

SOUTHERN HUMBOLDT COMMUNITY PARK DRAFT ENVIRONMENTAL IMPACT REPORT

STATE CLEARINGHOUSE NUMBER 2010092037

Prepared for
Humboldt County Planning Department

April 2016

Prepared by
Amy Skewes-Cox, AICP

In conjunction with

BASELINE
ENVIRONMENTAL COLLABORATIVE
ILLINGWORTH & RODKIN, INC.
LSA ASSOCIATES
NATALIE MACRIS
TOM CAMARA GRAPHICS
WORDSMITH WORD PROCESSING
W-TRANS

TABLE OF CONTENTS

- 1. INTRODUCTION 1-1
- 2. SUMMARY 2-1
- 3. PROJECT DESCRIPTION 3-1
 - 3.1 PROJECT LOCATION AND SITE CHARACTERISTICS..... 3-1
 - 3.2 PURPOSE, NEED, AND OBJECTIVES..... 3-4
 - 3.3 BACKGROUND 3-5
 - 3.4 PROJECT SUMMARY 3-6
 - 3.5 PROPOSED LAND USES BY AREA..... 3-12
 - 3.6 EXISTING AND PROPOSED WATER SYSTEM IMPROVEMENTS..... 3-36
 - 3.7 PROPOSED GENERAL PLAN LAND USE DESIGNATION AND ZONING 3-40
 - 3.8 REVIEWING AGENCIES AND REQUIRED APPROVALS 3-41
- 4. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES..... 4-1
 - 4.1 AESTHETICS 4.1-1
 - 4.2 AGRICULTURE AND FORESTRY RESOURCES..... 4.2-1
 - 4.3 AIR QUALITY 4.3-1
 - 4.4 BIOLOGICAL RESOURCES..... 4.4-1
 - 4.5 CULTURAL RESOURCES 4.5-1
 - 4.6 GEOLOGY AND SOILS 4.6-1
 - 4.7 GREENHOUSE GAS EMISSIONS 4.7-1
 - 4.8 HAZARDS AND HAZARDOUS MATERIALS..... 4.8-1
 - 4.9 HYDROLOGY AND WATER QUALITY 4.9-1
 - 4.10 LAND USE AND PLANNING 4.10-1
 - 4.11 MINERAL RESOURCES 4.11-1
 - 4.12 NOISE..... 4.12-1
 - 4.13 POPULATION AND HOUSING..... 4.13-1
 - 4.14 PUBLIC SERVICES 4.14-1
 - 4.15 RECREATION 4.15-1
 - 4.16 TRANSPORTATION/TRAFFIC..... 4.16-1
 - 4.17 UTILITIES AND SERVICE SYSTEMS 4.17-1
- 5. ALTERNATIVES..... 5-1
 - 5.1 SUMMARY OF ALTERNATIVES..... 5-1
 - 5.2 ALTERNATIVES CONSIDERED AND REJECTED 5-4
 - 5.3 IMPACTS OF ALTERNATIVES 5-5
 - 5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE..... 5-17
- 6. CEQA CONSIDERATIONS 6-1
 - 6.1 SIGNIFICANT IRREVERSIBLE EFFECTS 6-1
 - 6.2 SIGNIFICANT UNAVOIDABLE IMPACTS..... 6-1
 - 6.3 GROWTH INDUCEMENT 6-1
 - 6.4 CUMULATIVE IMPACTS 6-2
- 7. EIR AUTHORS 7-1
- 8. REFERENCES 8-1

APPENDICES

Appendix A	Notice of Preparation (NOP) and NOP Comments
Appendix B	Agricultural Report
Appendix C	Air Quality Data
Appendix D	Noise Data
Appendix E	Traffic Assessment Management Control Plan
Appendix F	Transportation Data
Appendix G	Water Supply Data
Appendix H	Biological Background Studies
Appendix I	Lighting Plan

Figures

Figure 3-1	Regional and Project Location	3-2
Figure 3-2	Existing General Plan and Zoning Designations	3-3
Figure 3-3	Proposed Zoning and Site Areas.....	3-7
Figure 3-4	Area 1 – Tooby Memorial Park (8.2 Acres)	3-14
Figure 3-5	Area 2 – Park Headquarters (6 Acres)	3-16
Figure 3-6	Area 3 – Main Agricultural Area (127.1 Acres).....	3-20
Figure 3-7	Area 4 – Community Commons (56.4 Acres).....	3-24
Figure 3-8	Area 5 – Sports Area.....	3-31
Figure 3-9	Area 6 – Riverfront	3-33
Figure 3-10	Area 7 – Forestland.....	3-35
Figure 3-11	Water Infrastructure.....	3-37
Figure 4.1-1	Views from Sprowel Creek Road	4.1-3
Figure 4.1-2	Views from Sprowel Creek Road and Kimtu Road.....	4.1-4
Figure 4.1-3	Views from U.S. Highway 101 and Rivercrest Drive	4.1-5
Figure 4.1-4	Views of Tooby Memorial Park.....	4.1-7
Figure 4.1-5	Views of Sprowel Creek Road Bridge and Ranch Complex Barn	4.1-8
Figure 4.2-1	Reduced Area Alternative Soil Rating	4.2-4
Figure 4.2-2	Hay Production (2008 – 2012)	4.2-5
Figure 4.4-1	Mapped Wetlands/Streamside Management Areas	4.4-3
Figure 4.4-2	Special-Status Animal Species Observations	4.4-7
Figure 4.4-3	Regulated Waters in Tooby Memorial Park Area (Area 1)	4.4-26
Figure 4.4-4	Regulated Waters in Park Headquarters Area (Area 2)	4.4-27
Figure 4.4-5	Regulated Waters in Community Commons Area (Area 4).....	4.4-28
Figure 4.4-6	Regulated Waters in Sports Area (Area 5).....	4.4-29
Figure 4.5-1	Wood/Tooby Ranch Complex Buildings.....	4.5-6
Figure 4.10-1	Existing Land Use	4.10-2
Figure 4.12-1	Project and Surrounding Noise Sensitive Areas.....	4.12-2
Figure 4.12-2	Project Site and Measurement Locations.....	4.12-6
Figure 4.12-3	Measured Hourly Noise Levels at LT-1 and LT-2.....	4.12-7
Figure 4.12-4	Measured Hourly Noise Levels at LT-3.....	4.12-9
Figure 4.12-5	County Land Use/Noise Compatibility Matrix	4.12-12
Figure 4.16-1	Roads, Service Roads, and Trails.....	4.16-3
Figure 4.16-2	Lane Configurations and Traffic Volumes	4.16-9
Figure 5-1	Alternative 2 – Reduced Public Facilities Acreage	5-2
Figure 5-2	Alternative 3 – Site at Benbow State Park.....	5-12
Figure 6-1	Cumulative Projects within 2 Miles of Project Site.....	6-8

Tables

Table 2-1 Summary of Project Features 2-2

Table 2-2 Summary of Impacts and Mitigation Measures 2-5

Table 3-1 Anticipated Regulatory Approvals by Federal and State Agencies 3-43

Table 4.3-1 Federal and State Ambient Air Quality Standards 4.3-7

Table 4.3-2 Ambient Air Quality Monitoring Data in Eureka, 2011-2013 4.3-8

Table 4.3-3 Federal and State Ambient Air Quality Monitoring Attainment Status for NCAB 4.3-8

Table 4.3-4 Project Operational Emissions (Annual Tons Per Year) 4.3-17

Table 4.6-1 Soil Types and Slopes at the Project Site 4.6-3

Table 4.6-2 Modified Mercalli Scale 4.6-4

Table 4.12-1 Definitions of Acoustical Terms Used in this Report 4.12-3

Table 4.12-2 Typical Noise Levels in the Environment 4.12-4

Table 4.12-3 Short-Term Noise Measurement Results 4.12-10

Table 4.12-4 Humboldt County Short-Term Noise Standards (L_{max}) 4.12-13

Table 4.12-5 Typical Noise Source Levels at 100 Feet for Performance Areas Events 4.12-17

Table 4.12-6 Calculated Noise Levels at the Adjacent Noise-Sensitive Uses 4.12-20

Table 4.16-1 Collision Rates at the Study Intersections 4.16-4

Table 4.16-2 Intersection Level of Service Criteria 4.16-7

Table 4.16-3 Summary of Existing Peak Hour Intersection Level of Service Calculations 4.16-8

Table 4.16-4 Summary of Future Peak Hour Level of Service Calculations 4.16-10

Table 4.16-5 Project Impact Levels 4.16-13

Table 4.16-6 Trip Generation Summary 4.16-15

Table 4.16-7 Trip Distribution Assumptions 4.16-15

Table 4.16-8 Summary of Existing and Existing-plus-Project Peak Hour Level of Service Calculations for Project Level 1 4.16-15

Table 4.16-9 Summary of Future and Future-plus-Project Peak Hour Level of Service Calculations for Project Levels 1 and 2 4.16-16

Table 4.16-10 Summary of Available Capacity 4.16-18

Table 4.17-1 Existing Water Sources at Project Site 4.17-3

Table 4.17-2 Existing Water Demand at Project Site by Water Source 4.17-3

Table 5-1 Comparison of Impacts of Project Alternatives (After Mitigation) 5-6

Table 6-1 Cumulative Projects in Vicinity of Project Site 6-4

1. INTRODUCTION

This document is an Environmental Impact Report (EIR) prepared in accordance with the California Environmental Quality Act of 1970 (CEQA), as amended. Humboldt County is the lead agency for the project evaluated in this EIR.

1.1. PROJECT BACKGROUND

The overall goal of the project is allow to a mix of public, private, and non-profit uses on the 405.7-acre Southern Humboldt Community Park property on Sprowel Creek Road in Garberville, California (Assessor's Parcel Numbers [APNs] No. 222-241-009 and 222-091-014).

Southern Humboldt Community Park, the project applicant, proposes improvements to the site that include sports fields, playgrounds, picnic areas, and trails. Activities would include a variety of community-based agricultural projects, including a farm stand, along with sports, educational, and camp activities. The project site would include a Park Headquarters (Area 2) that would repurpose existing buildings for park offices and community meeting spaces. Existing and additional agricultural projects would continue on the project site, and new agricultural projects would be added. Existing gravel mining uses in Areas 1 and 6 of the project site would continue. The four existing residential units on the project site would continue to be used for housing caretakers and farm workers or be rented.

The project includes the following requested approvals from Humboldt County:

1. Amending the Humboldt County General Plan (Framework Plan and 1984 Garberville, Redway, Benbow, Alderpoint Community Plan) to add a Public Recreation (PR) land use designation, and changing the General Plan land use designation on the entire 405.7-acre project site to the new Public Recreation (PR) designation. The Humboldt County General Plan currently designates the project site as IR (Industrial, Resource Related), AR5-20 (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres), and AL20 (Agricultural Lands, one dwelling unit per 20 acres).
2. Amending the Humboldt County Zoning Ordinance to add a Public Facility (PF) zoning classification, rezoning 87 acres of the project site from Agriculture Exclusive (AE) to PF, and retaining the existing AE zoning on approximately 307 acres and the existing Heavy Industrial-Qualified (MH-Q) zoning on approximately 12.1 acres of the project site.
3. Obtaining approval of a conditional use permit, special permit for certain proposed uses, including arts and crafts festivals and a special permit is also required to allow for reduced setbacks for new development from streams and wetlands.
4. Bank the existing residential development rights as assets for 54 parcels in the areas of the project site that are currently designated Agricultural Rural (AR 5-20) and Agricultural Lands (AL 20) by the Humboldt County General Plan that could be transferred to other properties for a fee at such time, if ever, that Humboldt County adopts a Transfer of Development Rights program.

A detailed description of proposed improvements to the site and approvals required is provided in Chapter 3, Project Description, of this EIR.

1.2. PUBLIC REVIEW

This Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for a 45-day period as indicated on the Public Notice of Availability of this document. During the public review period, written comments on the adequacy of the Draft EIR may be submitted to:

Michael Richardson
Senior Planner

Mailing Address

Humboldt County Planning and Building Department
3015 H Street
Eureka, CA 95501

Email Address: mrichardson@co.humboldt.ca.us

Responses to all substantive comments received on the adequacy of the Draft EIR and submitted within the specified review period will be prepared and included in the Responses to Comments/ Final EIR. Prior to approval of the project, the Humboldt County Planning Commission must certify the Final EIR and adopt a Mitigation Monitoring and Reporting Program (MMRP) for mitigation measures identified in the EIR, in accordance with the requirements of California Public Resources Code (PRC) Section 21001.

1.3. ORGANIZATION OF THE EIR

This Draft EIR is organized into the following chapters:

Chapter 1, Introduction: Provides an introduction and overview that describes the intended use of this EIR, project background, the EIR process, and organization of the document.

Chapter 2, Summary: Briefly describes the project and concerns associated with it, identifies levels of significance for each impact addressed in the EIR, summarizes the project-specific effects of the project, identifies mitigation measures, and compares impacts of the project with those of alternatives to the project.

Chapter 3, Project Description: Contains information on the project site, project objectives, and project characteristics.

Chapter 4, Environmental Setting, Impacts, and Mitigation Measures: Contains an analysis of environmental topics. Each topic is addressed in a separate section. Each section is divided into an *Introduction* that describes the general content and approach used for the topic; an *Environmental Setting* section that describes baseline environmental information; a *Regulatory Framework* section that describes federal, state, and local regulations applicable to the topic; and an *Environmental*

Impacts and Mitigation Measures section that describes project-specific impacts and mitigation measures, along with cumulative impacts.

Chapter 5, Alternatives: Assesses impacts of two alternatives to the project, including a No Project Alternative as required by CEQA. The alternatives are compared to the proposed project and an “Environmentally Superior Alternative” is identified.

Chapter 6, CEQA Considerations: Contains sections required by CEQA, including a discussion of cumulative impacts, growth inducement, and significant unavoidable impacts.

Chapter 7, EIR Authors: Lists the persons directly involved in preparing this report.

Chapter 8, References: Lists the persons, agencies, and organizations contacted and documents used during preparation of this report.

1.4. NOTICE OF PREPARATION

A Notice of Preparation (NOP) was prepared by Humboldt County to obtain comments from agencies and the public regarding issues to be addressed in the EIR. The NOP review dates were from 9/13/2010 through 10/12/2010. The Notice of Preparation can be viewed on the CEQANET website at the following address: <http://www.ceqanet.ca.gov/DocDescription.asp?DocPK=645837>

Copies of the comments received in response to the NOP are included in **Appendix A** of this EIR.

This EIR was prepared based on the comments received on the NOP and the project information provided. The following topics were found to have potential environmental impacts and thus are addressed herein in this EIR:

- Aesthetics
- Agricultural/Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

2. SUMMARY

This section briefly describes the proposed Southern Humboldt Community Park (SHCP) EIR. It also summarizes the project-specific impacts and mitigation measures identified in this EIR (Table 2-1). Alternatives to the project that will be considered are also summarized.

PROJECT UNDER REVIEW

The Southern Humboldt Community Park proposed project site is located in the southern region of Humboldt County, California. The project site is comprised of 405.7 acres along Sprowel Creek and Kimtu Roads, 1 mile outside of the town of Garberville. Project maps can be found in Chapter 3, Project Description, of this EIR.

This project would change the County's General Plan land use designation for the entire site to the Public Recreation (PR) designation. The current land use designation is a combination of Agricultural Rural with a 5- to 20-acre minimum lots size on 256 acres and Agricultural Lands with a 20-acre minimum lot size on 150 acres.

This project would change the zoning of 87 acres from Agriculture Exclusive (AE) to Public Facilities (PF). Approximately 318.7 acres of the property would retain AE zoning. A Qualified (Q) zone would be added to the 318.7 acres in the AE zoning to allow for recreational uses in the AE areas. The current zoning is Agriculture Exclusive on all 405.7 acres. The three discretionary entitlements being requested by the applicant include the following:

- General Plan amendment
- Rezoning
- Conditional Use Permit for Medium and Large Events

The project applicant proposes to be able to retain and transfer the existing residential development rights of the Agricultural Lands and Agriculture Rural Plan designations that currently apply to the property. These land use designations represent 54 potential parcels.¹

The property has been operating as the Southern Humboldt Community Park since 2000. The project site has 3.5 miles of trails, a playground, picnic areas, and swimming beach that are used by the public. Use of the Park site was estimated at 46,000 visitor days per year in 2012. The property has historically been an operating ranch since the 1800's and is currently the site of ongoing agricultural projects.

The project site property has 12 existing structures, ten of which are currently in use. These structures include the original farm/ranch house (occupied by Park caretakers), two bunkhouses, a blacksmith shop, farm stand, chicken coop, garage, a small barn, and the modern hay barn.

¹ Calculations for residential units allowable based on current Humboldt County land use designations at the site: Project has 239.9 acres of land currently in Agriculture Residential 5-20 (AR) designation which allows up to 47 units. Project also contains 153.7 acres of land in Agricultural Lands 20 (AL) designation which allows up to seven units for a total of 54 units.

TABLE 2-1 SUMMARY OF PROJECT FEATURES

Site Area	Name of Area	Acreege	Proposed Features
1	Tooby Memorial Park	8.2 acres	<i>Rezoning to Public Facility from Agriculture Exclusive.</i> Upgrading of existing facilities to include shade structure, new bathroom, reconfigured parking area, new traffic circle and signage, trail improvements with improved beach access, addition of 10 new play structures within fenced playground.
2	Park Headquarters	6.0 acres	<i>Rezoning to Public Facility from Agriculture Exclusive (AE).</i> Residences and other facilities to remain in this area. Existing ranch house to be remodeled for new Park Headquarters offices and community center. New facilities to include new bathroom facility, temporary performance stage near large barn, upgrading of main entrance to accommodate two-way traffic. Retention of existing trees. New fencing for livestock and public safety, and protection of riparian areas. More defined parking area. No new paved parking but new temporary area for up to 150 cars in designated fields for special events.
3	Main Agricultural Area	127.1 acres	<i>Rezoning from AE to AE-Qualified Zone to Allow Recreational Activities.</i> Continued and expanded agricultural operations. New trails to be used during tournaments and walk-a-thon type events. New greenhouse, fencing, temporary parking for medium and large events (unpaved). Planting of riparian corridor to stabilize banks.
4	Community Commons	56.4 acres	<i>Rezoning to Public Facility from Agriculture Exclusive.</i> Overnight camping in Area 4B (Environmental Camp). Up to 2.5 miles of new trails, new bridge (one lane, flatcar bridge); bike skill building track; up to five potable water tanks. Area 4A would be the event area (see discussion below) where temporary facilities would be developed during medium and large events. Temporary parking area (unpaved) would also be provided.
5	Community Facilities/Sports Area	16.0 acres	<i>Rezoning to Public Facility from Agriculture Exclusive.</i> Ten acres of new ball fields with bleachers and benches. New restrooms and concession stand facility with storage; new gravel access road connecting park entrance to ball fields; new parking areas along new access road for 50 cars; new playground; off leash dog park in fenced area; skate park (10,000 square feet).
6	Riverfront	77.0 acres	No change in zoning for area designated for industrial use (MH-Q) but rezoning for area designated as AE to AE-Qualifying zone (Q). Improvements to trail and parking areas.
7	Forest Preserve	115.0 acres	<i>Rezone from AE to AE-Qualifying (Q).</i> Up to 2.5 miles of new trails (unpaved) with small, wooden or metal foot bridges over stream crossings.
Total		405.7 Acres	
Features Not Related to Specific Area			
Small Events	Weddings and memorial services; birthday parties; informal gatherings; small fundraisers and similar small events		
Medium Events	Events for 800 to 2,500 attendees such as musical events, theater, dance performances. To occur in Community Commons area. No more than 5 events per year with parking on the site. To be addressed by Conditional Use Permit.		
Large Events	One event per year covered by Conditional Use Permit. Attendance would range from 2,500 to 5,000 people per day (up to 4,000 attendees and 1,000 staff); family-friendly event to include musicians on three outdoor stages, artisans selling wares, exhibits, food vendors and on-site educational workshops. Parking to be partially on-site (up to 500 vehicles) by permit, with remainder of parking in Redway and Garberville, with shuttle buses provided. Event would end by midnight.		

The proposed changes to land use activity include the inclusion of recreation for sports fields, public assembly and events, playgrounds, picnic areas, trails, educational activities and camp activities. Activities include a variety of community-based agricultural projects, including a farm stand. The sports field's activities would include games, practices, jamborees, and tournaments. The project site would include a Park Headquarters (Area 2) that would repurpose existing buildings for park offices and community meeting spaces, and a kitchen. The project would include small events at the large barn. Existing and additional agricultural projects would continue on the project site.

All existing access points would remain in use. This includes access from Sprowel Creek Road, Kimtu Road, and Tooby Ranch Road (for special events only). One new internal road is proposed within the Sports Facilities, Area 5. The existing main entrance would be improved to accommodate two-way traffic. Existing private internal Park ranch service roads provide connectivity, access, and exits from multiple locations within the Park property and can be utilized for emergencies and maintenance.

The proposed project is expected to increase the number of visitors by an estimated 800 persons per day during the peak seasons (late spring, summer, and early fall). Small events such as birthday parties, weddings, memorials, and nonprofit fundraisers are included in everyday uses. This project includes up to five special events per year with 800 to 2,500 attendees (including staff, vendors, and performers), and one annual event per year with up to 5,000 attendees (4,000 guests plus up to 1,000 staff, vendors, and performers).

AREAS OF POTENTIAL CONTROVERSY

The comments on the Notice of Preparation (see Appendix A) and at the project scoping meeting focused on the following topics:

- Removal of agricultural lands.
- Increased traffic, especially during large events.
- Visual impacts of new facilities.
- Removal of wildlife habitat and impacts to wetlands and riparian areas.
- Construction noise.
- Water quality and water supply.
- Potential for cultural resources to be disturbed.
- Potential use of Timber Production Zones.
- Species of special concern and wetlands.
- Stream restoration and buffers.
- Water use and availability.
- Streambed Alteration Notification.
- Event parking adequacy.
- Light pollution.
- Traffic safety and narrowness of access roads.
- Need for Traffic Control Plan.
- Impact on property values.
- Cost of maintenance.
- Emergency vehicle access disruptions.
- Noise from events.
- Security and crowd management.

- Waste disposal.
- Size of events too large.
- Unstable soils.
- Safety of skateboarding.
- Dust during events.

IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant effect on the environment is defined as a substantial or potentially substantial adverse change in any of the physical conditions within the area affected by a project, including effects on land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. The criteria of significance used to determine whether or not effects are significant are included in the "Impacts and Mitigation Measures" section for each topic discussion in this EIR.

This EIR identifies one significant unavoidable project-level impact which is the removal of agricultural lands. All other identified impacts can be mitigated to a less-than-significant level with the implementation of the recommended mitigation measures. This EIR also addresses less than significant impacts for which mitigation measures are not needed.

Prior to approval of the project, written findings regarding each of the identified environmental impacts must be prepared. Also, a monitoring program for each mitigation measure must be adopted. This monitoring program will be prepared as part of the Final EIR for this project.

ALTERNATIVES TO THE PROJECT

Three alternatives to the proposed project are evaluated in Section 5, Alternatives. They are:

- Alternative 1: No Project
- Alternative 2: Reduced Public Facilities Acreage
- Alternative 3: Benbow Lake State Recreation Area

The environmental impacts of each alternative are compared. The ability of each alternative to meet project objectives is also evaluated. Alternative 2 was found to meet many of the project objectives. Alternative 2 would be the environmentally superior alternative.

SUMMARY TABLE

Table 2-2 summarizes project impacts and mitigation measures. The table identifies the level of impact both before and after mitigation.

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
AESTHETICS			
<u>AESTHETICS-1</u> : Implementation of the project would result in construction of new community facilities including recreation fields, a skatepark, a dog park, concessions stands, and visitor amenities and parking areas that would be visible from Kimtu Road and that would change the scenic vista from this road. Such new features could also visually contrast with the natural surroundings.	PS	<u>AESTHETICS-1a</u> : New landscaping shall be planted at the edge of the gravel parking area fronting on Kimtu Road in Area 5, the Sports Area. This landscaping shall be low evergreen shrubs that would partially screen parked cars from view from Kimtu Road. All vegetation planted as mitigation shall be planted outside the County-maintained road right-of-ways, meet the County visibility ordinance, not block county road drainage, or cause additional maintenance for the road crew. Prior to installing vegetation, the planting plan should be reviewed by the Department of Public Works. <u>AESTHETICS-1b</u> : Similar evergreen shrubbery shall be planted. After 5 years the shrubs shall be at least 4 feet in height and provide a visual screen for a minimum of 85 percent of the view of the parking areas for Area 5 adjacent to Kimtu Road adjacent to Kimtu Road to screen the proposed skatepark and dog park in Area 5 from view. However, landscaping plans shall be reviewed and approved by the Public Works Department to ensure that landscaping would not interfere with sight visibility for safety reasons.	LTS
<u>AESTHETICS-2</u> : Project components such as special events would have a need for nighttime lighting that would create a new source of nighttime light or glare that may adversely affect nighttime views in the area (see Appendix I: Lighting Plan).	PS	<u>AESTHETICS-1c</u> : All new buildings and other built features at the project site shall be painted in neutral colors to blend into the surroundings and shall not include reflective materials. The combination of these measures would reduce the potential impact to less than significant. <u>AESTHETICS-2a</u> : The applicant shall prepare a lighting plan that shall address the facility lighting placement and design for ongoing operations. This plan shall be reviewed and approved by the County's Planning Department. To avoid intrusion into neighboring properties and visibility from nearby roads, all lighting shall be shielded and directed downwards, and shall use the minimum wattage to allow safe conditions. Pathway lighting shall be placed low to the ground to minimize excess lighting. Temporary lighting of parking areas during festival events shall be shielded and directed to minimize glare. <u>AESTHETICS-2b</u> : Lighting shall be on timers to minimize the number of hours of lighting at the project site. <u>AESTHETICS-2c</u> : During festival events, all concession participants shall be informed of the need to minimize lighting at the project site. This requirement shall be included in the Conditional Use Permit for the project site. The combination of the above measures would reduce this potential impact to less than significant.	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
Agricultural/Forestry Resources			
<p><u>AGFR-1:</u> The project would convert farmland (approximately 4 acres in Area 3 and 16 acres in Area 5) to non-agricultural use, reducing the overall inventory of agricultural land in Humboldt County and conflicting with Humboldt County General Plan policies for protecting agricultural land.</p>	PS	<p><u>AGFR-1:</u> The 4-acre temporary parking zone in Area 3 shall be not be used for parking until after the hay crop is harvested. The project applicant shall remove all trash and debris from fields used for parking and return the field to productive use for the next season.</p> <p>To protect the continued agricultural use of Area 3, the applicant shall record a deed restriction on the Area 3 part of the property that would convey to the County the development rights for any development other than the existing uses. This restriction shall preclude any improvements in the area except those for agricultural purposes, such as greenhouses and barns. The restriction would allow the use of the area for parking for temporary events, and the use of ranch roads for moving people and equipment associated with those events, because no new development would be needed for these temporary uses. The deed restriction may include a clause releasing the restriction at the time the zoning and general plan are changed to limit the use of the property to agricultural uses.</p> <p>No additional mitigation is available for the loss of farmland. This measure would help reduce the farmland conversion impact, but the project would still result in a net loss of farmland. The impact would therefore be significant and unavoidable.</p>	SU
Air Quality			
<p><u>AIR-1:</u> During construction, the project could result in a cumulatively considerable net increase of criteria pollutants (i.e., PM₁₀) for which the project region is nonattainment under an applicable national or State ambient air quality standard.</p>	PS	<p><u>AIR-1:</u> The project lies within the jurisdiction of North Coast Unified Air Quality Management District (NCUQAMD). All project construction and management shall comply with NCUQAMD ordinances for dust control. Project grading and construction shall use best available fugitive dust control measures during operations in order to reduce the amount of particulate matter that is present in the air as a result of man-made fugitive dust sources.</p> <p>The following best management practices shall be implemented to reduce emissions and control dust during all project construction and grading activities that involve ground disturbance of 1,000 square feet or more:</p> <ol style="list-style-type: none"> 1. Water all active construction areas at least twice daily; 2. Maintain at least 2 feet of freeboard for haul trucks; 3. Cover all trucks hauling soil, sand, and other loose materials; 4. Plant vegetative ground cover in disturbed areas as soon as possible; 5. Cover inactive soil storage piles; and 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
6. Treat accesses to a distance of 100 feet from the paved or gravel road with a 6- to 12-inch layer of wood chips or mulch, or treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.	PS	<u>AIR-2a:</u> On-site access roads used for movement of people and goods shall be watered at least twice daily for large and medium-sized events to reduce PM ₁₀ emissions. Access roads shall be treated to a distance of 100 feet from the paved or gravel road with a 6- to 12-inch layer of wood chips or mulch, or accesses shall be treated to a distance of 100 feet from the paved road with a 6-inch layer of gravel. <u>AIR-2b:</u> For large and medium-sized events, the Traffic Control Plan (see Appendix E) shall be implemented. The Traffic Control Plan demonstrates how shuttle ridership and carpools would be strongly encouraged in an effort to reduce traffic on Sprowel Creek Road; how the use of shuttle buses from both Redway, Garberville, Benbow, and Richardson Grove campground would help reduce the impact of vehicles on park properties, and how all attendees and volunteers would be encouraged to use the shuttle (e.g., by charging parking fees while shuttles would be free). The combination of the two measures would reduce this impact to a less-than-significant level.	LTS
BIOLOGICAL RESOURCES			
BIO-1: Construction activities and site fire fuel management activities could result in the loss of bird nests in active use, which would be a violation of the federal Migratory Bird Treaty Act (MBTA) and State Code.	PS	BIO-1: Major construction activities and vegetation management for fire fuel reduction shall be performed in compliance with the Migratory Bird Treaty Act (MBTA) and relevant sections of the California Fish and Wildlife Code to avoid loss of bird nests in active use. This shall be accomplished by preferably scheduling vegetation removal for fire fuel management and major construction activities outside of the bird nesting season (which occurs from February 15 to August 31) to avoid possible impacts on nesting birds if new nests are established in the future. Alternatively, if these activities cannot be restricted to the non-nesting season (September 1 to February 14), a pre-construction nesting survey shall be conducted depending on the proposed activity as defined below. The pre-construction nesting survey(s) shall include the following: <ul style="list-style-type: none"> A qualified biologist (Biologist) shall conduct a pre-construction nesting bird (both passerine and raptor) survey within 14 days prior to major construction and fire fuel management activities. Construction activities requiring pre-construction surveys include: sports field improvements in the Sports Area; Environmental Camp and concession stand in the Commons Area; the new restroom, new parking, and roadway improvements in the Park Headquarters Area; and traffic circle and replacement 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>restroom in Tooby Memorial Park. Major tree limbing and brush thinning for fire fuel management shall also require a pre-construction nesting survey when performed during the nesting season. Birds typically acclimate to on-going vegetation management practices associated with farming and property maintenance, such as hay crop harvest, field tilling, and mowing for trail clearance, special event area maintenance and other property maintenance, and no preconstruction surveys or special avoidance measures are considered necessary for these activities.</p> <ul style="list-style-type: none"> ▪ If no nesting birds are observed, no further action is required and scheduled activities shall be initiated within 14 days of the survey to prevent take of individual birds that could begin nesting after the survey. ▪ Another nest survey shall be conducted if more than 14 days elapse between the initial nest search and the beginning of the scheduled major construction activities or fire fuel management activity during the nesting season. Follow-up nest surveys are not required for on-going maintenance activities and events because birds typically acclimate to these activities or would avoid nesting in the vicinity if sensitive to the associated noise, increase in human activity and other disturbance levels. ▪ If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 75 to 100 feet for passerines and 300 feet for raptors) and other factors such as on-going disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the California Department of Fish and Wildlife. ▪ Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or operations shall be permitted. Continued use of existing facilities such as occupied buildings, existing parking, and site maintenance may continue within this buffer zone where the nesting birds have acclimated to these activities. ▪ No restrictions on activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area. But additional controls on lighting, noise amplification and other possible disturbance sources that could affect the viability of nest success shall be considered by the Biologist, and recommendations and restrictions defined, if necessary. ▪ Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed. 	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
<p><u>BIO-2</u>: Proposed development could result in filling or modifications to regulated waters, including areas of freshwater emergent wetland and seasonal creek channels.</p>	PS	<ul style="list-style-type: none"> ■ A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the County prior to initiation of major construction activities and major fire fuel vegetation management within the buffer zone. Following written approval by the County, restricted activities within the nest-buffer zone may proceed. ■ <u>BIO-2a</u>: A Wetland Protection and Replacement Program (WPRP) shall be prepared by a qualified wetland specialist and implemented to provide compensatory mitigation for modifications to any areas of jurisdictional waters affected by the project, and to ensure compliance with County General Plan policies and the SMA Ordinance related to stream and wetland protection and mitigation. At a minimum, the WPRP shall contain the following components: <ul style="list-style-type: none"> ■ If on-site avoidance of jurisdictional waters, streams and wetlands identified in the SMA ordinance is not feasible, the WPRP shall provide compensatory mitigation at a minimum 2:1 ratio (ratio of mitigation acreage or credits to affected jurisdictional waters, streams and wetlands identified in the SMA ordinance), subject to the review and approval by the Planning Director in consultation with CDFW and other regulatory agencies. Any habitat created as compensatory mitigation shall be monitored for a minimum of 5 years or until success criteria are met, as defined in the WPRP to ensure successful establishment. The WPRP shall specify success criteria, maintenance and long-term management responsibilities, monitoring requirements, and contingency measures necessary to achieve a minimum survival rate of 85 percent of planted species following the first year of planting and 75 percent following the fourth year of planting. ■ Annual monitoring reports shall be provided to the Planning Director, CDFW and other regulatory agencies before December 31 of each monitoring year, summarizing the status of revegetation efforts, and any maintenance activities performed or required. Photographs of the location from either side of the treatment area shall be included. Maintenance and monitoring shall continue until the area is completely revegetated with a minimum of 80 percent absolute cover of plants comprised of species similar to the undisturbed affected area as reviewed and approved in writing by the Planning Director in consultation with CDFW and other regulatory agencies. ■ Orange construction fencing shall be installed at the edge of adjacent jurisdictional waters to be preserved to ensure no disturbance to these features. The construction fencing shall remain in place for the entire duration of construction to ensure construction equipment avoids these areas. 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<ul style="list-style-type: none"> ■ A qualified biologist/restoration specialist shall meet with heavy equipment operators prior to the beginning of site-disturbing activities to explain the required mitigation, and be available during the initial phase of construction to provide situation-specific avoidance measures. ■ Installation of the pedestrian bridges and other seasonal creek crossings or modifications shall be performed during the summer and fall months when the channels are dry, to minimize disturbance to aquatic habitat and avoid the need for temporary coffer dam and possible dewatering during construction. ■ Any areas to be retained as natural habitat and disturbed as part of construction shall be restored to prevent erosion and contamination of nearby receiving waters. Monitoring shall be provided as part of the larger WPPP for a minimum of 5 years to ensure the disturbed area is successfully revegetated. ■ Authorization for modifications to jurisdictional waters on the site shall be obtained by the applicant from the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act, the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act, and the California Department of Fish and Wildlife (CDFW) under Section 1602 of the State Fish and Game Code. ■ All legally required permits or other authorizations shall be obtained by the applicant from the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NOAA Fisheries), and CDFW for the potential "take" of protected species under the federal and California Endangered Species Acts, if required. Although considered unlikely given the absence of suitable habitat for State- or federal-listed special-status species, the resource agencies make the determination on the need for any consultation or incidental take permits. This EIR specifically does not allow development that would require an incidental take permit. Subsequent environmental review would be required for approval of any development that requires an incidental take permit. ■ Proof that all appropriate authorizations have been secured from the Corps, RWQCB, and CDFW and that adequate compensatory mitigation has been defined shall be furnished to the County prior to the issuance of a grading permit for any component of the project affecting jurisdictional waters. 	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
<p>BIO-3: Proposed development would replace areas of existing natural habitat and could disrupt wildlife use of the site unless adequate controls are taken to prevent significant disruption.</p>	PS	<p><u>BIO-2b</u>: To address potential indirect impacts on water quality and downgradient receiving waters in the vicinity of the site, the applicant shall implement best management practices under the Storm Water Pollution Prevention Plan (SWPPP) called for in Mitigation Measure HYDRO-1a and the Stormwater Control Plan (SCP) called for in Mitigation Measure HYDRO-1b.</p> <p>The combination of the measures above would reduce this impact to less than significant.</p> <p><u>BIO-3a</u>: A qualified landscape architect or restoration ecologist who specializes in native habitat restoration shall be retained to incorporate the following provisions into the Landscape and Revegetation Plans for the project:</p> <ul style="list-style-type: none"> ▪ Prohibit the use of highly undesirable species in landscape improvements on the site which could spread into the adjacent open space areas. Unsuitable species include: blue gum eucalyptus (<i>Eucalyptus globulus</i>), acacia (<i>Acacia</i> spp.), pampas grass (<i>Cortaderia selloana</i>), broom (<i>Cytisus</i> spp. and <i>Genista</i> spp.), gorse (<i>Ulex europaeus</i>), bamboo (<i>Bambusa</i> spp.), giant reed (<i>Arundo donax</i>), English ivy (<i>Hedera helix</i>), German ivy (<i>Senecio milarinoides</i>), cotoneaster (<i>Cotoneaster parmosus</i>), and periwinkle (<i>Vinca</i> spp.), among others identified in the CalEPPC List. ▪ Define maintenance and monitoring provisions to ensure the successful establishment and long-term viability of native plantings and the control and eradication of highly aggressive non-native broom and other noxious weeds. The maintenance and monitoring program shall be implemented during a minimum 5-year monitoring required as part of tree replacement and wetlands mitigation, and shall continue as part of long-term maintenance of open space areas. ▪ Provide adequate controls to prevent unauthorized vehicle access to natural areas to be retained. These can include appropriately placed bollards, gates, and wildlife friendly fencing that serves to control unauthorized vehicle access but allows for movement by larger terrestrial wildlife. ▪ Provide for reseeded of all graded slopes not proposed for roadways and other improvements with a mix of native grasses and forbs appropriate for the site rather than a conventional seed mix typically used for erosion control purposes to replace and improve existing habitat values of grasslands disturbed on the site. <p><u>BIO-3b</u>: Measures recommended in Mitigation Measures BIO-1, BIO-2a, BIO-2b, BIO-3a, and BIO-4 would serve to partially protect important natural habitat on the site for wildlife, avoid the potential loss of nests in active use, and minimize disturbance to wetlands and provide for replacement of affected jurisdictional waters. The following additional provisions shall be implemented to further protect wildlife habitat resources that could otherwise be compromised as part of the project:</p>	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
<p><u>BIO-4:</u> Proposed development has the potential to conflict with local regulations related to Stream Management Areas and the intent of relevant policies in the Humboldt County General Plan related to streams and wetlands.</p>	PS	<ul style="list-style-type: none"> ■ Permanent and temporary lighting shall be carefully designed and controlled to prevent unnecessary illumination of natural habitat on the site. Lighting shall be restricted to the immediate vicinity of areas necessary to provide the minimum level necessary for safety purposes to illuminate pathways and other outdoor areas. Lighting shall generally be kept low to the ground, directed downward, and shielded to prevent illumination into adjacent natural areas. ■ Dogs and cats shall be kept on leash at all times when on trails and natural areas on the site. ■ All garbage, recycling, and composting shall be kept in closed containers and latched or locked to prevent wildlife from using the waste as a food source. This shall include trash generated during temporary special events. 	LTS
<p>The combination of the measures above would reduce this impact to less than significant.</p>	PS	<p><u>BIO-4:</u> Implementation of Mitigation Measures BIO-3a and BIO-3b would ensure adequate mitigation is provided for the direct loss of jurisdictional waters on the site, that protection and restoration of nearby waters is provided by the project, and that required authorizations are secured by regulatory agencies with evidence of compliance provided to the County prior to issuance of a grading permit. The following additional provisions shall be implemented to ensure conformance with relevant policies and standards in the County's General Plan and to meet with the intent of the SMA Ordinance:</p> <ul style="list-style-type: none"> ■ Provide compliance with Section 314-61.1, Streamside Management Area Ordinance of the Zoning Code and secure all required permits for any modifications to regulated habitat areas along streams and other wet areas. ■ Relocate the portion of the Environmental Camp in Area 4 so that it is sited outside of the 50-foot buffer setback along the adjacent seasonal creek to the east. Although potential impacts associated with the few tents and other improvements near the top of bank are relatively minor, the buffer area is important to minimize vegetation removal, trampling and concentrated human activity along the seasonal creek. ■ Restrict use of the Temporary Event facilities in Area 4 to the dry season (May 1 to October 31) to minimize disturbance to nearby seasonal aquatic habitat associated with the seasonal creeks. Exception to this restriction period may be authorized if field inspection verifies that surface water is no longer present in the spring months and that rains are not forecast in the fall months. ■ Provide pedestrian bridge crossings over the seasonal creeks in the vicinity of the Temporary Event facilities and the Environmental Camp along designated trails to avoid concentrated pedestrian activity in the channel bottom. 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
<p>BIO-5: The project would contribute to a cumulative reduction in the surface water flows to the South Fork Eel River, creating the potential for a significant cumulative impact on aquatic life.</p>	PS	<ul style="list-style-type: none"> ■ Install split rail fencing and interpretive signage to direct park users to designated creek crossing locations and minimize the potential for concentrated informal crossings of the creek channels. <p>BIO-5: Recommendations contained in the Water Supply and Demand Analysis and Potential Impacts on Surface Water and Aquatic Habitat (WSDAPISWAH) shall be implemented to address the project's contribution to cumulative impacts on aquatic life in the South Fork Eel River. These consist of the following and are described in more detail below: 1) general recommendations for design and operation of the park, 2) adaptive management practices during times of water scarcity, and 3) controls on water availability through increased water storage capacity and restrictions on flow diversions from the South Fork Eel River during the dry season.</p>	LTS
<p>General Recommendations</p>			
<p>The following are general recommendations to address the project contribution to cumulative impacts on aquatic life in the South Fork Eel River and to improve the beneficial effects of the project on improving habitat conditions. Some of these must be rigidly enforced, such as use of appropriate drought-tolerant turfgrass species and appropriate irrigation design that can substantially reduce water demand. These are very specific recommendations where compliance with the recommendation can be established as a performance standard for the measure.</p>			
<ul style="list-style-type: none"> ■ Improvements to Water Storage Capacity – As a goal of improving habitat conditions, the applicant shall work with the appropriate specialists to improve water storage capacity on the site. The project vicinity typically receives an average of 58 inches of precipitation, but the majority of the precipitation occurs between mid-October and mid-May. Thus, retaining water on-site during the wet season and allowing it to discharge back into the river during the dry season is the best means of further enhancing the hydrologic benefits that the park already provides. Water can be retained on-site by enhancing wetlands, restoring riparian areas, constructing infiltration or water storage ponds, and storing water in tanks. It is likely that enhancing groundwater recharge by enhancing wetlands, and restoring riparian areas would be the least expensive and infrastructure-intensive means of accomplishing this goal and would bring with it a suite of additional environmental benefits. 			
<ul style="list-style-type: none"> ■ Installation of Drought-tolerant Turfgrass – Drought-tolerant cool turfgrass species, such as Native Bentgrass™ from Delta Bluegrass, Zoysia 'De Anza', and/or Buffalo grass 'UC Verde' shall be used for turf plantings in the playfields and other areas of irrigated turf on the site. Each species and cultivar has differing benefits and advantages, but factors that shall be considered when selecting the type(s) of grass to 			

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>be planted include evapotranspiration potential, drought tolerance, dormancy, soils structure and fertility, fertilizer demand, mowing height, invasive weed potential, and durability. Species that are recognized as an invasive species by the California Invasive Plant Council shall not be used. A landscaping firm experienced in turfgrass cultivation in similar Mediterranean climate zones shall be consulted by the applicant in selecting the exact species and cultivars for the playfields. Hybridized drought-resistant grass species and cultivars typically use about 70 percent of the water required by non-hybridized species.</p> <ul style="list-style-type: none"> ▪ Appropriate Design of Irrigation Systems – Irrigation systems shall be designed with best available irrigation technologies, and be low-to-the ground and subsurface to reduce the potential for evaporation. Generally, sprinkler systems that apply water as close to the ground surface as possible will result in less evaporative loss. In addition, watering shall occur at night or in the early morning hours, which also reduces evaporation. ▪ Seasonal Restrictions for Irrigation – Most importantly, the irrigation allowance shall be determined based on the characteristics of each water year (when and how much precipitation falls) as that should influence how playfields are managed. Deciding when to cease irrigating the playfields is one of the most critical adaptive management measures for mitigating the potential adverse impacts associated with turf irrigation, and restrictions are defined further below under recommendations for adaptive management. <p>Adaptive Management Practices There is a hierarchy of need for water in most communities during times of water scarcity. While sports fields are important for communities to congregate, turfgrass can be replanted after a drought in which irrigation is halted and grass dies. Water needed for direct human consumption often overrides most other uses, trailed closely by irrigation for food crops, and water needed to support instream beneficial uses. However, while alternative water supplies may sometimes be available for human needs, requirements for aquatic organisms can only be met through maintenance of life-sustaining minimum flows and viable water quality. Given the drought conditions that have been ongoing for at least 3 years (at the time of this writing), irrigation of the sports field during extended drought conditions is likely to be highly scrutinized and of reduced priority compared to other needs.</p> <p>For this reason, the WSDAPISWAH recommends establishing a water budget for various irrigation demands on the site, as well as a triggering mechanism for the reduction or cessation of irrigation during periods of water shortage, based on higher priority uses.</p>	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>There are likely to be several tiers of demand within the beneficial uses that currently need to be serviced at the site including direct human consumption, residential uses, irrigation of trees and other established semi-permanent vegetation, irrigation of annual row crops, irrigation of turfgrass, and irrigation of pasture/wetlands. This water budget and management procedures would be defined as part of an Adaptive Management Plan for the site, as required below.</p> <p>The monitoring and management strategy defined in the Adaptive Management Plan shall consider current riverine, atmospheric, and antecedent precipitation conditions when determining the quantity of water available to irrigate turfgrass on the playfields. When the design and construction of new facilities is initiated, they shall be informed by the findings contained in the Adaptive Management Plan, and the findings shall be used in determining what type of and how many playfields are to be constructed. Phasing of the playfield construction would also allow field capacities to equilibrate with user demand and resource availability.</p> <p>The WSDAPISWAH recommends that the irrigation cutoff threshold for the playfields be significantly higher than the 17-cubic-foot-per-second (cfs) flow conditions in the South Fork Eel River observed in July 2015. A threshold of 30 cfs beyond which the playfields could only be irrigated with stored or recycled water is recommended. This threshold would result in less vigorous turf at the onset of the wet season. One adaptation could be rotating the location(s) and layout(s) of fields in active use throughout the dry season in a manner that spreads the recreational impact on desiccated turf throughout the entire playfield area.</p> <p>The following measures are recommended to provide adaptive management in future water use at the site:</p> <ul style="list-style-type: none"> ▪ Develop an Adaptive Management Plan by a qualified hydrologist/landscape contractor that establishes a reliable means of determining the annual irrigation water diversion cutoff date. The Adaptive Management Plan shall be in place by the onset of construction of any playing fields. ▪ Consult with turfgrass and sports field irrigation system experts before laying out sports fields and designing irrigation systems in order to determine the best drought-tolerant turfgrass and irrigation strategies to reduce water consumption. ▪ Refine the water demand summary for agricultural areas and turfgrass (from the 2014 "Water Supply and Demand Analysis Memorandum" prepared for the project applicant by GHD; see Appendix G of the Draft EIR) using the WSDAPISWAH Estimated Water Demand to provide more detail for the site. 	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>Future Water Storage and Restrictions on Flow Diversions</p> <p>The Lake and Streambed Alteration Agreement (LSAA) with the California Department of Fish and Wildlife (CDFW) allows up to 2,000 gallons per day to be diverted from the spring currently used by the applicant between November 1 and July 1 of each year. The other diversion serving the site is from an infiltration gallery in the South Fork Eel River that is allowed to operate at a maximum diversion rate of 0.24 cfs. Use of the infiltration gallery currently does not have a specified period of diversion in the LSAA.</p> <p>The following measures are recommended to improve future water storage and ensure adequate restrictions on in-channel diversions that could otherwise result in a cumulatively significant contribution to adverse effects on the aquatic habitat of the South Fork Eel River during the dry season:</p> <ul style="list-style-type: none"> ▪ The applicant shall install additional non-potable water storage facilities on the site for irrigation and as a source of fire suppression water for the Main Agricultural and Forestland areas. ▪ Diversion from the South Fork Eel River infiltration gallery shall cease when the flow at Sylvandale (USGS Gauge #11476500) is nominally less than 30 cfs, contingent on calculation of a more robust metric. ▪ Staff will track streamflow at Sylvandale (USGS Gauge #11476500), available from USGS website) between July 1st and October 31st. If streamflow drops below 40 cfs, streamflow data will be checked daily before diverting water from the South Fork Eel River infiltration gallery for sports field irrigation. No diversion from the South Fork Eel River infiltration gallery will occur when the collected streamflow data shows the flow at Sylvandale (USGS Gauge #11476500) is less than 30 cfs. ▪ The LSAA with the CDFW requires that streamflow be measured prior to any diversion if water is diverted between July 1 and October 31. Measurements shall be taken at USGS Gauge 11476500. ▪ A report consisting of streamflow measurements and diversion data will be submitted annually on December 31st to the Planning Director and the CDFW. The report shall also assess the effectiveness of the mitigation measure, and make recommendations for increasing the efficacy of the mitigation, if needed. This report shall be subject to the approval of the Planning Director in consultation with the CDFW. ▪ The applicant shall seek funding to install additional water storage tanks and other on-site facilities to improve availability during the dry season. The additional water storage capacity can be defined as part of the Adaptive Management Plan, and preferably implemented in conjunction with construction of the future sports fields. Depending on the location selected for these tanks and other storage facilities, additional 	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>environmental review may be required. Any necessary environmental review shall be conducted before the facilities are installed.</p> <ul style="list-style-type: none"> The Southern Humboldt Community Park is a senior water rights holder on the South Fork Eel River. Complying with any and all agreements to conserve water in an effort to protect fish and wildlife during periods of prolonged drought has no affect on existing senior water rights. <p>The combination of the measures above would reduce the project's contribution to the cumulative impact to less than significant.</p>	
CULTURAL RESOURCES			
<p>CULTURAL-1: The project could cause a substantial adverse change in the significance of the Wood/Tooby Ranch Complex, a historical resource as defined in CEQA Guidelines Section 15064.5. Remodeling contributing properties to the Wood/Tooby Ranch Complex could cause a substantial adverse change in the significance of this resource.</p>	PS	<p>CULTURAL-1: Any remodel, reconfiguration, or rehabilitation of the ranch house, cabin, garage, or other contributing buildings to the historical Wood/Tooby Ranch Complex by the project shall be conducted in accordance with the Secretary of the Interior's Standards for Rehabilitation (Standards) and undertaken with the assistance of an individual meeting the Secretary of the Interior's Professional Qualifications Standards for historic architecture (qualified architect). The qualified architect shall review the applicant's plans for work on the Wood/Tooby Ranch Complex buildings and provide written recommendations to the applicant and County to ensure that modifications to historical buildings are done in compliance with the appropriate standards. The qualified architect shall oversee remodeling, reconfiguration, or rehabilitation of the historical buildings to ensure that work is done in compliance with the standards. The County shall ensure that the recommendations of the qualified architect are followed as a condition of project approval.</p>	LTS
<p>CULTURAL-2: The project could cause a substantial adverse change in the significance of archaeological resources, resulting from construction-related ground disturbance. Also, increased use of and visitation to the property from public and private events as well as recreational uses have the potential to result in incidences of vandalism of resources, unauthorized collection of archaeological materials, and trampling of archaeological deposits.</p>	PS	<p>CULTURAL-2a: The Site Monitoring and Protection Protocols described in the Community Park Cultural Resources Management Plan (Venwayen and Whiteman, 2008) shall be implemented for the project. These monitoring and protection protocols include the following:</p> <ol style="list-style-type: none"> Placement of Protective and/or Interpretive Signs: Signs shall be placed at strategic locations in the community park—such as near restrooms, at kiosks, and trailheads—prohibiting surface collection of artifacts or digging in archaeological sites. Site Patrols: Community park staff shall routinely patrol archaeological resources, particularly during mid-size and festival-size events, to ensure that visitors remain on designated trails and away from archaeological deposits. Community park staff shall maintain a record of archaeological site inspections, including the date of inspection, observed damage or sources of potential damage (e.g., volunteer trails or cattle grazing) to archaeological resources. At its discretion, the County may request a copy of the inspection record(s) from the applicant. If damage or sources of potential 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>damage to archaeological resources is observed, community park staff shall implement site-specific measures to mitigate or prevent further damage. Such measures may include fencing to prevent incursion on archaeological deposits, signs requesting that visitors stay on designated trails, and planting of dense vegetation near archaeological resources to reduce the potential for site incursion.</p>	
		<p>3. Fencing: A fence or section of fence shall be used to direct foot traffic away from archaeological resources on the project site. Temporary chain-link fencing or construction fencing could be used to keep people off archaeological sites during mid-size and festival-size events.</p>	
		<p>4. Archaeological Survey: Prior to project ground disturbance within 100 feet of a recorded archaeological resource, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards shall conduct a survey to ensure that archaeological deposits would not be affected by the project. If an archaeological deposit is identified during the survey, project activities shall be redirected to avoid the deposit. If project activities cannot be redirected, the archaeological deposit shall be evaluated and mitigation carried out, as appropriate. Such mitigation may include a controlled excavation to recover archaeologically and historically significant information as well as public outreach and interpretation.</p> <p>CULTURAL-2b: Prior to project approval, the County shall ensure that the following compulsory specification be included in the project construction contract plans: If cultural resources greater than 50 years old, such as chipped or ground stone, historical debris, building foundations, or bone are discovered during project ground disturbance, work shall be stopped within 20 meters (66 feet) of the discovery. Work near the archaeological finds shall not resume until a professional archaeologist has evaluated the materials and offered recommendations for further action.</p>	
	PS	<p>The combination of the two measures above would reduce this impact to a less-than-significant level.</p> <p>CULTURAL-3: Refer to Mitigation Measures CULTURAL-2a and CULTURAL-2b. Implementation of Mitigation Measures CULTURAL-2a and CULTURAL-2b would reduce this potential impact to human remains by (1) establishing controls and protocols that would decrease the likelihood of public intrusion or destruction of archaeological resources containing human remains, i.e., through the use of signs, site patrols, and temporary fencing; and (2) establishing notification procedures for construction personnel in the event that archaeological resources and/or human remains are identified during project implementation.</p>	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
GEOLOGY AND SOILS				
<u>GEO-1:</u>	Development of the project could expose future site workers and patrons to significant seismic hazards, including ground shaking and seismic related ground failure.	PS	<u>GEO-1:</u> As a condition of approval for any grading or construction permits for the project, a design-level geotechnical investigation shall be prepared by a licensed professional and submitted to the Humboldt County Building Department for review and approval. The geotechnical review shall verify that the project plans incorporate the recommendations for design contained in the preliminary geotechnical report, the current California Building Code (CBC), and other applicable design standards. All design measures, recommendations, design criteria, and specifications set forth in the design-level geotechnical review shall be implemented as a condition of project approval.	LTS
<u>GEO-2:</u>	Development of the project could expose future site workers and patrons to significant geologic hazards, including hazards related to lateral spreading, slope instability, liquefaction, subsidence, and differential and total settlement.	PS	<u>GEO-2:</u> Implementation of Mitigation Measure GEO-1, requiring a design-level geotechnical review as a condition of approval for grading and construction permits, would reduce potential geologic impacts to less-than-significant levels. No additional mitigation is required.	LTS
<u>GEO-3:</u>	Soils at the project site may be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.	PS	<u>GEO-3:</u> Implementation of Mitigation Measure HYDRO-2, requiring demonstration of adequate capacity and operation of septic and wastewater systems, would reduce this potential impact to a less-than-significant level. No additional mitigation is required.	LTS
GREENHOUSE GAS EMISSIONS				
<u>GHG-1:</u>	The project could generate an increase in direct and indirect greenhouse gas (GHG) emissions.	PS	<u>GHG-1:</u> The project applicant shall implement the following measures to reduce greenhouse gas (GHG) emissions: <ol style="list-style-type: none"> 1. Design buildings to be energy-efficient. 2. Site buildings to take advantage of shade, prevailing winds, and landscaping to reduce energy use. The project shall make use of strategically-placed shade trees. 3. Limit the hours of operational outdoor lighting. 4. Install renewable systems where feasible, including solar and tank-less hot water heaters. 5. Create water-efficient landscapes. All landscaped areas shall be designed to reduce their water requirements. Landscaping shall make extensive use of drought-tolerant species. 6. Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls. 7. Control irrigation by systems designed to ensure water-efficiency. 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
HAZARDS AND HAZARDOUS MATERIALS			
HAZ-1: The project could expose the public or the environment to risks from reasonably foreseeable releases of hazardous materials during building renovation and demolition of buildings in Area 2.	PS	HAZ-1: As a condition of approval for project construction and demolition permits, a hazardous building materials survey shall be conducted by a qualified and licensed professional for all structures proposed for demolition or renovation as part of the project. All loose and peeling lead-based paint and asbestos-containing materials shall be abated by a certified contractor in accordance with local, state, and federal requirements. All other hazardous materials shall be removed from buildings prior to demolition in accordance with California Division of Occupational Safety and Health (DOSH) and California Department of Toxic Substances Control (DTSC) regulations. The completion of the abatement activities shall be documented by a qualified environmental professional and submitted to the County with applications for issuance of construction and demolition permits.	LTS
HYDROLOGY AND WATER QUALITY			
HYDRO-1: Proposed development at Area 5 could result in polluted runoff adversely affecting the water quality of South Fork Eel River.	PS	HYDRO-1a: Consistent with the requirements of the statewide Construction General Permit, the project applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce impacts on surface water quality through the project construction period. The SWPPP shall be prepared by a qualified stormwater professional (QSP). The SWPPP shall include the minimum best management practices (BMPs) required in Attachment C for Risk Level 1 discharges, Attachment D for Risk Level 2 dischargers, or Attachment E for Risk Level 3 dischargers (as applicable, based on final determination of the proposed project's Risk Level status [to be determined as part of the Notice of Intent for coverage under the Construction General Permit]). BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction or similar guidance. BMPs shall include all measures necessary to prevent sediment from the project site from being discharged during drainage. The SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations and, as appropriate, depending on the proposed project Risk Level, sampling of the site effluent and receiving waters. (Receiving water monitoring is only required for some Risk Level 3 dischargers.) If the proposed project is Risk Level 2 or 3, the project applicant shall also include requirements for Rain Event Action Plans as part of the SWPPP; a Rain Event Action Plan is a written document that must be prepared within 48 hours of any likely	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>precipitation event, describing actions that will be implemented to protect all exposed portions of the site from the predicted precipitation. BMPs shall include measures for dust control, erosion prevention, sediment control, construction vehicle traffic controls and tire washes, and material storage, spill prevention, and housekeeping protocols.</p>	
		<p><u>HYDRO-1b:</u> As a condition of approval for all grading and construction permits for the project site, the applicant shall prepare and implement a Stormwater Control Plan (SCP) for the project site consistent with all requirements of the MS4 National Pollutant Discharge Elimination System (NPDES) Permit as implemented by the Humboldt County Public Works Department. The SCP shall include, but not be limited to, BMPs designed into project features and operations to reduce potential impacts on surface water quality and to manage changes in the timing and quantity of runoff associated with development of the project site. The BMPs shall include Low Impact Development (LID) measures, such as minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source, to the maximum extent practicable. The potential for irrigation water runoff containing sediment or other contaminants will be addressed in the SCP, and any BMPs and LID measures to address irrigation water runoff will be included. Increased stormwater runoff may not be channeled or directed to flow across the traveled section of a County roadway, and drainage must be contained at the edge of the County road surface. Funding for the maintenance of all BMPs for the life of the proposed project shall be specified.</p>	
		<p>The combination of the two measures above would reduce this impact to a less-than-significant level.</p>	
<p><u>HYDRO-2:</u> Inadequate septic systems could potentially adversely affect groundwater and surface water quality.</p>	<p>PS</p>	<p><u>HYDRO-2:</u> As a condition of approval for building, grading, and construction permits at the project site, the applicant shall provide detailed plans for septic and wastewater disposal systems. The plans shall be prepared by a qualified professional and shall implement best available technology in the selection and installation of septic systems in compliance with state and county requirements. As a condition of approval for certificate of occupancy of the project site, the applicant shall provide evidence that the septic system is operating efficiently, that adequate capacity exists to address proposed site uses, and that a maintenance plan has been prepared and implemented for the system.</p>	<p>LTS</p>

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
LAND USE AND PLANNING				
	LAND-1: The project would conflict with applicable Humboldt County General Plan policies adopted for the purpose of avoiding or mitigating an environmental effect.	PS	LAND-1: The project applicant shall comply with all applicable mitigation measures identified in this EIR. Compliance with these measures would generally ensure that project conflicts with applicable Humboldt County General Plan policies would be reduced to less-than-significant levels. As indicated in Impact and Mitigation Measure AGFR-1, however, the loss of agricultural land that would result from the project would be a significant, unavoidable impact. The project's conflict with Humboldt County General Plan policies for protecting agricultural land would therefore be significant and unavoidable.	SU
MINERAL RESOURCES				
<i>No potentially significant impacts related to mineral resources would be anticipated as part of the proposed project development or operation.</i>				
Noise				
	NOISE-1: Concerts involving full (rock type) amplification during the large annual event, and medium-sized events with concerts involving medium amplification or loud acoustic bands in the Barnyard area, may exceed the County's short-term (L _{max}) land use and noise compatibility (CNEL) standards and increase ambient CNEL levels by 5 dBA or greater at some adjacent noise-sensitive (residential) receptors.	PS	NOISE-1a: A dispersed (satellite speaker) sound system around the stage and audience area of large amplified music events at the main stage in Area 4A and medium-sized music events at the western stage in Area 2 shall be used to lower point-source sound levels from that of a stage only speaker system. Sound levels needed to produce acceptable sound coverage of an audience with such a system are typically lower than those using stage-mounted speakers. NOISE-1b: The following sound level limits shall be employed for all outdoor events involving speech or voice/music amplification at the park: <ol style="list-style-type: none"> Any outdoor speech or voice/music amplification at the main, secondary or southern stage areas in Area 4A after 10:00 PM shall be limited to a maximum noise level of 90 dBA at 100 feet from the sound source. Any outdoor speech or voice/music amplification at the western stage in Area 2 after 10 PM shall be limited to a maximum noise level of 85 dBA at 100 feet from the sound source. Daytime outdoor speech or voice/music amplification at the main, secondary or southern stage areas in Area 4A shall be limited to a maximum noise level of 95 dBA at 100 feet from the sound source; and Daytime outdoor speech or voice/music amplification at the western stage in Area 2 shall be limited to a maximum noise level of 90 dBA at 100 feet from the sound source. 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p><u>NOISE-1c:</u> A Noise Management Plan, including the following provisions, shall be developed and implemented for use at the large- and medium-sized events that may generate noise levels in excess of the limits in the Humboldt County General Plan:</p> <ol style="list-style-type: none"> 1. The plan shall establish a position at which maximum event noise levels may be verified noise to show compliance with Mitigation Measure NOISE-1b; 2. Park staff shall obtain and be trained in the use of a sound level meter so as to capable of determining compliance with noise limits; 3. A member of the park's Board of Directors or management staff shall be designated as a complaint response coordinator and shall be responsible for responding to any local complaints about event-related noise; 4. If noise complaints are received during any event, noise shall be monitored during the next (subsequent) event at the residence from which noise complaints were received, and appropriate measures identified to reduce the impact to a less-than-significant level; and 5. Records of noise complaints shall be filed with the Humboldt County Planning Department at least once per year and included in any required annual report reviewed by the Planning Commission. 	
		<p><u>NOISE-1d:</u> The project shall be subject to the following annual reporting and review requirements:</p> <ol style="list-style-type: none"> 1. By December 31 of each year a medium-sized or large-sized event is held, the applicant shall prepare and submit 15 copies of a post-event report discussing that year's concert. Verification of attendance levels shall be discussed. 2. The report shall focus on assessing the effectiveness of the plan of operation, mitigation measures, and monitoring program. The report shall also contain written correspondence from agencies participating in monitoring and/or affected by the event (i.e., Planning Department, Division of Environmental Health, Sheriff's Office, and Public Works). 3. Responses to all concerns and issues identified in the report shall be provided and appropriate measures to be undertaken at the following year's event identified as needed. The annual report shall include sufficient data to assess the effectiveness of all required mitigation measures in relation to the total daily attendance and noise. 4. The Humboldt County Planning Commission shall review the post-event report within 120 days of receiving the report. The total attendance levels for medium- and large-sized events shall be determined by the Planning Commission on an annual basis 	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>after review and approval of the annual report. The allowed attendance levels for medium-sized events shall range from a low of 800 to a maximum of 2,500 persons total. A large-sized event ranging from 2,500 to 4,000 attendees is not allowed until the Planning Commission has reviewed and approved two consecutive annual reports for medium-sized events with attendance levels of at least 1,800 persons. In consultation with the reviewing agencies, the Planning Commission may waive the annual reporting requirements for medium- and large-sized events for up to 5 years should the applicant demonstrate the use has been conducted in conformance with all the required mitigation, and no changes in attendance levels or mitigation measures are proposed.</p> <p>5. To address area concerns that may arise, the applicant shall hold a minimum of one community meeting in the vicinity of the site within 90 days of each large-sized event. This requirement may be waived by the Humboldt County Planning Director in consultation with the reviewing agencies if no significant community issues have been reported during that year's large-sized event.</p> <p>The combination of the measures above would reduce this impact to a less-than-significant level.</p>	LTS
NOISE-2: Project construction could result in a substantial temporary increase in noise.	PS	<p>NOISE-2: The following best management practices shall be incorporated into the project:</p> <ul style="list-style-type: none"> ▪ Restrict noise-generating activities at the construction site or in areas adjacent to the construction site to the hours of 7:00 AM to 5:00 PM, Monday through Friday, and to the hours of 10:00 AM to 5:00 PM, Saturday and Sunday. ▪ Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment. ▪ Strictly prohibit unnecessary idling of internal combustion engines. ▪ Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. Temporary noise barriers could reduce construction noise levels by 5 dBA. ▪ Use "quiet" air compressors and other stationary noise sources where technology exists. ▪ Route all construction traffic to and from the project site via designated truck routes, where possible. Prohibit construction-related heavy truck traffic in residential areas, where feasible. ▪ Designate a "disturbance coordinator," who would be responsible for responding to any 	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p>local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.</p> <p>With the incorporation of these practices, the noise impact resulting from project construction would be reduced to a less-than-significant level.</p>	
POPULATION AND HOUSING			
<i>The project would not have any potentially significant impacts on population or housing conditions.</i>			
PUBLIC SERVICES			
<i>The project would not have any potentially significant impacts on public services (fire protection, police, and schools).</i>			
RECREATION			
<p>REC-1: The projects would include recreational facilities that might have an adverse physical effect on the environment.</p>	PS	<p>REC-1: The project shall comply with all applicable mitigation measures identified in this EIR. Compliance with these measures would ensure that the impact of recreational facilities included in the project would be reduced to a less-than-significant level.</p>	LTS
TRANSPORTATION/TRAFFIC			
<p>TRAFFIC-1: The project would increase traffic volumes on area roadways. While the volumes associated with typical daily operation would be nominal, medium-sized and large events would generate substantial traffic that could result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation.</p>	PS	<p>TRAFFIC-1a: As indicated in the Traffic Assessment Management Control Plan for the project, for events that are expected to exceed 1,200 attendees, flaggers shall be stationed at the intersection of Redwood Drive/Sprovel Creek Road at the conclusion of the event to direct traffic and to reduce delays.</p> <p>TRAFFIC-1b: For events having more than 2,000 attendees, shuttle buses shall be employed to reduce the total number of vehicles leaving the site to a maximum of 700 outbound vehicles in a single hour.</p> <p>TRAFFIC-1c: At medium-sized events, data regarding the number of attendees and resulting volumes of traffic shall be collected so that the number of trips can be monitored and thresholds adjusted if it is determined that attendance patterns or average vehicle occupancy are substantially different from what was assumed. These data shall be included in the annual report reviewed by the Humboldt County Planning Commission.</p>	LTS

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p><u>TRAFFIC-1d</u>: During the large festival events, on-site parking shall be limited to 500 spaces for attendees and 200 spaces for vendors and others working the event. While the vendors and others employed during the festival would likely remain on-site for an hour or more after the event concludes, the limited parking would ensure that the amount of traffic generated during a single hour results in trips that can be adequately handled by the street network. All other attendees would need to arrive by shuttle from off-site parking fields. It is understood that this is how the festival currently operates in Benbow, where there is substantially less parking than could be made available at the project site.</p>	
		<p><u>TRAFFIC-1e</u>: Festival parking passes shall be made available through advance purchase only, with a variety of purchase options, including buying them on-line or at the usual local ticket outlets where attendees purchase their event tickets. The number of parking passes that can be issued shall be limited for each day of the festival to 500. A separate pass shall be required for each day, with the passes to be displayed on the dashboard of the vehicle. The above requirements shall be addressed in the project's Traffic Management Assessment Control Plan (see Appendix E).</p>	
		<p><u>TRAFFIC-1f</u>: The project shall be subject to the following annual reporting and review requirements:</p>	
		<ol style="list-style-type: none"> 1. By December 31 of each year during which a medium- or large-sized event is held, the applicant shall prepare and submit 15 copies of a post-event report discussing that year's event(s). Verification of attendance levels shall be discussed. 2. The report shall focus on assessing the effectiveness of the plan of operation, mitigation measures, and monitoring program. The report shall also contain written correspondence from agencies participating in monitoring and/or affected by the event (i.e., Humboldt County Planning Division, Division of Environmental Health, Sheriff's Office, and Public Works Department). 3. Responses to all concerns and issues identified in the report shall be provided, and appropriate measures to be undertaken at the following year's event(s) identified as needed. The annual report shall include sufficient data to assess the effectiveness of all required mitigation measures in relation to the total daily attendance and traffic volume and intensity, and potential safety hazards to pedestrians and bicyclists. 4. The post-event report shall be submitted to the Humboldt County Planning Commission for review. The total allowable attendance levels for medium- and large-sized events shall be determined by the Planning Commission on an annual basis after review and approval of the annual report. The allowed attendance levels for medium-sized events shall range from a low of 800 to a maximum of 2,500 persons total. A large-sized event ranging from 2,500 to 4,000 attendees is not allowed until the Planning Commission 	

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Level of Sig. After Mitigation
<p>has reviewed and approved two consecutive annual reports for medium-sized events with attendance levels of at least 1,800 persons. In consultation with the reviewing agencies, the Planning Commission may waive the annual reporting requirements for medium- and large-sized events for up to 5 years should the applicant demonstrate the use has been conducted in conformance with all of the required mitigations, and no changes in attendance levels or mitigation measures are proposed.</p> <p>5. To address area concerns that may arise, the applicant shall hold a minimum of one community meeting in the vicinity of the site within 90 days of each large-sized event. This requirement may be waived by the Humboldt County Planning Director in consultation with the reviewing agencies if no significant community issues have been reported during that year's large-sized event.</p>	<p>PS</p>	<p>LTS</p>
<p><u>TRAFFIC-2:</u> The project has the potential to conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.</p>	<p>PS</p>	<p>LTS</p>
<p><u>TRAFFIC-3:</u> The project has the potential to increase safety hazards associated with access and circulation, especially in the Community Commons area (Area 4) of the site. Specifically, limited sight distance at any or all of the project driveways would result in a potentially unsafe condition.</p>	<p>PS</p>	<p>LTS</p>
<p><u>TRAFFIC-4:</u> The project could conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This is especially true for pedestrian use during medium- and large-sized events.</p>	<p>PS</p>	<p>LTS</p>

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

TABLE 2-2 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Sig. Without Mitigation	Mitigation Measure	Level of Sig. After Mitigation
		<p><u>TRAFFIC-4d</u>: Bicycle racks shall be included in each of the park's major entrances to encourage bicycle travel.</p> <p><u>TRAFFIC-4e</u>: To facilitate shuttle bus users, a temporary shelter shall be provided during events that use a shuttle bus, both to protect attendees and to provide guidance as to the location of the shuttle stop.</p> <p>The combination of the above mitigation measures would reduce this impact to a less-than-significant level.</p>	
UTILITIES AND SERVICE SYSTEMS			
<p><u>UTIL-1</u>: The project would require or result in the construction of new water facilities, the construction of which could cause significant environmental effects.</p> <p><u>UTIL-2</u>: The project would comply with federal, state, or local statutes and regulations related to solid waste. However, The Humboldt County Division of Environmental Health has identified the potential for impacts resulting from the handling of solid waste and recycling at the project, especially during events attracting 500 or more attendees.</p>	<p>PS</p> <p>PS</p>	<p>The project shall comply with all applicable mitigation measures identified in this EIR. Compliance with these measures would ensure that the impact of the proposed water facilities included in the project would be reduced to a less-than-significant level.</p> <p><u>UTIL-2</u>: The applicant shall submit a plan for the management of solid waste and recycling for events that would attract 500 or more attendees. The plan shall be subject to approval by the Humboldt County Division of Environmental Health. Prior to events attracting 500 or more attendees, the applicant shall manage solid waste and recyclables a manner consistent with the approved plan.</p>	<p>LTS</p> <p>LTS</p>

PS = Potentially Significant; LTS = Less Than Significant; SU = Significant and Unavoidable

3. PROJECT DESCRIPTION

This chapter describes the proposed Southern Humboldt Community Park (SHCP) project (the project) that is evaluated in this Draft EIR. This chapter provides information on the proposed project's location, objectives, existing and proposed facilities, construction techniques, maintenance, and permitting and entitlement requirements.

3.1 PROJECT LOCATION AND SITE CHARACTERISTICS

PROJECT SITE LOCATION AND LAND USES

The 405.7-acre project site is located in an unincorporated portion of southern Humboldt County, approximately 1 mile west of Garberville, at 934 Sprowel Creek Road at the intersection of Sprowel Creek Road with Kimtu Road (see **Figure 3-1**).

Tooby Memorial Park is located in the northeastern portion of the project site and has been in operation as a park for more than 50 years. The park is a well-used facility in southern Humboldt County. In 2008, use of the park by visitors was estimated at 42,000 visitor days per year. By 2012, park use had increased to an estimated 46,000 visitor days per year.

The project site includes aquatic and riverine habitats bordered by riparian vegetation as well as mixed deciduous and conifer forest, native redwoods, California Bay forest, non-native grasses, freshwater emergent wetlands, seasonal creeks, and prime farmland. The South Fork Eel River flows across the northern portion of the project site.

Most of the project site has been used for ranching and agricultural activities since the mid-1800s. Numerous dwellings and out-buildings are located on the project site. There are currently four people on-site including three caretakers and one resident.

As shown in **Figure 3-2**, the Humboldt County General Plan land use designations for the project site are IR (Industrial, Resource Related); AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres); and AL(20) (Agricultural Lands, one dwelling unit per 20 acres). The project site is zoned MH-Q (Heavy Industrial-Qualified) and AE (Agriculture Exclusive).

NEARBY LAND USES

Adjoining properties on the north side of the South Fork of the Eel River include a cluster of low-density, rural-residential, single-family-zoned properties; a single-family horse ranch; and an operational 36.3-acre surface mining, gravel, and shale extraction, storage, and processing facility that has a General Plan designation of Industrial, Resource Related (IR) and is zoned MH-Q. The property where the gravel mining facility is located is owned by the Southern Humboldt Community Park (the project applicant), but the separate parcel containing the mining operation is not a part of the proposed project.

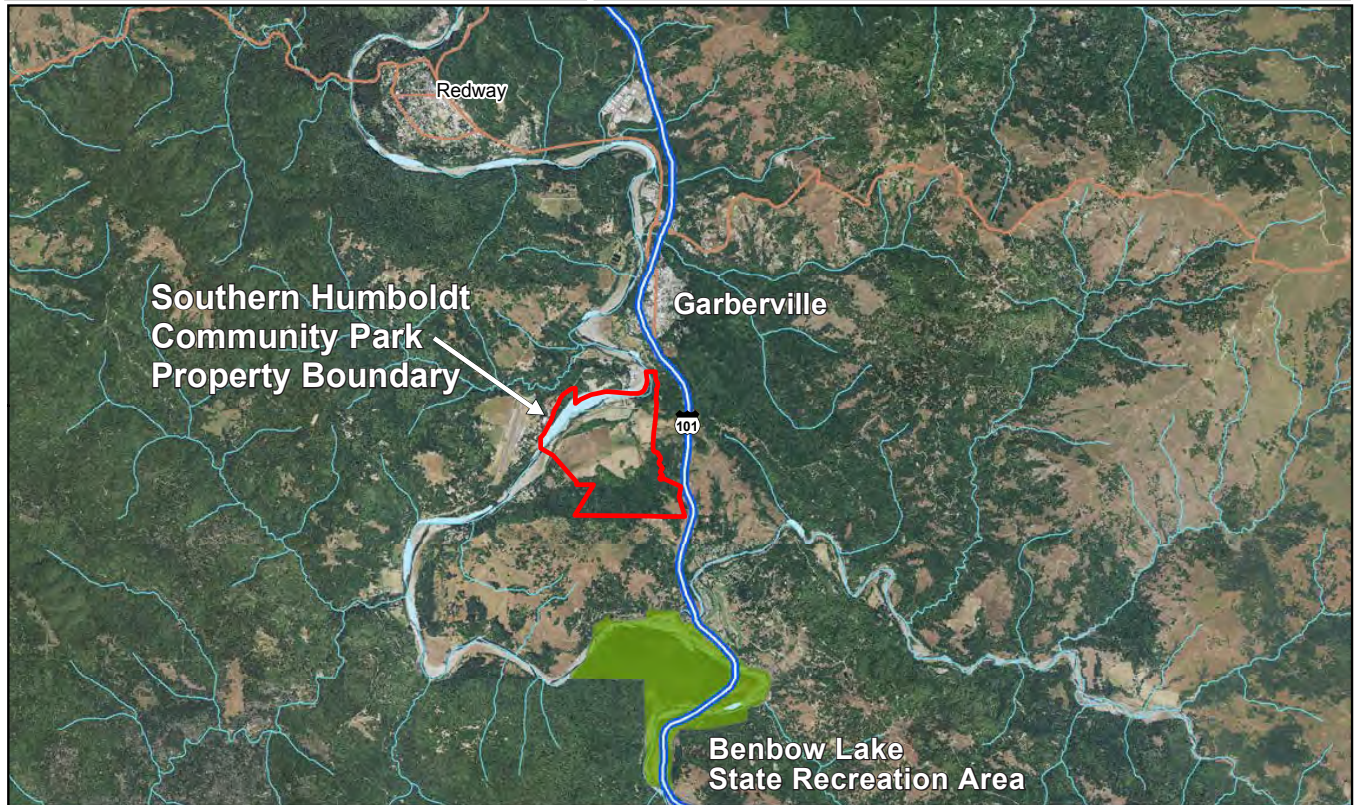
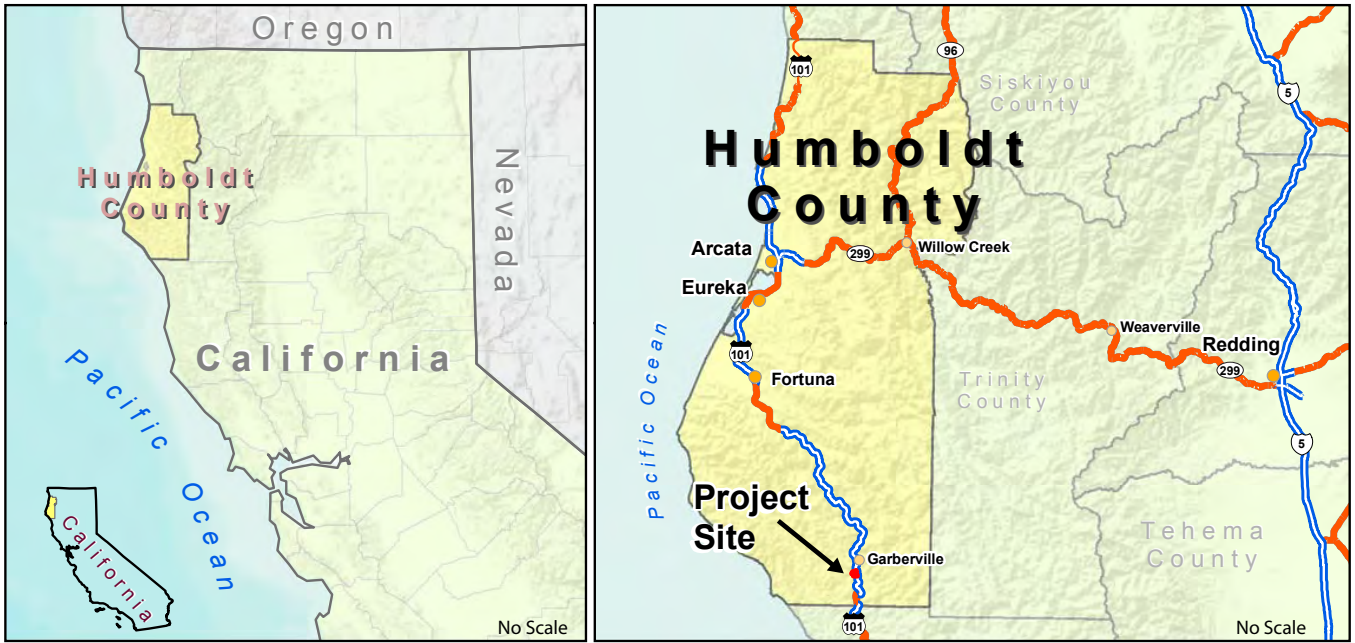


Figure 3-1

REGIONAL AND PROJECT LOCATION

SOURCE: GHD, 2014

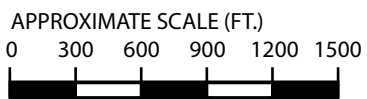
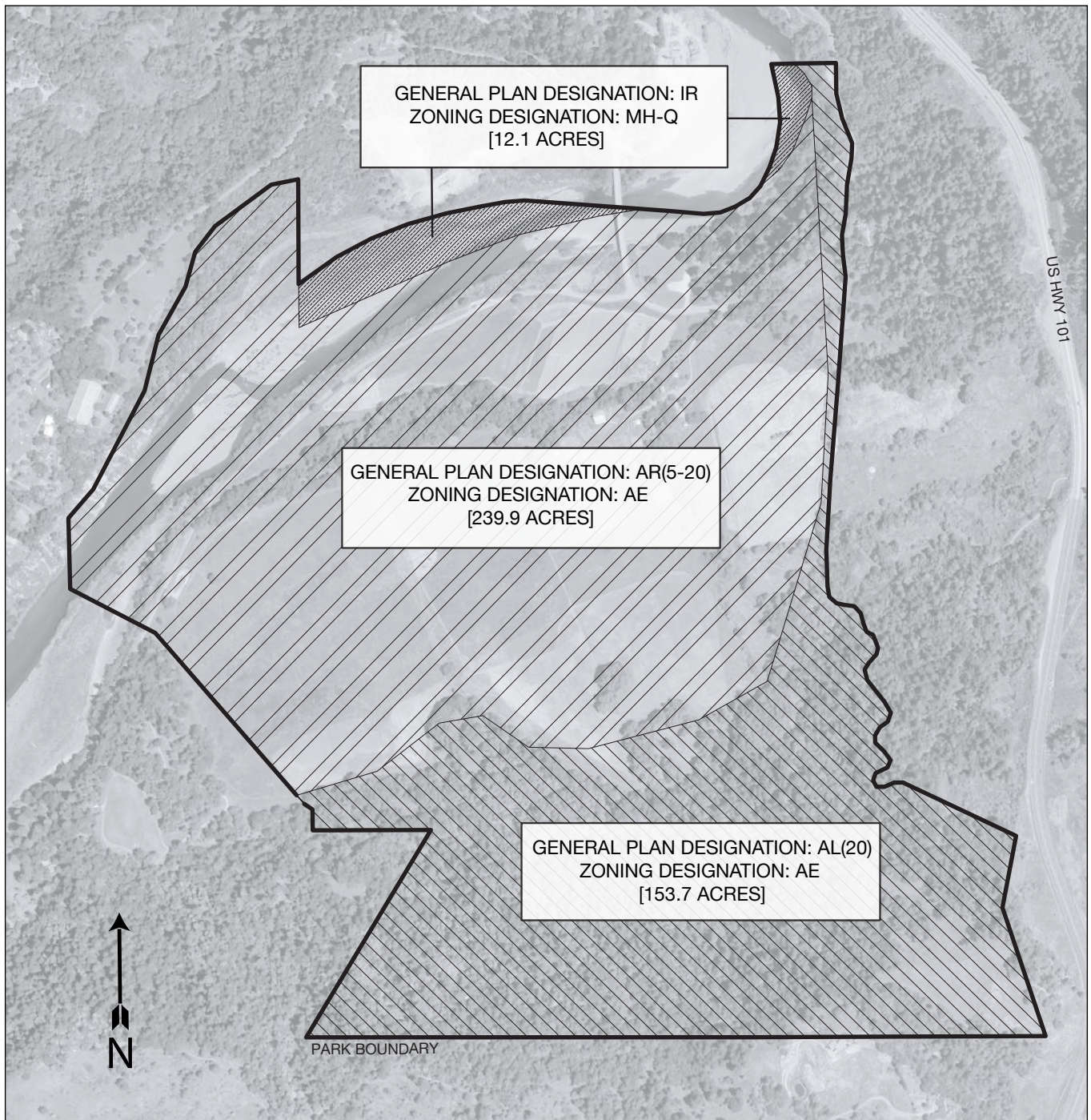


Figure 3-2

EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

SOURCE: Huber C&D, 2014

To the east, the project site borders Highway 101 and a privately owned 80-acre parcel with a single-family residence, which is also the location of the new Garberville Sanitary District (GSD) potable water treatment facilities expansion. The water treatment facilities are also not a part of the proposed project.

To the west, the project site is bordered by a privately owned 70-acre undeveloped and unoccupied property.

Benbow Lake State Recreation Area (see Figure 3-1), located approximately 2 miles south of Garberville, offers nearby compatible recreational land use and public access opportunities.

3.2 PURPOSE, NEED, AND OBJECTIVES

PURPOSE

The purpose of the proposed project is to create the appropriate land use regulatory framework for continued use and enhancement of the existing infrastructure, resources, and other assets within the project site.

NEED

The Garberville and Redway areas of southern Humboldt County have a limited supply of available community park facilities and do not currently have any land zoned to allow the development of a multi-use community park. Because of the mountainous topography of southern Humboldt County and the distance between population centers, the area has historically lacked community gathering spaces in close proximity to population centers. Although there are available federal, state, and county parks in southern Humboldt County, these generally lack the appropriate space, proximity to towns, and infrastructure to be well suited to community gatherings, events, and other recreational activities. Much of the flat land close to population centers was historically, and remains, in use for agricultural, commercial, and residential development and is zoned accordingly. This has led to an overuse of the few public areas close to population centers.

PROJECT OBJECTIVES

Project objectives are the broad goals that support the proposed project and form the basis for evaluation of project alternatives. The objectives for the proposed project are as follows:

1. To establish a multi-use community park on land owned by the Southern Humboldt Community Park, a non-profit group established for the purpose of administering a local community park.
2. To create a balance between human uses and natural resource protections within the SHCP boundaries by promoting multiple compatible uses of the land that conserve the ecological, historic, agricultural, and scenic resources.
3. To retain and enhance existing infrastructure, resources and other assets of the Southern Humboldt Community Park to support recreational, entertainment, and community enrichment uses, including all the following uses:

- Social activities, cultural experiences, events, festivals, concerts and celebrations;
 - Multi-purpose trails and facilities for walking, bicycling, and equestrian use;
 - Interpretive riparian trail and interpretive features including trails, kiosks, and displays;
 - Organized sports and tournaments including disc-golf, soccer, baseball, and football;
 - Playgrounds, barbeque and food preparation areas, and picnic areas;
 - Environmental and educational facilities that can be used for trainings, workshops, group retreats, and sports camps;
 - River access for non-motorized boating and swimming; and
 - Community meeting rooms, and a community kitchen to prepare food for on-site uses.
4. To retain and enhance existing infrastructure, resources, and other assets to support agricultural and ecological restoration uses of the project site including:
 - Protection of prime farmland;
 - Farming, grazing and animal husbandry;
 - Sustainable agriculture community education;
 - Agriculture projects and agricultural production;
 - Water facilities to support project objectives;
 - Dry farming and water conservation practices;
 - Economically viable farming;
 - Community supported agricultural (CSA) projects;
 - Cooperative facilities for processing and storage of crops;
 - Restoration, forest management, and erosion control; and
 - Retain existing surface mining.
 5. To provide the appropriate land use regulatory framework for the uses listed above through changes in the zoning and Humboldt County General Plan land use designations of the site, and the approval of conditional use permit to allow community events with more than 800 attendees and special permits to create a two-lane entrance road and for small bridge installation.
 6. To retain transferable development rights provided through the existing mixed agricultural/residential land use designation AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres); and AL(20) as assets that could be transferrable to other properties in the County for a fee under a transfer of development rights program.

3.3 BACKGROUND

The project applicant is Southern Humboldt Community Park, a non-profit group established for the purpose of administering a local community park. Since the applicant took over ownership and operational responsibility of the project site in 2000, it has been working with the community to identify appropriate uses for the project site. In addition, the applicant has been working with Humboldt County to align the existing and proposed uses of the project site with the Humboldt County General Plan and Zoning Ordinance.

The applicant conducted extensive public outreach in its multi-year park planning process, including three initial public visioning events with 30 to 60 attendees in 2002; a series of four targeted public planning sessions beginning in 2008, with 40 to 200 attendees; and a 2012 survey of 425 individuals. This community input formed the basis for park planning efforts and shaped the proposed project.

In support of the project, the applicant commissioned preliminary technical and environmental work that included property surveys and more than a dozen special studies to gather information about the existing conditions on the project site. On November 10, 2009, the Humboldt County Board of Supervisors voted unanimously to accept a General Plan Amendment petition, which allowed the applicant to submit the application for the proposed project. The application was initially filed on May 22, 2010. The Notice of Preparation of the Draft EIR was released in August 2010. A community scoping session was held at the project site on September 9, 2010 to receive input on what should be included in the Draft EIR.

Since that time, the applicant and County staff have been working on the Draft EIR. The project site has continued to be used for resource production consistent with the existing zoning, and for small-scale community activities consistent with the historic use of the property. In 2011, it was estimated that there were more than 46,000 park user-days visits.

3.4 PROJECT SUMMARY

The project site includes a variety of existing facilities, structures, and land uses. Under the project, some of these would be continued and some would be changed. The discussions of existing and proposed uses below refer to the following subareas of the site:

- Area 1 – Tooby Memorial Park (8.2 acres)
- Area 2 – Park Headquarters (6.0 acres)
- Area 3 – Main Agricultural (127.1 acres)
- Area 4 – Community Commons (56.4 acres)
- Area 5 – Community Facilities/Sports Area (16.0 acres)
- Area 6 – Riverfront (77.0 acres)
- Area 7 – Forest Preserve (115.0 acres)

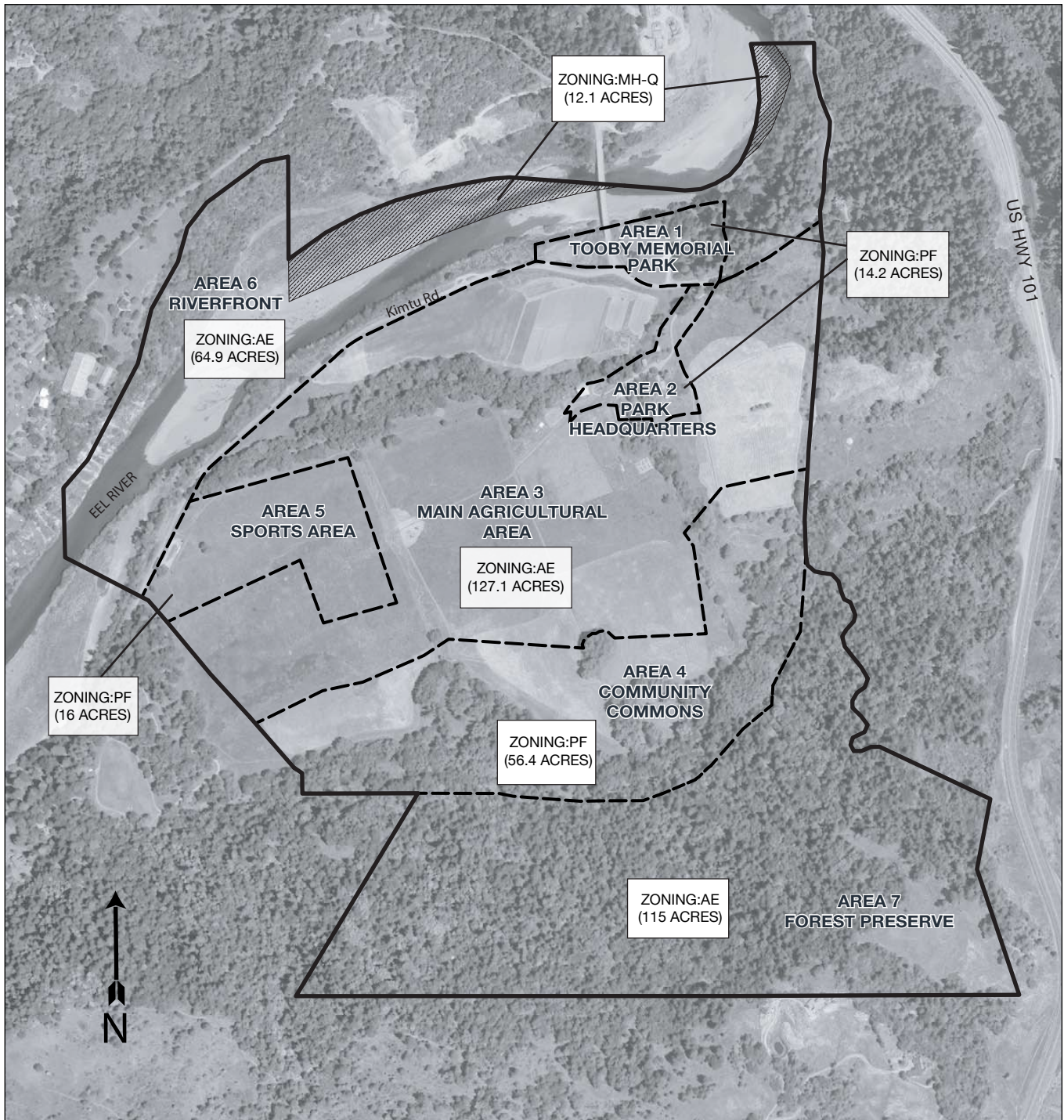
These seven subareas are illustrated in **Figure 3-3** and described in more detail in Section 3.5 below.

PROPOSED CONTINUED USES OF EXISTING FACILITIES

The proposed project would retain the following existing facilities, with some modifications.

Agricultural Facilities

Portions of the site have been used historically and are currently used for agricultural activities. Since agricultural activities would continue as part of the proposed project, most of the existing agricultural buildings would remain in use. Existing uses include the production, processing, and storing of agricultural products. In the Park Headquarters (Area 2), an existing large two-story barn, a small two-story barn, a chicken coop, and a horse stable with tack room and covered storage area would remain in use with no significant physical alterations. Agricultural processing would continue in the main, two-story barn. An existing refrigeration unit is next to the main barn. A small existing tool shed in the Park Headquarters is used as a farm stand. In the Main Agricultural Area (Area 3), existing greenhouses and storage sheds would remain in use. There are two unserviceable structures in Park Headquarters (Area 2): the scale house and the slaughterhouse. There are



PF = PUBLIC FACILITIES
 AE = AGRICULTURE EXCLUSIVE
 MH-Q = HEAVY INDUSTRIAL

Figure 3-3

PROPOSED ZONING AND SITE AREAS

SOURCE: Huber C&D, 2014

no proposed uses for these two structures. Existing livestock fencing in the Park Headquarters and in the Main Agricultural Area would be maintained. Existing community uses currently taking place in the barnyard include weddings, memorials, nature study, agricultural study, and workshops and classes.

The following existing uses would be continued and are consistent with the historical use of the property:

- Production of food, fiber, plants, and timber;
- Continued agricultural use of existing structures: two barns, greenhouses, outbuildings, chicken coop, stables, and farm stand;
- Cottage industry, such as value-added farm products, food products, nursery, or seed production which will require that the Public Facility (PF) zone be added to the cottage industry ordinance;
- General agricultural production;
- Continued use of horse stable facilities for fewer than six horses;
- Agricultural products processing; such as post-harvest handling and market preparation;
- Agricultural storage and refrigeration;
- Watershed, forest management, and restoration; and
- Equestrian uses.

Recreational and Community Facilities

Within Tooby Memorial Park (Area 1), existing playground equipment, a picnic area, barbeque pits, and benches dating to the 1960s would remain for public use. This area has been used for public recreation, swimming, boating, ad hoc sports games, community gatherings and events for many decades. Additional existing picnic areas located in the Main Agricultural Area (Area 3) and Community Facilities/ Sports Area (Area 5) would also be retained. Approximately 3.5 miles of existing unpaved trails, dating to 2002, throughout the park would remain in use. Other existing visitor uses of the park, under the current agreement with Humboldt County Planning Department, exist and would continue in Areas 3 through 5. These include hiking, biking, horseback riding, disc golf course dog walking, nature study, forest, habitat and streamside restoration, agricultural study, workshops, classes, weddings, and memorials.

The existing disc golf course in Areas 3 through 5 would also be retained. An existing labyrinth pathway in the Main Agricultural Area (Area 3) would continue to be used during weddings and memorials. Existing benches, way-finding signs, and interpretive signs throughout the park, in addition to two kiosk/shade structures (one in the Park Headquarters and one at the Community Facilities Area) would be retained. Existing portable toilet facilities, which have been placed in several areas of the park, would continue to be necessary.

Transportation/Parking

A network of existing park service roads is currently used by park staff, by hikers and bicyclists, and for agricultural machinery and vehicles; these roads would remain in use. All existing roads

and existing permanent unpaved parking areas in Tooby Memorial Park (Area 1), Park Headquarters (Area 2), and the Community Facilities/Sports Area (Area 5) would be retained. There are several unpaved parking areas that are currently used by park visitors approximately once per month to facilitate events in the Park Headquarters, the eastern portion of the Main Agricultural Area (Area 3), along Kimtu Road (Area 6), and in the Community Facilities/Sports Area (Area 5). These areas would continue to be used as a part of the project.

Residential Facilities

There are currently four residential units on the project site. These existing structures consist of a large ranch/farm house serving as a caretaker's unit, a one-bedroom cabin, a two-bedroom bunk house in the Park Headquarters (Area 2), and a small mobile home/caretaker's unit in Tooby Memorial Park (Area 1). These residential units are used for housing caretakers and farm workers or are rented, and would continue to be used similarly as part of the project. Portions of some of the existing residential facilities may be converted for additional park uses. Use conversion may include minor physical alterations, repair, and maintenance of existing structures. Existing structures may be used as office spaces, meeting spaces, and a community kitchen.

PROPOSED NEW USES

Proposed physical changes to the project site would allow expanded and new opportunities for use of the park, including community enrichment events, agricultural uses, and a variety of proposed recreational uses including organized sports, disc golf, specialty group camping, educational classes, workshops, camps, and ecological restoration uses, as discussed below. New proposed uses include community assembly as part of the everyday allowable uses. Additional proposed park uses range from birthday parties, weddings, and memorial services to non-profit fundraisers, concerts, sporting events, tournaments and a festival. The park serves an important role as a place for community interaction and as a gathering place for a wide range of activities.

Agricultural and Ecological Restoration Uses

Agricultural use has been an important part of the history of the Tooby Ranch and is ongoing under existing park management. The project proposes community uses of existing agricultural land to increase the productivity of the land by allowing multiple farmers, community groups, and individuals to use the land and existing facilities. Collaborative use of agricultural land and facilities would allow a greater level of community participation and cooperation in farming and agricultural production. This would also assist multiple farmers in sharing basic set-up costs to make farming more profitable. Park management proposes ongoing restoration activities aimed at watershed and forest improvements as part of ongoing maintenance and stewardship of the land.

Recreational and Educational Uses

The park would be used for many educational purposes including workshops, forums, classes, meetings, educational camps, and agritourism. Additional community uses, such as workshops and classes, would also take place in the park. New proposed recreational uses would include a wide variety of recreational uses such as organized sports, an environmental camp for specialty groups, recreational sports, and educational camping. In addition, the existing park uses of hiking, bicycling, horseback riding, bird watching, skate ramp, disc golf, and dog walking allowed under

current agreement with Humboldt County would be expanded through additional trails, a bike park, a new skate park, and a dog park

In addition, the various existing and proposed sports and recreational facilities would host tournaments for multiple teams. This could include bicycling and disc golf events using existing facilities and new facilities.

Proposed New and Modified Uses of Existing Park Facilities Uses

The project would allow the modified use of existing structures for additional community purposes. The existing ranch/farm house and garage would be modified to include community meeting rooms, offices, and kitchen facilities. The ranch house would also retain living quarters.

Remodeling the existing ranch/farm house and garage would create the Park Headquarters offices and a community center facility. The remodeled spaces would be used as a community center, community kitchen, educational, and spaces for meetings, workshops and park offices.

Proposed New Facilities

Proposed new facilities would include facilities for organized sports such as baseball, soccer, football, and other similar sports and recreational uses. Additional trails, bicycle park, dog park, and a skate park would be added for public recreation uses. Concession and equipment facility, modification of existing water system, restrooms and portable toilets would be added.

Events

Various small events, as well as five medium-sized events per year and one festival per year, are proposed as part of the project.

Small Events

The following small events (attendance under 800) would occur under the project and would be considered allowable within the number of visitors allowed at the park daily based on the type of event held:

- **Birthday parties and informal gatherings.** With attendance typically ranging from 10 to 50 people, Tooby Memorial Park (Area 1) and the large barn in the Park Headquarters (Area 2) have been favorite gathering places for family birthday parties, BBQs, and similar events. Tooby Memorial Park has served as a location for these types of events for more than four decades. These types of gatherings often have amplified music such as radios or portable personal music players. These events typically end at sunset. This type of activity would continue with the proposed project, with no limit on the number of these types of events annually.
- **Weddings and memorials.** Many weddings and memorial services for community members have taken place at the park. These events would continue in Tooby Memorial Park (Area 1), the Park Headquarters (Area 2), the Community Commons Area (Area 4), and the labyrinth in the Main Agricultural Area (Area 3). Weddings could include low-key amplified music such as one musical group or a DJ using a small public address amplification system at 65 decibels or

less. These events would typically end at sunset, but a few each year may continue until midnight. Attendance would be 500 people or less and would be within the daily visitor allowance at the park.

- **Small fundraisers and events.** Many local non-profit organizations and park user groups have used the park for fundraising activities. A few examples include the Hospice Barnyard Brew, the Egg Hunt, the Walk in the Park (fundraiser for the local schools and the park) and mountain bike races. These are well-attended events that bring a wide range of community members and interests groups together at the park. Most of these events include a variety of types of amplified music including prerecorded and live performances. Small events with amplification could also take place at Tooby Memorial Park (Area 1), the Park Headquarters (Area 2), and the Community Commons and the wedding grove (Area 4), due to their size and setting. The sound level produced during such a small event would be 71 decibels at 500 feet from the performance areas. These events would typically end at sunset, but a few each year may continue until midnight with a maximum attendance of 800 people and would be within the number of daily visitors allowed at the park.

These small events would be considered as public assembly uses under the proposed new zoning and would not require a special conditional use permit or be limited in the number of events. These types of events would be allowed to occur all year. They would occur seasonally, most often during late spring, summer, and early fall months. The majority of these small events would occur between sunrise and sunset, with a few events each year going to midnight.

Medium-Sized Events

This type of event often features multiple performers and performances by well-known groups or individuals that would likely attract more attendees than small events. These events could cover a wide range of musical genres, theater, dance performances, and concerts. These events would take place in the Community Commons (Area 4). Attendance would be 800 to 2,500 people daily in addition to staff and vendors. Not more than five of these medium-sized events would occur per year. Parking would occur on-site on approximately 6 acres. For events with more than 2,000 attendees, shuttle buses would be used and public parking in the towns of Garberville and Redway would be utilized. These events would be included in the proposed conditional use permit.

Festival/Large Event

The park would host a festival-sized event annually. Attendance would range from 2,500 to 5,000 people per day. The event would occur once per year and be no longer than 2 days. The event would be a family-friendly event that features a unique blending of local and regional musicians on three outdoor stages, roving entertainers, quality artisans displaying and selling wares, exhibits of fine arts displays, international cuisine, and on-site educational workshops. The attendance would fluctuate over the course of the day and the total number of attendees on the site at any one time would be less than the 1-day total. Actual attendees would cap at 4,000 per day, with an additional 1,000 staff, vendors, and entertainers on-site.

The event organizers would encourage attendees to park in street side parking spaces available in the towns of Redway and Garberville and ride shuttle buses, a system that has been successfully used by the Mateel Community Center's Summer Arts and Music Festival for decades. The event would have the same (or lesser) street parking needs as the Summer Arts and Music Festival

(Justin Crellin, General Manager Mateel Community Center). Street parking in Redway and Garberville is well proven to be adequate for off-site parking for an event of this size. On-site parking would be available and would be limited to 500 attendee vehicles and 200 vehicles for staff and vendors, for a total of 700 vehicles. This event would be included in the proposed conditional use permit.

PROPOSED GENERAL HOURS OF OPERATION

The park would be open to the general public from dawn to dusk all year, as it is currently. Prearranged special events may run until midnight. By advanced arrangement with park staff, Area 4 the Environmental/Educational Camp would have overnight camping.

ANTICIPATED NUMBER OF VISITORS

The proposed improvements included in the project are expected to increase the number of visitors by an estimated 800 persons per day during the peak seasons (late spring, summer, and early fall). Additional visitors would be allowed at the park for special events under a conditional use permit. Under the conditional use permit, one annual event per year with up to 5,000 attendees (4,000 guests plus up to 1,000 staff, vendors and performers), and up to five events per year with 800 to 2,500 attendees (including staff, vendors and performers) are proposed.

ANTICIPATED NUMBER OF NEW EMPLOYEES

When the project is in full operation (anticipated in 3 to 5 years), it would likely result in four full-time permanent employees.

3.5 PROPOSED LAND USES BY AREA

Due to the large size of the project site, the project plans address subareas of the site. The site has been divided into the following seven subareas, as shown in Figure 3-3:

- Area 1 – Tooby Memorial Park (8.2 acres)
- Area 2 – Park Headquarters (6.0 acres)
- Area 3 – Main Agricultural (127.1 acres)
- Area 4 – Community Commons (56.4 acres)
- Area 5 – Community Facilities (16.0 acres)
- Area 6 – Riverfront (77.0 acres)
- Area 7 – Forest Preserve (115.0 acres)

Each of these subareas is discussed in more detail below.

AREA 1 – TOOBY MEMORIAL PARK (8.2 ACRES)

Area 1, Tooby Memorial Park, is designated in the Humboldt County General Plan as AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and zoned as Agriculture Exclusive (AE). The proposed project would change the General Plan designation of

this area to a new designation, Public Recreation (PR), and change the zoning to a new zone, Public Facility (PF).

Existing Facilities

Area 1 has functioned as a public park since the 1960s. Existing facilities include a playground with playground equipment located in an approximately 11,500-square-foot fenced area (see **Figure 3-4**). An additional 6,500-square-foot area includes picnic tables, barbecue pits, and a large area for parking. The Tooby Park area also includes public beach access to the South Fork of the Eel River and is a popular swimming site in the summer. There are existing trails throughout this area that would continue to be used by the public, such as an existing pedestrian trail (375-foot gravel path) between Tooby Memorial Park and the 45,000-square-foot parking area within Area 1, to the west of the Sprowl Creek Bridge. There are existing trails and a bridge extending from Tooby Park (Area 1) to the redwood grove along the northwestern corner of Riverside Area (Area 6) adjacent to Sprowl Creek Road. Signage, fencing, gates and existing landscaping also are currently in place. Portable toilets and trash service are currently available at the site. A caretaker residence (a 192-square-foot trailer) is also on-site.

Proposed Facilities

The proposed work in this area is to upgrade, improve, and maintain existing facilities. The following reconfigurations and new facilities are proposed (see Figure 3-4):

- A 1,000-square-foot, 12-foot-tall gazebo/ shade structure would be installed.
- A 400-square-foot (40-foot by 10-foot) bathroom would be installed.
- A drinking fountain would be installed.
- The existing parking lot (65 cars) would be reconfigured for safety.
- A traffic circle would be created and gateway signage would be installed.
- The existing flat parking area on the west side of the Sprowl Creek Bridge would be reconfigured and used for overflow parking (45,000 square feet). (Existing gravel storage would remain an allowed use.)
- The existing 100-foot-long dirt footpath to the beach would be improved with wooden steps from the playground and parking lot area and would improve access for non-motorized boating.
- The addition of up to 10 additional play structures total would be added, the existing fenced playground area would be expanded and within the 1.5-acre recreation area.

The new construction listed above would involve minimal grading, and heavy equipment would be limited to less than one single dump truck and small tractor.

Access

Access to Tooby Park is on Sprowl Creek Road approximately 1 mile from Garberville. The existing parking area would be reconfigured with a traffic circle and shade trees. Overflow parking

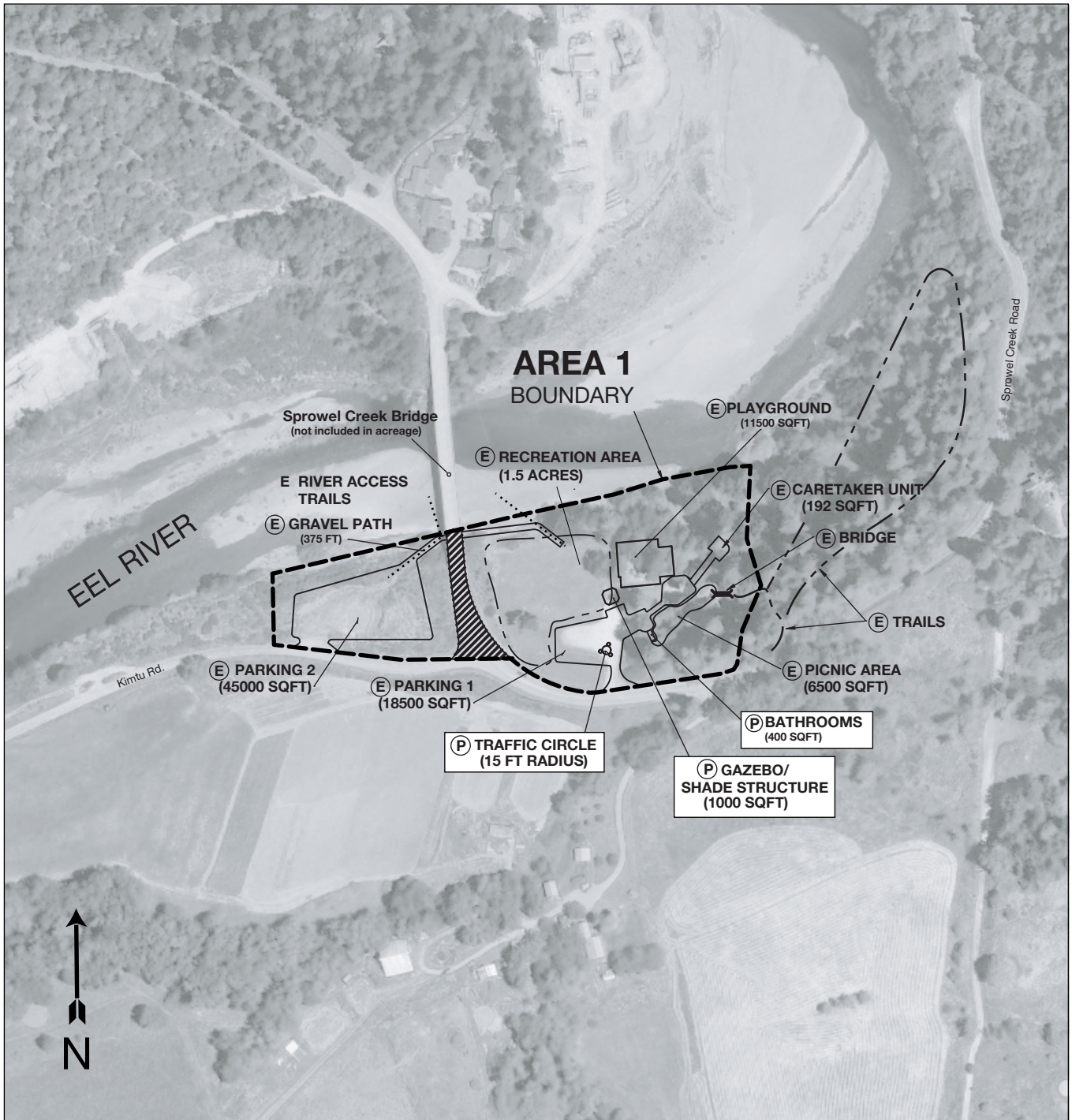


Figure 3-4

AREA 1: TOOBY MEMORIAL PARK (8.2 ACRES)

SOURCE: Huber C&D, 2014

may be used on the west side of the Sprowel Creek Bridge in an existing large flat area within Tooby Park (Area 1).

Lighting

Outdoor lighting is proposed at the existing caretaker's residence and at the restrooms. Temporary lighting would be used on special occasions that continue beyond dark. Solar and battery-powered lighting options would be used whenever possible.

Changes to Existing Agriculture

Tooby Park (Area 1) has been operating as a park for more than 50 years and, as such, has not been used for agricultural production during that time. There are no current agricultural uses of Area 1, and no new agriculture uses are proposed.

Gravel Operation

Areas within and near Area 1 are currently leased by Randal Sand and Gravel for harvest of gravel, sand, and shale. The section of Area 1 on the west side of the Sprowel Creek Bridge is currently used as a stock pile for gravel. This use would remain the same and would continue to be allowed within Area 1.

Removal of Vegetation

No removal of trees or vegetation is proposed in Area 1.

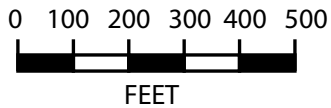
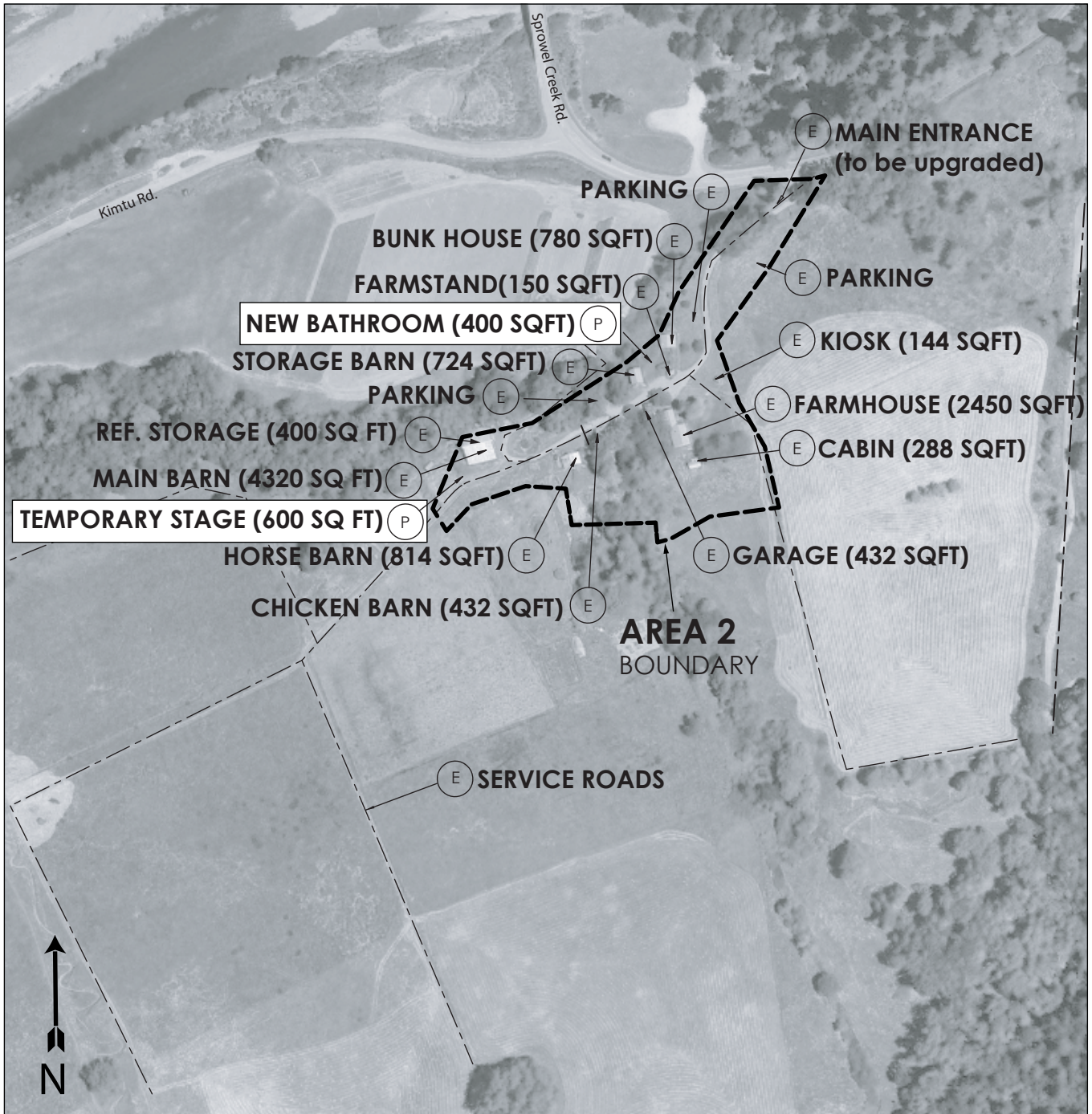
AREA 2 – PARK HEADQUARTERS (6 ACRES)

Area 2, Park Headquarters, is designated in the Humboldt County General Plan as AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and zoned as Agriculture Exclusive (AE). The proposed General Plan designation is Public Recreation (PR) and the proposed zoning is Public Facility (PF).

Existing Facilities

Area 2 includes most of the existing structures from the old ranch (see **Figure 3-5**). Area 2 contains 13 existing permanent ranch and residential structures. Several of the buildings are in poor to very poor structural condition. These structures and their existing uses include:

- Main ranch/farm house—caretaker's unit (2,241 square feet) currently in residential use;
- Secondary house/cabin (300 square feet), currently unoccupied;
- Bunk house (624 square feet) currently in residential use;
- Farm stand (96 square feet) for sale of produce;
- Chicken coop with loft (633 square feet) used for raising chickens;
- Garage (432 square feet) currently used as a workshop;



- (E) EXISTING
- (P) PROPOSED
- SERVICE ROAD
- PROPOSED USE

Figure 3-5

AREA 2: PARK HEADQUARTERS (6 ACRES)

SOURCE: Huber C&D, 2014

- Horse barn including tack room, stables, and storage (576 square feet) used for horses, livestock, and equipment;
- Small barn with loft (1464 square feet total) used to store farm equipment;
- Large, modern, two-story hay barn (4,320 square feet footprint with 7,503 square feet total) used for hay storage, park and farm equipment, and community gatherings;
- Refrigeration container (400 square feet);
- Existing parking along the park entrance road and past the main barn accommodating 150 cars;
- 10-foot by 20-foot greenhouse of aluminum construction with plastic covering; and
- A central underground hub for the water delivery system that runs throughout the park.

There are existing trails throughout Area 2 that would continue to be used by the public. Existing uses include residential uses and housing for caretakers and farmworkers working within the project site.

Proposed Facilities and Construction

The following are the proposed uses for Area 2:

- A 400-square-foot, 12-foot-tall bathroom facility would be installed near existing structures and parking area.
- A 20-foot by 30-foot (600-square-foot) temporary performance stage would be installed near the large barn.
- The existing main entrance and driveway to the Park Headquarters would be upgraded to create an additional lane and accommodate two-way traffic. The upgraded entrance driveway would be 15 feet wide and less than 500 feet in length. The existing driveway is tree-lined; all existing trees would be retained and a lane would be added with a gravel surface. A 25-foot-wide paved encroachment exists at this entrance.
- Remodeling of the existing ranch/farm house and garage to create Park Headquarters offices and a community center. The existing 2,241-square-foot structure would be remodeled and would be phased. The remodeled spaces would be used as community, educational, and civic spaces for meetings, workshops, and park offices. The phases would be as follows:
 - The large modern main barn (4,320-square-foot footprint with 7,503 square feet total) would have structural improvements required to allow for dual use of the facility. Community uses of the main barn would be in addition to the existing agricultural uses. The Phase 1 remodel would repurpose the existing utility shed, bathroom, and kitchen area as the Park Headquarters office, public kitchen, and meeting rooms. The remodel would include 1,150 square feet of the ranch/farm house. The remaining footage in the ranch/farm house would continue to be residential. The existing two-car garage (482 square feet) would be fully converted to a multi-purpose meeting classroom space and community center.
 - The Phase 2 remodel would include the remaining area in ranch/farm house to be used for additional park offices and public meeting spaces.

- An unoccupied cabin (300 square feet) behind the farm house would be remodeled for offices.
- New fencing would be added (and existing fencing repaired) for livestock and public safety and to protect riparian areas.
- Existing vehicle parking for daily park users along the park entrance road would be more clearly defined with fencing, such as split rail. Existing unpaved parking now accommodates 75 cars. There is existing staff parking for events near the main barn that accommodates 75 cars.
- Designated fields within Area 2 would be used as temporary parking areas to accommodate an additional 150 cars during activities and events. No paved parking is proposed.

Portions of the existing 3-bedroom, 2,450-square-foot main farm house, the 288-square-foot cabin, and the 432-square-foot garage may be remodeled to accommodate new uses in addition to residential uses. Use conversion may include physical alterations of existing structures to accommodate offices, meeting spaces, a community kitchen, restrooms and reconfigured residential uses.

The project would continue to use 7,503-square-foot, two-story main barn for community gatherings and events. Agricultural processing (processing of row crops such as onions, garlic, beans, and hay storage) would also continue in this barn.

Ranch buildings such as the main ranch house, the secondary unoccupied house, the garage, and the modern hay barn would have additional Park Headquarters uses for offices, meeting spaces, and other community uses.

Existing Agricultural Uses

All existing agricultural uses would continue in this area. This includes the use of the stable, horse barn, paddocks, and chicken coop for livestock. Equestrian activities and grazing would continue to take place in the corrals and pastures within and surrounding the Park Headquarters. Additional acreage may be cultivated in the future for general agricultural purposes. Existing storage and refrigeration facilities would continue to be used to support agriculture. A small existing farm stand at the Park Headquarters would continue to be used for sale of agricultural products. Agricultural processing (i.e., processing of crops such as onions, garlic, beans, and seeds), related cottage industry such as value-added farm products, food products, nursery, or seed production and sales yards of agricultural and similar related products would continue to be allowed in this area. Existing small greenhouses in the Park Headquarters area would continue to be used as well as the gardening areas adjoining the residences. Existing uses include housing and camping for farmworkers (at the current bunkhouse and cabin when those facilities are available) working within the project site.

Proposed Community Uses

The Park Headquarters (Area 2) will be used for a variety of new uses and community activities. These include administrative office uses, classes, meetings, workshops, study groups, educational, recreational uses, and community assembly for weddings, memorials, parties, small and medium

sized events, sporting tournaments, and equestrian activities and events. A kitchen facility will allow on-site preparation of foods and processing of agricultural products.

Access

Access to the Park Headquarters is via the existing main entrance and driveway from Sprowel Creek Road approximately 1 mile from the town of Garberville. This access to the Park Headquarters area is the main entrance to the park. The main entrance is one of three public entrances to the park. A series of existing ranch service roads connect this area to other areas of the community park. Service roads would not be available for everyday park use by the general public.

Lighting

Standard outdoor lighting may be installed at and between the existing buildings. Additional solar and battery-powered lighting options would be used where possible. The new construction and remodeling of existing structures would involve minimal grading. Use of heavy equipment would be limited to a single dump truck and small tractor, similar to construction of one single-family residence.

Removal of Vegetation

Removal of vegetation would include invasive species such as Himalayan blackberries and Scotch broom that are encroaching on existing facilities. No tree removal is planned.

AREA 3 – MAIN AGRICULTURAL AREA (127.1 ACRES)

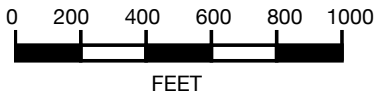
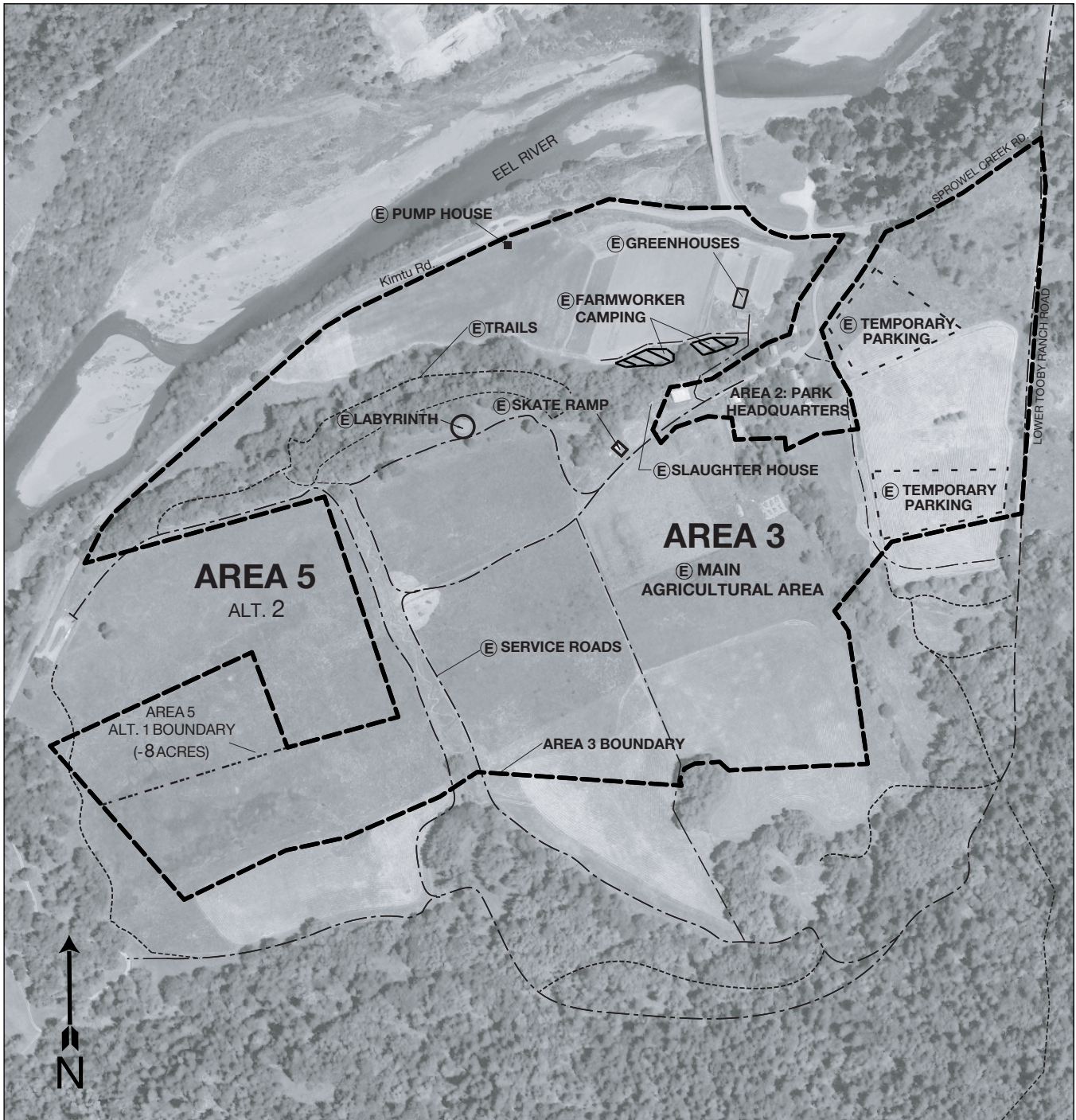
The existing General Plan designation for Area 3, Main Agricultural Area, is AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and the existing zoning is Agriculture Exclusive (AE). The proposed General Plan designation is Public Recreation (PR) and the proposed zoning is Agriculture Exclusive (AE), Qualified (Q) zone. A Qualified zone would provide allowance for recreation activities in the AE-zoned area.

Existing Facilities

The majority of Area 3 is proposed for continued agricultural use along with additional compatible recreational uses (see **Figure 3-6**). The project would maintain the current agricultural uses and cottage industry uses and expand them to include additional general agricultural uses. The lower farm field location (referred to as the Main Agricultural Area) is approximately 15 acres and is currently used for row crops. This use would continue.

Area 3 is not irrigated with the exception of the lower farm field (15 acres) and 3 acres on the upper flat.

Existing facilities in Area 3 are limited to greenhouses. The dimensions of the greenhouses are 10 feet by 20 feet and 15 feet by 50 feet. The greenhouses are constructed of aluminum poles covered with plastic film. There is an existing pump house in the lower farm field that is about 5 feet by 7 feet.



- ⓔ EXISTING
- Ⓟ PROPOSED
- SERVICE ROAD

Figure 3-6

SOURCE: Huber C&D, 2014

AREA 3: MAIN AGRICULTURAL AREA (127.1 ACRES)

Area 3 is the lower farm field (community farming area) that is served by an agricultural well located in the South Fork of the Eel River within Area 6, Riverfront.

A hay crop is produced each spring from Area 3 (and portions of Area 4). Acreage used for hay production has varied from year to year, ranging from 15 to 45 acres. Hay crop is typically harvested in late May.

Area 3 has historically been grazed (and overgrazed) by sheep and cattle. Much of the agricultural acreage in Area 3 is of a degraded quality from a century or more of intensive grazing. Grasses and hay in the western part of Area 3 are of poor quality and have not been used for agriculture for the past 15 years or more.

Farmworkers would continue to be allowed to camp temporarily on-site during farming seasons. Farmworkers camping would be on the lower farm field at the base of the escarpment. A maximum of 12 farmworkers would be on-site at any one time.

There are existing trails throughout Area 3 that would continue to be used by the public. Existing uses also include camping for farmworkers as well as a labyrinth and a skate ramp that are used by the public (see Figure 3-6). Those uses would continue. The skate park is proposed for Area 5, Sports Field Area, and the existing ramp in Area 3 would be removed after the skate park is completed.

Changes to Existing Agricultural Uses

Changes proposed for Area 3 include efforts to improve soil fertility and to add additional general agricultural and community farming uses over time. Community based farming and grazing projects would be encouraged.

Hay production and grazing would continue and would likely increase in Area 3. As stated previously, much of the open land has suffered from overgrazing in the past century. A program of rotational grazing would be added as would specialty crops, row crops, and possibly orchards. Plans include improving and restoring the grasslands, providing habitat for wildlife, and removing invasive species. Additional acreage would be brought under active agricultural production over time.

Spring harvest of hay and rotational grazing would accommodate the compatible recreational uses and temporary parking (for seven occurrences per year) that are proposed to overlay portions of this area. Hay is typically harvested early in the spring season. A portion of Area 3 that is used to grow hay in the early spring would be used later in the season for temporary public parking during events. This would allow for the hay harvest to be completed each year before additional recreational uses would occur. These new uses would not significantly interfere with the existing agricultural activities. A 1-acre (or less) section within the parking area closest to the Park Headquarters would be used for early spring events such as the annual Egg Hunt. This area would be mowed early and would not be included in the hay crop area.

Tournaments, bicycle races and walk-a-thon type events would have participants utilizing the trails that exist throughout Area 3 – Main Agricultural Area. Visitors would pass through Area 3. Main event activities would happen in Areas 1, 2, 4, 5, and 7.

Proposed Facilities and Construction

The following are the proposed changes for Area 3:

- New fencing would be added (and repaired) for livestock security, public safety, and protection of riparian areas. This fencing would control livestock movement and allow for rotational grazing.
- An additional greenhouse (up to 15 feet by 50 feet) is proposed to be added in Area 3 adjacent to existing greenhouses. Greenhouses would be constructed from packaged kits with aluminum pipe structure and plastic film removable covers. The greenhouse would be placed over existing soil with no concrete or paving.
- The proposed conditional use permit has been requested to allow five mid-size events (800 to 2,500 persons) and one festival-size event (2,500 to 5,000 persons) to take place at the park annually. Temporary parking for these events would be located in fields in Area 3 that adjoin the Park Headquarters (Area 2).
- Fields adjacent to the Community Facilities/Sports Area (Area 5) on the eastern side of the property would also provide temporary parking areas (see **Appendix E**). These areas would not be paved, graded, or otherwise improved.
- During these events, the existing ranch service roads through Area 3 may be used by park and community event staff to move equipment and supplies, performers, and emergency vehicles.
- Agricultural uses in Area 3 would continue and may include orchards, row crops, nursery production, hay production, grazing, and all general agricultural uses.
- An existing 55,000-gallon water storage tank is located on an adjacent property (Assessor's Parcel Number 221-091-11). This tank has historically provided potable water to the project site for residential and limited agricultural uses. There is an existing deeded easement that allows for placement of additional large-capacity water storage tanks on this adjacent property. At this time, no off-site water storage tanks are proposed.
- Temporary event fencing may be placed in this area to protect wildlife and visitors during the festival sized event.
- The riparian corridor that bisects Area 3 would be planted to stabilize the banks and to provide habitat and shade.

Access

There are three access points from County roads to Area 3:

- The existing main entrance road from Sprowel Creek Road—approximately 1 mile from the town of Garberville— through the Park Headquarters Area (Area 2). This entrance road provides access to Area 3. There are existing non-paved ranch service roads that connect this area to other areas of the project site. The service roads are available for farm equipment, service vehicles, and park staff and are not available for general public use.
- Sprowel Creek Road via the Lower Tooby Ranch Road would be used during special events. This road is not available for everyday general public access.

- The western portion of Area 3 has access from Kimtu Road. Access to this portion of Area 3 is also through a series of trails for public use. There are existing non-paved ranch service roads that connect this area to other areas of the project site. The service roads are not available for general public use.

Lighting

No permanent lighting fixtures would be installed. The special events each year that may continue past dusk would use portable lighting stations to illuminate the parking areas. One temporary lighting station for each parking area would be provided. All station lighting would be directed and shielded to reduce light and glare and to prevent light leakage to surrounding roads and properties.

Removal of Vegetation

No trees or vegetation would be removed in this area other than invasive species such as Himalayan blackberries and Scotch broom that may be removed as part of general maintenance.

AREA 4 – COMMUNITY COMMONS (56.4 ACRES)

The existing General Plan designation for Area 4, Community Commons, is AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and the existing zoning is Agriculture Exclusive (AE). The proposed General Plan designation is Public Recreation (PR) and the proposed zoning is Public Facility (PF).

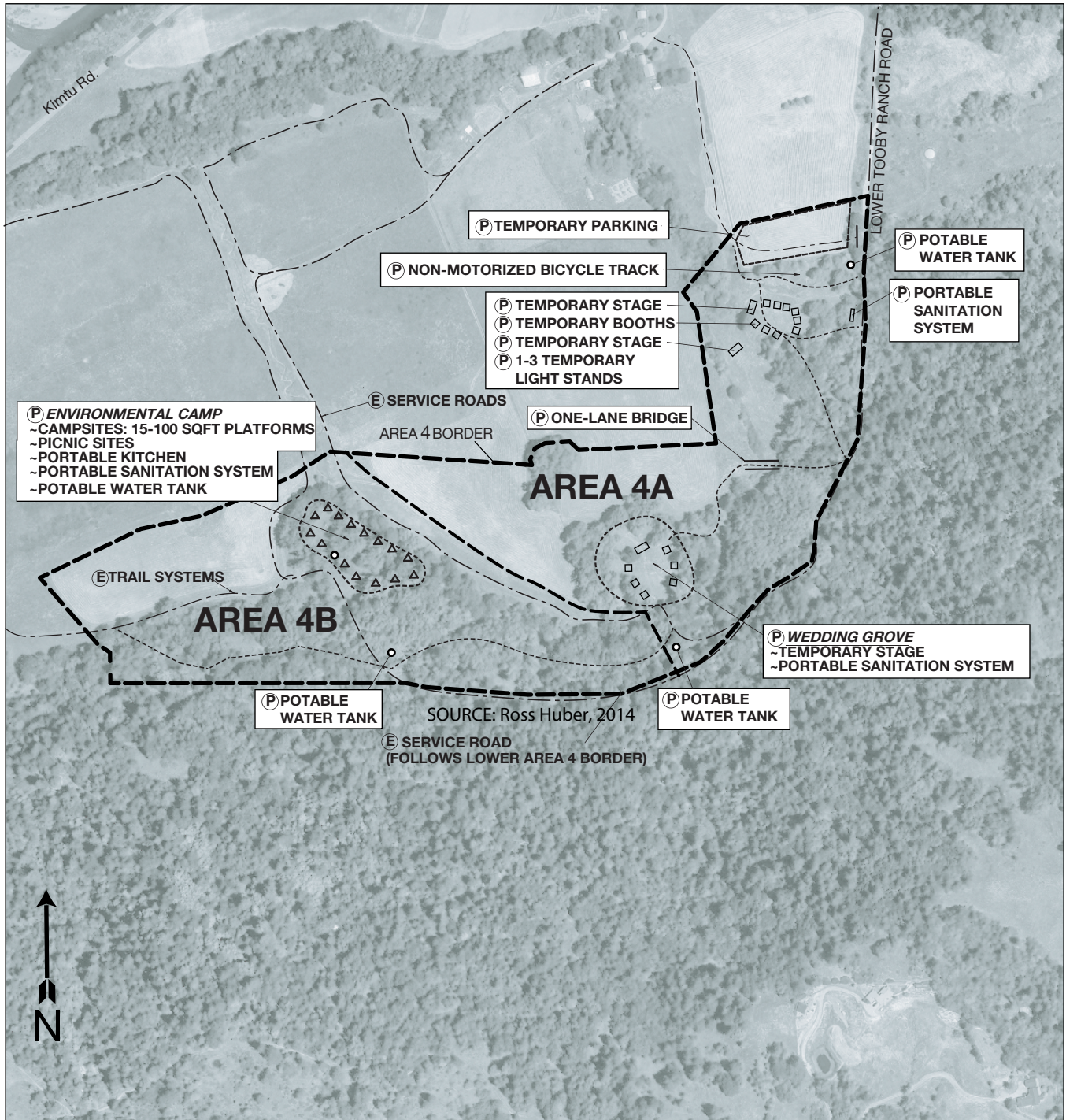
Existing Facilities

- There are 2.5 miles of existing trails and benches in Area 4, existing unused well, waterlines
- Fencing for livestock (see **Figure 3-7**).
- Restoration and watershed improvement projects will be maintained or improved to prevent fuel hazards the advance of existing headcut gullies and legacy erosion issues.

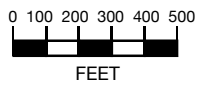
Proposed Facilities

Area 4 would include a number of new proposed uses and facilities that include the following:

- Area 4 includes an event area and a specialty camping area that would consist of infrastructure that is predominately seasonal and temporary in nature.
- Up to 2.5 miles of new trail would be located in Area 4. Trails would have unpaved surfaces and would be constructed with hand tools.
- A simple one-lane flat-car bridge would be installed in Area 4A over a ravine approximately 2,700 feet south of the Park Headquarters area (see **Figure 3-7**). This bridge would facilitate one-way traffic flow during some events. Also, the bridge would help with pedestrian access when necessary. The bridge would be fashioned from a flatbed trailer.
- A non-motorized bike skill building track (0.25-acre) consisting of 20 yards of mounded dirt and wood construction would be built near the service road entrance to the event parking area.



SOURCE: Ross Huber, 2014



- (E) EXISTING
- (P) PROPOSED
- SERVICE ROAD
- PROPOSED USE

Figure 3-7

AREA 4: COMMUNITY COMMONS (56.4 ACRES)

SOURCE: Ross Huber, 2014

- Up to three potable water tanks of up to 500 gallons each would be placed in Area 4 (see Figure 3-7). Additional water lines would be placed along the existing service road to connect tanks to the existing network of water pipe.

Proposed Uses

- The Community Commons (Area 4) would be used for a variety new uses and community assembly related activities. These include weddings, memorials, workshops, classes, small and medium events, a festival, study groups, specialty camping, equestrian activities and events, sporting tournaments and bicycle track uses.
- Restoration and watershed improvement projects would be maintained or improved to prevent fuel hazards the advance of existing headcut gullies and legacy erosion issues.

For clarity, this area would be broken into two subareas:

- Area 4A, Event Area
- Area 4B, Environmental Camp

Community Commons: Area 4A – Event Area

Area 4A, Event Area, would be used seasonally for public and private events.

Proposed Temporary Facilities

The following temporary infrastructure would be used during the seasonal public and private events (see Plan of Operation in **Appendix E**):

- Temporary vendor booths (10 feet by 10 feet by 10 feet by 20 feet), made of canvas and aluminum construction to be assembled and disassembled on-site during the event.
- Temporary stages for performances.
- A temporary sanitation station that would include portable toilets as necessary and required by numbers of attendees (1 unit per 75 people), a temporary washing station for food vendors at events, along with grey water catchment and a holding tank. A licensed contractor would pump, service, and remove all waste to an off-site location.
- Portable lighting located in parking areas during events that continue into the evening. This would be provided for medium-sized events and any festival-sized event.
- Temporary event fencing.
- Parking for special events to be provided at the junction of the Main Agricultural Area (Area 3) and the Community Commons (Area 4).

Access

Vehicle access to the Community Commons event area in Area 4A would be from Sprowel Creek Road to Lower Tooby Ranch Road. Lower Tooby Ranch Road connects with the parking areas. There are existing internal park service roads leading to the temporary parking areas in the fields. During medium- and festival-sized events, traffic on Lower Tooby Ranch Road would be limited to

incoming vehicles only. The public would exit the event using the internal ranch road that links to the main park entrance in the Park Headquarters (Area 2).

Parking

Public parking would be limited to designated temporary parking areas. The Traffic Control Plan (see Appendix E) proposes to limit parking for the public on the site. The proposed conditional use permit would allow parking for the five events with attendance of 800 to 2,500 persons and one annual festival-sized event with attendance of 2,500 to 4000 persons. In addition, there could be up to 1,000 persons in staff, vendors, and performers for a total of 5,000 persons at the festival-sized event. Parking for these events would be located in the Community Commons (Area 4) adjacent to the Park Headquarters (Area 2) and designated fields in the Main Agricultural Area (Area 3), and temporary parking would be provided in the Community Facilities/Sports Area (Area 5). All staff would be encouraged to ride the shuttle buses. A maximum of 100 vehicles for staff and vendors would remain on-site overnight for security and for early shifts. Other off-site parking would include parking in the towns of Garberville and Redway. Shuttle buses would bring attendees from off-site parking locations in Garberville and Redway.

Pedestrian Access

The public would reach the event site on foot from the designated parking area to the event area. There are two existing metal bridges spanning a ravine that would facilitate pedestrian access to the event site. Pedestrians would reach other areas within the event site using the existing trail system and service roads. An additional bridge, made from a flatbed trailer bed, would be placed over the span of the ravine in Area 4A (see Figure 3-7).

Lighting

One to three temporary light stands would be positioned in the parking lots during evening seasonal events. The entry to the event site would also be lit. Low-voltage lighting would be used to light the portable toilets. Portable solar and battery-powered lighting would be used when possible. Craft and food booths that remain open after dark would also provide their own lights.

Vendor Booths

Canvas portable vendor booths would be placed along the edges of the event areas. They would be assembled and disassembled for the events and would not be a permanent fixture. Temporary food booths would be provided with a portable washing station and wastewater would be collected in a temporary tank. The wastewater in these tanks would be serviced by the same company servicing the portable toilets.

Seasons and Hours of Use

The events proposed for Area 4A are expected to occur between the months of May and October. Trails in this area would be accessible from dawn to dusk as is proposed for the rest of the project site. During special prearranged events, this area may be used from dawn to midnight.

Removal of Vegetation

No removal of trees is planned in this area except for invasive species such as Scotch broom, Himalayan blackberry, and poison oak that would be removed as part of routine maintenance.

Agriculture Changes

Currently, portions of this area are being used for hay production (approximately 15 acres). Hay production would continue in those areas. Hay is typically cut in mid-spring and events would be scheduled after harvest of the hay crop. Portions of this area may be used for grazing livestock.

Number of Visitors

There would be an increase in park visitors to Area 4A during gatherings such as weddings, memorials, and parties; during medium-sized events of 2,500 persons maximum (expected five times per year); and one festival event with up to 4,000 persons in attendance plus 1,000 persons in staff, vendors, and performers (5,000 in total) are expected during one weekend.

Environmental Camp: Area 4B

Area 4B would be the environmental camp that would be used for campsites.

Existing Facilities

This area is generally wooded with connecting trails that would continue to be used by the public. This area would be used by special groups and organized groups such as educational, sports, or environmental groups and for staff camping during some events. There are existing service roads within this area that are not for general public use.

Proposed Facilities and Construction

The proposed project includes a specialty camping area that would consist of camping areas that are temporary in nature. There would be no construction of permanent facilities in this area. The following facilities are proposed:

- A 2-acre environmental camp with up to 15 primitive camp sites for groups. Campsites would contain wooden platforms (10 feet by 10 feet) for tents at each site.
- A picnic table and benches would be placed at each site.
- Trails and signage to sites would be provided.
- A sanitation station would be provided when the camp is used. The sanitation station would include portable toilets, as necessary, based on numbers of attendees (1 unit per 75 people), and a temporary washing station with grey water catchment and holding tank. A licensed contractor would be retained to pump, service, and remove all waste to an off-site location.
- Potable water tanks would be provided on elevated stands, with up to maximum size of 110-inch diameter by 150 inches in height each to service the area. Two locations for potable water tanks are shown in Figure 3-7.

- Restoration and watershed improvement projects would be maintained or improved to prevent fuel hazards the advance of existing headcut gullies and legacy erosion issues.

Access

Primary access to the proposed environmental camp would be from Sprowel Creek Road to Tooby Ranch Road and then onto the existing Community Park perimeter service road. A secondary access point for service vehicles is from the Kimtu Road entrance on the western side of the project site. This existing service road extends east along the tree line and turns south to the camp. Service vehicles would deliver camping equipment and campers to the site and would be required to park in approved parking areas at park entrances. Pedestrian/backpack access would be along the same routes. Food service vehicles would be allowed within Area 4B.

Lighting

Necessary lighting would consist of temporary solar or battery-powered lighting used to light portable toilets at the environmental camp.

Hours of Use

The environmental camp is proposed to be available all year long and 24 hours per day. The majority of use is expected to occur during the spring, summer, and fall months.

Removal of Vegetation

Brush and poison oak removal would be required surrounding the campsite areas. Control of invasive species such as Scotch broom and Himalayan blackberry would occur in this area. Fallen trees and tree hazards would be removed for safety as part of ongoing routine maintenance.

Changes to Existing Agriculture and Proposed Agricultural Uses

The hay fields and grazing areas adjacent to the environmental camp area would continue to be used for these purposes. Additional new agricultural uses would be allowed in this area and would include rotational grazing, orchards, seasonal crops and other general agricultural uses.

AREA 5 – COMMUNITY FACILITIES/SPORTS AREA (16 ACRES)

The existing General Plan designation for Area 5, Community Facilities/Sports Area, is AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and the existing zoning is Agriculture Exclusive (AE). The proposed General Plan designation is Public Recreation (PR) and the proposed zoning is Public Facility (PF).

Area 5 is proposed to become the location for multiple community recreational facilities. This area would include multiple sports fields for organized sports, such as baseball, little league, softball, soccer, and football. A dog park, skate park, and new playground are proposed.

Existing Facilities

There is an existing parking area approximately 10,000 square feet in size located adjacent to Kimtu Road for visitors to Area 5. An informational kiosk and two picnic tables are located adjacent to the parking area. There are existing trails throughout Area 5.

Proposed Facilities

The following are proposed facilities for Area 5:

- Ten acres of fenced ball fields would be installed, including a multi-use soccer/football field (70,000 square feet), 1 soccer field (45,000 square feet), one standard size (high school) baseball/multi-purpose field (130,000 square feet), and a multi-purpose field (80,000 square feet) for softball, baseball, and soccer. This area would be irrigated (10 acres).
- Bleachers and benches would be placed near ball fields.
- 1,000-square-foot restrooms and a concession stand facility with storage would be installed.
- A new gravel access road 20 feet in width and 1,000 feet in length would be constructed to connect the entrance to the park to the ball fields. The first 25 feet from the roadway would be paved.
- Construction would include the addition of new parking areas along the new access road with a total of 50 additional non-paved parking spaces.
- A 5,000-square-foot playground, fenced with 10 play and climbing structures and no paving, would be installed.
- A proposed off-leash dog park (5,000 square feet) with fenced area would be installed.
- A skate park (approximately 10,000 square feet) would be constructed of concrete and wood; excavation would be required.

There would be direct exposure of soils when the ball fields, parking area, service road, skate park, playground, and proposed buildings are constructed. Significant grading may be needed to create a level play field and parking areas. While the depth of grading would be less than 24 inches, there is a large area that would be graded; approximately 9 acres (14,333 cubic yards) of soil may be disturbed during construction of the ball fields, structures and parking area. Grading would be graduated from 0 feet to a maximum of 24 inches. All graded material would remain on-site.

Construction would require the use of several types of heavy equipment, including graders, backhoes, loaders, and dump trucks.

After grading occurs, the exposed soils are proposed to be covered with material that would prevent dust emissions. The parking areas are proposed to be covered with 3 inches of gravel, and the ball fields would be covered by turf.

Proposed Uses

Community Facilities/Sport Facilities (Area 5)

This area is proposed to be utilized for a variety of recreational uses (see **Figure 3-8**). Organized and leisure sports teams would conduct games, practices and sporting tournaments at the project site. Sports activities include soccer, baseball, softball, football, and similar activities. Dog owners would have a fenced area to allow dogs' off-leash. A new skateboard park would be used for ramp riding and skills building. There would be a new playground and picnic areas for recreation activities. New uses would include sports related classes, workshops, and training camps.

Seasons and Hours of Use

This area would be open from dawn until dusk all year. During sports tournaments, occasional night games would be held.

Access

This area has access from Camp Kimtu Road. An internal dirt road would be constructed to provide access for the sports fields and to provide additional parking.

Lighting

Bathroom facilities and the concessions would also have outdoor lighting.

Agricultural Uses

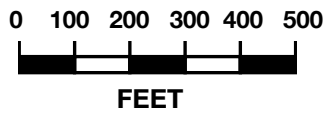
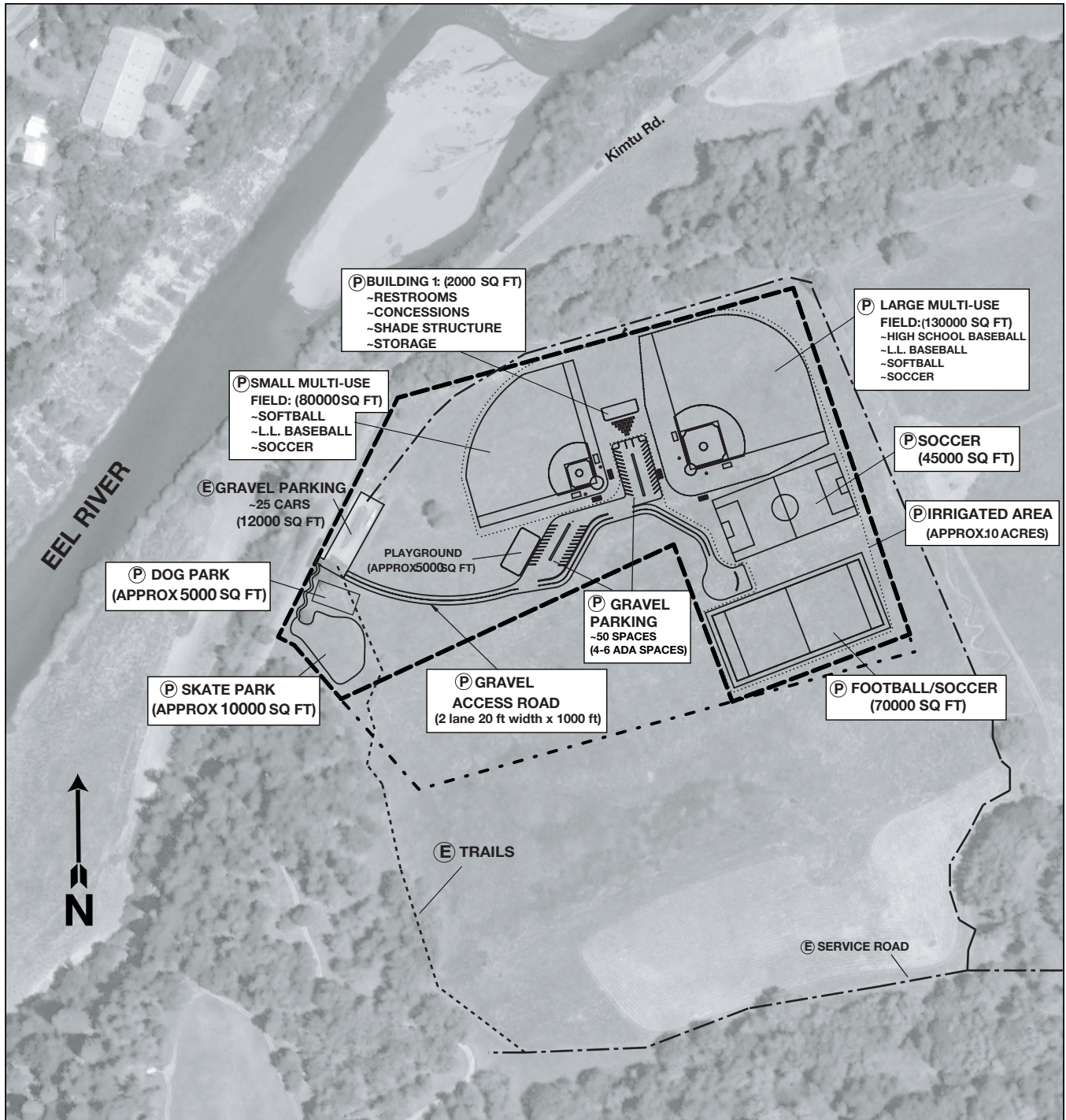
There are no existing agricultural uses of this area. The land in Area 5 has not been used for any agricultural purposes for the past 15 years. Landscaping could incorporate edible plants and fruit-bearing trees.

Removal of Vegetation

Surface vegetation such as grasses and small shrubs would be removed during construction of ball fields. No trees would be removed.

AREA 6 – RIVERFRONT (77 ACRES)

The existing General Plan designations for Area 6, Riverfront, are AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and IR (Industrial, Resource Related). The existing zoning is Agriculture Exclusive (AE) and MH-Q (Heavy Industrial, Qualified). The proposed General Plan designation is Public Recreation (PR) and the proposed zoning is Agriculture Exclusive (AE), Qualified (Q) zone. The portion designated and zoned for industrial use would remain unchanged.



- (E) EXISTING
- (P) PROPOSED
- SERVICE ROAD
- PROPOSED USE

Figure 3-8

AREA 5: SPORTS AREA

SOURCE: Huber C&D, 2014

Existing Facilities

This area has numerous existing access points from within the project site, including from Tooby Memorial Park (Area 1), and from surrounding properties along the South Fork Eel River. There is an existing network of trails northeast of Tooby Memorial Park that would remain in use. There are two existing pedestrian bridges in this area.

A separate 36.3-acre parcel in Area 6 is designated for industrial use in the Humboldt County General Plan and zoned MH-Q. This parcel is not included in the proposed rezoning. This separate parcel a portion of the river bar are currently permitted and leased to Randall's Sand and Gravel for a gravel and shale mining operation. The permitted area extends into Area 6. These existing gravel and shale operations would continue.

Proposed Changes

Currently, there are two existing undeveloped areas along the north side of the riparian corridor of the South Fork Eel River (see **Figure 3-9**). This area has been used informally for parking, picnicking, and river access by the public for decades. This existing trail and parking area would be modified and improved to better control existing public uses. Plans include formalizing the existing deficient dirt parking and picnic areas to keep cars in designated areas. Parking for ten vehicles would be formalized along this existing area off Kimtu Road. No pavement is proposed. Wooden split rail fencing would be constructed at the edge of parking areas. Construction would be limited to a single dump truck and small tractor. This area would be utilized for riverside activities and not included in plans for parking during special events unless the event is occurring at the Tooby Memorial Park site.

Lighting

No lighting is proposed for this area.

Removal of Vegetation

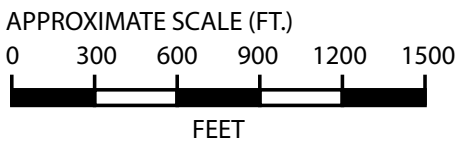
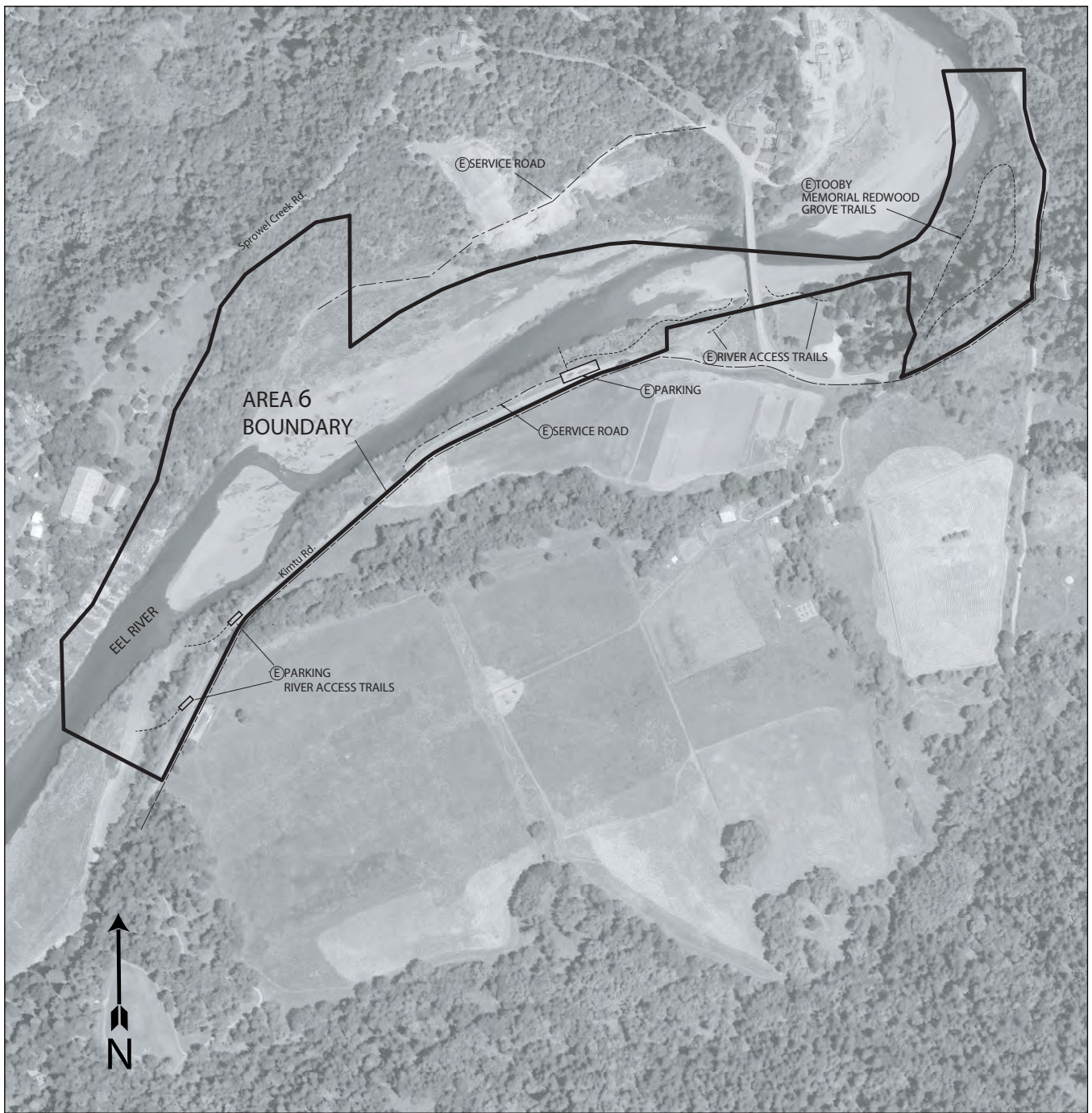
No trees are proposed to be removed from this area. Surface vegetation and selective removal of underbrush and invasive species would occur along the north side of the river for trail construction. Restoration of the riparian area would include riparian plantings to provide shade and to prevent erosion. Removal of invasive species would also occur in this area.

Access

Area 6 runs adjacent to Kimtu Road. There are existing unimproved public river access points that would be formalized and improved under this proposal.

Agricultural Uses

There are no existing agricultural uses of Area 6, and no new agricultural uses are proposed.



- ⓔ EXISTING
- TRAIL
- SERVICE ROAD

Figure 3-9

AREA 6: RIVERFRONT

SOURCE: Huber C&D, 2014

Gravel Operation

All permitted and leased gravel operations existing in this area would remain unchanged by the project.

Hours of Use

Currently, this area is unfenced and is accessible to the public 24 hours per day, all year. This would remain the same under the project.

AREA 7 – FOREST PRESERVE (115 ACRES)

The existing General Plan designation for Area 7, Forest Preserve, is AL(20) (Agricultural Lands, one dwelling unit per 20 acres) and the existing zoning is Agriculture Exclusive (AE). The proposed General Plan designation is Public Recreation and the proposed zoning is Agriculture Exclusive (AE), Qualified (Q).

Existing Facilities

Area 7 is forest land that supports native tree cover. There is no timberland or timberland production zones within the project site. There are existing trails through this area.

Proposed Changes

Up to 2.5 miles of new trail would be located in Area 7 (see **Figure 3-10**). The proposed trails would have unpaved surfaces and would be constructed with hand tools. Small wooden or metal footbridges would span over small stream crossings for protection. No changes are proposed to the forest in this area. The area would be used for low-impact activities, such as hiking, non-motorized bike riding, and disk golf including races and tournaments.

Seasons and Hours of Use

The trails would be open from dawn until dusk all year long, as are all park trails.

Access

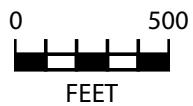
Area 7 would have access through main entry points to the park. The public would park in designated parking areas at the main entry points in Area 2 and Area 5 and proceed along the interconnected internal trail system. Area 7 would be accessible to the public by the internal trail system only. There is an existing access service road along Lower Tooby Ranch Road that would be used by park staff but would not be open for public use.

Parking

No parking areas for Area 7 are proposed. Visitors using Area 7 trails would park in public parking lots in Area 2 and Area 5.



APPROXIMATE SCALE (FT.)



- (E) EXISTING
- TRAIL
- - - - - SERVICE ROAD

Figure 3-10

AREA 7: FORESTLAND

SOURCE: Huber C&D, 2014

Lighting

There is no proposed lighting in Area 7.

Removal of Vegetation

There would be no removal of trees for trail construction. Small underbrush may be removed to construct trails and as part of maintenance or ongoing fuel hazard reduction program implemented by the park since 2002.

3.6 EXISTING AND PROPOSED WATER SYSTEM IMPROVEMENTS

EXISTING WATER SOURCES

The SHCP has four existing water sources that serve the site, as well as a dual piping system (see **Figure 3-11**). The first source is the South Fork Eel River which is currently used primarily for irrigation and for livestock. There is an existing infiltration gallery in the river and a pump house in Area 3. Waterlines are installed from the infiltration gallery throughout Area 3 – Main Agricultural Area and the Park Headquarters – Area 2.

The second source is a spring. This water source comes from a spring on the adjacent property (APN 222-091-11) with a legal deeded easement. The spring fills the existing 55,000-gallon water tank on the adjacent property. This spring provides potable water to the project site through the existing water delivery system to Area 2, Area 3, Area 4, and Area 5.

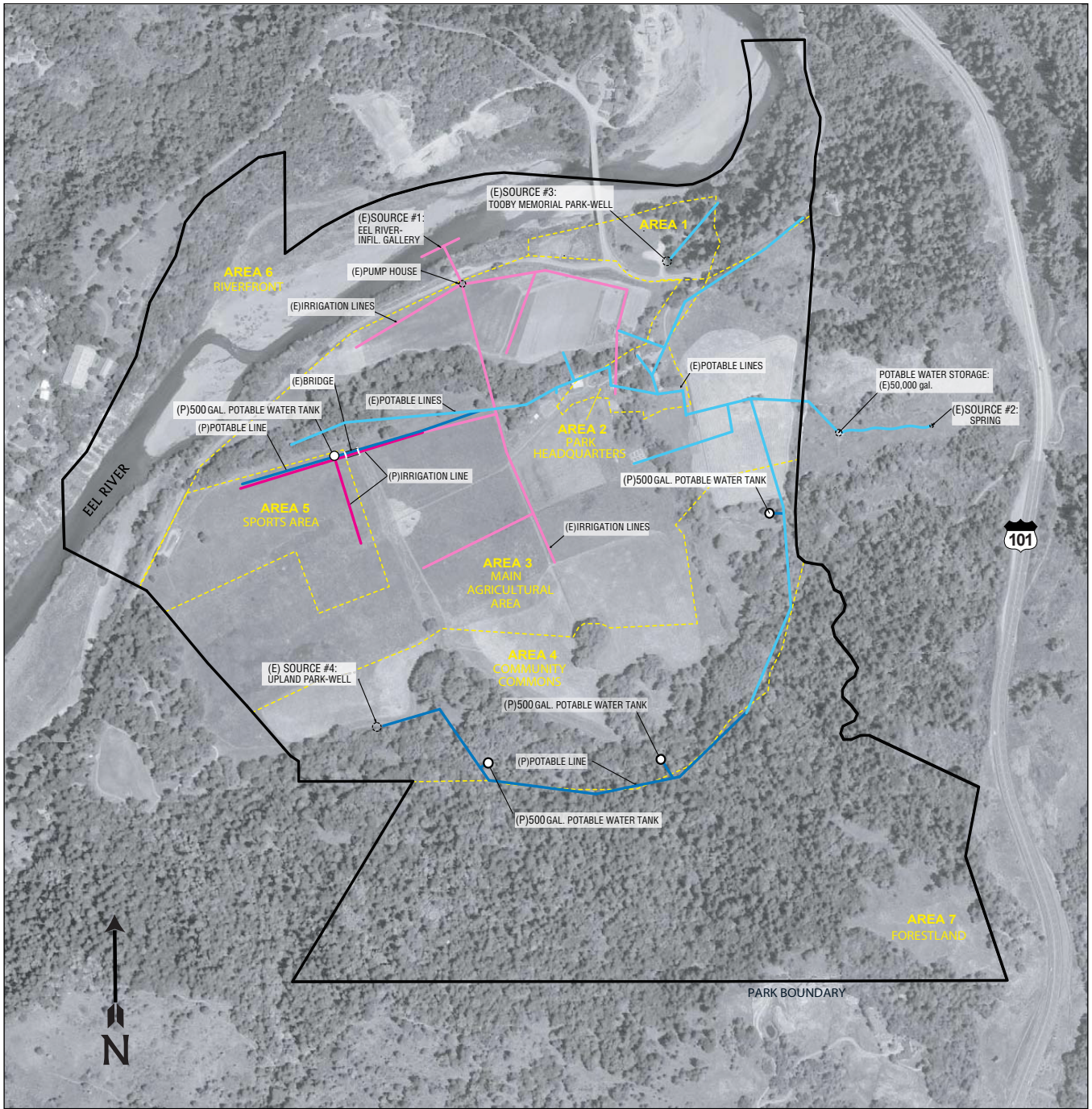
The third source is from the Tooby Memorial Park Well which has been serving the water needs in Area 1 for decades. There is existing water system infrastructure within this park and the water supply is adequate. The final and fourth water source is upland well in Area 4. This well would be connected to the existing water system and utilized to fill the off-site 55,000-gallon storage tank during the forbearance¹ months.

EXISTING WATER LINE INFRASTRUCTURE AND WATER STORAGE TANK

An existing water system on the project site includes independent, dual-water systems: one for potable water and one for non-potable water delivery. These systems run throughout the project site in Areas 2, 3, 4, and 5. Area 1 has an independent potable well water system.

A water storage tank that provides water to the site is located just off the site. This water storage tank site has a legal deeded easement on adjacent property APN 222-091-11. The existing tank has a 55,000-gallon storage capacity (see Figure 3-11).

¹ Forbearance months refer to July 1 – October, 31, CDFW LSA Agreement R1-09-0238.



- (E) EXISTING POTABLE LINES
- (P) PROPOSED POTABLE LINE
- (E) EXISTING IRRIGATION LINES
- (P) PROPOSED IRRIGATION LINES
- (P) PROPOSED POTABLE WATER TANKS
- AREA BOUNDARY

Figure 3-11

WATER INFRASTRUCTURE

SOURCE: Ross Huber, 2014

PROPOSED WATER INFRASTRUCTURE IMPROVEMENTS

Additional waterlines would be installed for full project implementation. A dual system would provide potable and non-potable water on the project site and would be added in phases. The proposed additional water lines are described below.

Potable Water Lines and Tanks

Connection of Source #4, Upland Well, to Existing Potable System within Community Commons – Area 4

An additional water pipeline would be installed in Community Commons – Area 4 along the existing service road and trails to connect the existing upland well (Source #4) to the existing potable water system (see Figure 3-11). This waterline would also provide water to Celebration Grove and Environmental Camp in Area 4. This waterline extension would connect this well to the existing off-site 55,000-gallon water storage tank, utilizing the existing water delivery system.

While conducting ground disturbing activities during the installation of waterlines on the project site, all protocols in the site specific Cultural Resource Management Plan for the Southern Humboldt Community Park would be closely followed. All ground disturbance would occur at least 100 feet from known archaeologically sensitive areas.

Existing Potable Waterline extended to Sports Facilities – Area 5

One trench would carry both the potable and non-potable waterlines from Area 3 – Main Agricultural Area to Area 5 – Sports Facilities Area along the southern side of the existing service road (see Figure 3-11).

Connection of Source #4 Upland Well to Existing Potable System within Community Commons – Area 4

An additional 2,500 feet of pipeline would be installed in Community Commons – Area 4 along existing service road and trails to extend the existing potable waterline to connect the existing upland well (Source #4) to the existing potable water system. This waterline would also provide water to Celebration Grove and Environmental Camp in Area 4.

The installation would utilize existing service roads and trails. Waterlines would be installed with a trencher. Pipe would be placed at a depth of 12 to 18 inches with a 6-inch width. All soil removed during trenching would be returned to the trench. No trees would be removed during the installation of this line. Vegetation that would be disturbed would include grasses, poison oak and low brush. It would take 2 days to install this line and installation would occur between September 1 and February 1. The installation would require two truck trips to deliver and return the trenching equipment.

Existing Potable Waterline Extended to Sports Facilities – Area 5

An additional 1,800 feet of waterline would be installed from the existing potable line in Area 3 (Main Agricultural Area) to Area 5 (Sports Facilities Area) along the southern side of the existing

service road. The potable water and non-potable water lines being extended to Area 5 would both be placed in the same trench. An additional 100 feet of line would be trenched from the labyrinth area to the southern side of the service road. The water line would cross the stream channel on the existing footbridge. Installation details would be similar to the Source No. 4 line discussed above.

Water Storage Tanks

Three small water tanks with a maximum size of 47-inch diameter by 71-inch in height would be stationed in Areas 4 and one tank would be stationed in Area 5 (see Figure 3-11). The capacity of each tank would be 500 gallons. Thus, on-site storage for 2,000 gallons would be provided with the project. The source of water for these tanks would be the spring (Source 2) and the upland well (Source 4).

All tanks would be installed along the existing service road on level ground. Each tank would be sited within a 4-foot by 4-foot-square, 8-inch-tall, low redwood box, filled with sand. Tanks would be placed and leveled on the sand base. No soil would be moved or disturbed. No trees would be cut to install the tanks. Vegetation to be disturbed would include grasses, poison oak and low brush.

Installation of the tanks would occur between October 1 and February 1 and would take one working day to complete for all four tanks. The installation would require one pickup truck trip for materials and two vehicles for workers.

Non-Potable Water Lines

Existing Non-Potable Waterline extended to Sports Facilities – Area 5

An additional waterline would be installed from Area 3 to the Sports Facilities (Area 5) along the southern side the existing service road and within the field to provide non-potable water for irrigation and other non-potable uses. One trench would carry both the potable and non-potable waterlines. This line would be installed at the time the ball fields are constructed. The water source for this new line would be the well in the South Fork Eel River (Source 1).

Existing Non-Potable Waterline Extended to Sports Facilities – Area 5

An additional 1,700 feet of waterline would be installed from Area 3 to Area 5 along the southern side of the existing service road to provide non-potable water for irrigation and other non-potable uses. Both the potable and non-potable water lines would be placed in the same trench. The water lines would cross the stream channel on the existing footbridge.

All water lines would be 1.25-inch flexible poly, schedule 180. The installation would utilize existing service roads and trails. Waterlines would be installed with a trencher. Pipe would be placed at a depth of 12 to 18 inches with a 6-inch width. All soil removed during trenching would be returned to the trench. No trees would be removed during the installation of this line. Vegetation that would be disturbed includes grasses and low brush.

Installation would occur at the time the ball fields are constructed. The installation would require two truck trips to deliver and return the trenching equipment.

3.7 PROPOSED GENERAL PLAN LAND USE DESIGNATION AND ZONING

PROPOSED GENERAL PLAN LAND USE DESIGNATION

The Public Recreation (PR) land use designation from the Humboldt County General Plan update that is currently underway would be applied to the entire 405.7-acre project site. The project would require a General Plan amendment to apply this land use designation to the project site (see Section 3.8, Reviewing Agencies and Required Approvals, below).

The purpose of the PR designation is to protect lands suitable for public recreation and/or resource protection and to provide open space and public lands. Allowable uses types include the following:

- **Natural Resource.** Fish and wildlife habitat, public access facilities, resource related recreation, boating facilities, watershed management and wetland restoration
- **Resource Production.** General agriculture and timber production.
- **Industrial.** Aquaculture.
- **Civic.** Community assembly, public recreation.
- **Other.** Caretaker's residence, subordinate residential, surface mining, temporary camping, and RV park, similar compatible uses.

PROPOSED ZONING

The proposed zoning of the project site is illustrated in Figure 3-3 and described below.

Agriculture Exclusive (AE) Zone

Under the project, approximately 307 acres of the project site would remain zoned AE (see Figure 3-3).

Heavy Industrial-Qualified (MH-Q) Zone

Under the project, approximately 12.1 acres of the project site would remain zoned MH-Q (see Figure 3-3).

Public Facility (PF) Zone

As part of the project, a Public Facility (PF) zoning classification would be added to the Zoning Ordinance (Title III of Division 1 of Humboldt County Code) and applied to approximately 87 acres of the project site (see Figure 3-3).

The PF zone is intended to apply to areas in which community-based uses are the desirable predominant uses. The purpose of this zoning classification is to allow a variety of civic uses and natural resource uses, including resource production, recreation, education and research, and natural resource uses.

Allowable use types include:

- **Civic.** Essential services, community assembly, public recreation and facilities, open spaces, minor utilities.
- **Residential.** Caretakers and other incidental residence.

Conditionally permitted uses include:

- Extensive impact civic uses, solid waste disposal.

Qualified (Q) Combining Zone

The Q combining zone is intended to be combined with any principal zone in situations where sound and orderly planning principles indicate that specified principal permitted uses or conditional uses otherwise allowed under the principal zone should be limited or not be allowed with or without a conditional use permit. The Q combining zone also allows development standards or restrictions to be added, deleted, or modified to implement the General Plan or CEQA mitigation or to limit additional entitlements. The qualified uses must be specified in the ordinance applying the Q combining zone to a specific property.

As part of the project, the Q combining zone would be applied to the areas zoned PF to allow agricultural uses and to the areas zoned AE allow for public recreation uses.

3.8 REVIEWING AGENCIES AND REQUIRED APPROVALS

This EIR will be used by Humboldt County, the CEQA lead agency for the project, in addition to CEQA responsible and trustee agencies to comply with CEQA requirements. The EIR may also be used by other local, state, or federal agencies with regulatory authority over for the project as an informational document.

The following actions may be subject to the requirements of the California Environmental Quality Act:

- Rezoning and General Plan amendments
- Conditional use permits
- Special permits
- Grading permits
- Building permits
- Encroachment permits

Early consultation is mandatory with responsible and trustee agencies and voluntary with any person or organization that may be concerned with the environmental effects of a proposed project. It provides an opportunity to resolve many potential problems that could arise in more serious form later in the review process. The consultations should occur as early in the review process as feasible to better define areas of concern and to focus the EIR on these problems (CEQA Guidelines, Sections 15082-15083).

REQUIRED APPROVALS

Required Approvals from Humboldt County

The project would require the following approvals from Humboldt County:

- **General Plan Amendment** – Amend the Humboldt County General Plan and the 1984 Garberville, Redway, Benbow, Alderpoint Community Plan to add a Public Recreation (PR) land use designation, which would allow natural resource uses, resource production uses, recreation facilities and uses, and education and research uses. Change the General Plan land use designation on the entire 405.7-acre project site to the new Public Recreation (PR) designation.
- **Zoning Ordinance Amendment and Rezoning** – Amend the Zoning Ordinance (Title III of Division 1 of Humboldt County Code) to add a Public Facility (PF) zoning classification, which would allow natural resource uses, resource production uses, recreation facilities and uses, and education and research uses. Rezone 87 acres of the project site from Agriculture Exclusive (AE) to Public Facility (PF) to allow the proposed recreation uses, education and research uses, public assembly, natural resource uses, and resource production uses on the site. Retain the AE zoning on approximately 307 acres of the project site and retain the existing MH-Q zoning on approximately 12.1 acres of the project site. Add a Qualified (Q) combining zone to (1) the 307 acres zoned AE, to allow recreational uses; and (2) the 87 acres zoned PF, to allow agriculture.
- **Conditional Use Permit** – Approve a conditional use permit to allow specific activities within the PF-zoned areas of the site, including five medium-sized events of 800 to 2,500 persons and a festival-scale community assembly event of up to 5,000 persons similar to Summer Arts and Music Festival at Benbow.
- **Transfer of Development Rights** – This project will allow the applicant to retain and bank the existing residential development rights as credits for the areas of the project site that are currently designated Agricultural Lands (AL) and Agricultural Rural (AR) by the Humboldt County General Plan. These credits will be retained for transfer until such time, if ever, that Humboldt County adopts a Transfer of Development Rights (TDR) or program similar in nature. Currently there is no TDR program in Humboldt County and it is unknown if or when one will be adopted by the County. These land use designations represent approximately 54 potential parcels.
- **Building and Grading Permits** – Issue building and grading permits and other necessary approvals for specific improvements such as playing fields and new buildings in specific portions of the site.
- **Cottage Industry Ordinance Amendment** – Amend the cottage industry ordinance to include PF zones.

Required Approvals from State and Federal Agencies

In addition to approvals from Humboldt County, the project may require permits and approvals from federal and state agencies as listed in **Table 3-1**.

TABLE 3-1 ANTICIPATED REGULATORY APPROVALS BY FEDERAL AND STATE AGENCIES

Agency	Permit or Approval
U.S. Army Corps of Engineers	Permit under Section 404 of the Clean Water Act.
North Coast Regional Water Quality Control Board	Permit under Section 401 of the Clean Water Act; National Pollutant Discharge Elimination System permit.
California Department of Fish and Wildlife	Consultation under the California Endangered Species Act and authorization of incidental take; permit under Section 1602 of the Fish and Game Code (streambed alteration agreement).
U.S. Fish and Wildlife Service/ National Marine Fisheries Service	Consultation under the federal Endangered Species Act and authorization of incidental take.

REVIEWING AGENCIES

As the lead agency for this project, Humboldt County will be responsible for considering certification of the EIR and the various project approvals (see “Required Approvals from Humboldt County” above). In addition to Humboldt County, a number of other jurisdictional and permit-granting agencies oversee specific environmental concerns in the project site vicinity. The following is a listing of agencies and their authority, jurisdiction, or area of environmental concern. Each of these agencies may use this Draft EIR during their review. In addition, Native American tribes are required by State law to be consulted on all General Plan Amendments for protection of cultural resources.

Federal Agencies

- National Marine Fisheries Service: Administers Endangered Species Act as it pertains to marine species.
- U.S. Fish and Wildlife Service (USFWS): Administers Endangered Species Act.
- U.S. Environmental Protection Agency (USEPA): Issues permits for point source discharges.
- U.S. Army Corps of Engineers (Corps): Controls dredge and fill of U.S. waters including wetlands under Section 404 of the Clean Water Act; controls navigable waters under Section 10 of the River and Harbors Act; establishes wetlands boundaries.

State Agencies

- State Lands Commission: Responsible for tidelands and historic waterways.
- California Department of Transportation (Caltrans): Responsible for the management of the statewide transportation network.
- Native American Heritage Commission (NAHC): Mandated to preserve and protect places of special religious or cultural significance pursuant to Section 5097 *et seq.* of the Public Resources Code.
- California Department of Fish and Wildlife (CDFW): Reviews fish and wildlife issues.
- California Department of Forestry and Fire Protection (CAL FIRE): Responsible for wildland fire protection and for regulation of timber production.

- California Regional Water Quality Control Board (RWQCB): Concerned with the effects of wastewater disposal on water quality and supply.
- California Air Resources Board (CARB). Responsible for establishing state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving state implementation plans.

Regional Agencies

- Air Quality Management District (AQMD): Monitors air quality and has permit authority over certain types of facilities, including dry-cleaning plants, service stations, landfills, sewage treatment plants, and industrial plants.

Local Agencies

- Humboldt County Planning and Building Department: Serving as lead agency for CEQA review of the project.
- Humboldt County Sheriff's Office: Responsible for law enforcement and emergency response.
- Humboldt County Department of Health and Human Services, Division of Environmental Health: Oversees water supply, solid waste, sewage disposal, and food preparation.
- Humboldt County Department of Public Works: Regulates encroachment onto county roads.
- Garberville Fire Protection District and Briceland Volunteer Fire Department: Provide fire protection in the project site vicinity, along with CAL FIRE.

4. ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

This section addresses project-related impacts within the following 17 topic categories:

- Aesthetics
- Agricultural/Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities and Service Systems

Each of the 17 topic sections in this EIR presents information in four parts, as described below.

INTRODUCTION

This section addresses the overall issues covered for the topic and the primary studies and other documents used in report preparation.

ENVIRONMENTAL SETTING

This section briefly describes elements of the project setting relevant to a discussion of impacts in the topic category.

REGULATORY FRAMEWORK

This section describes applicable federal, state, regional, and local regulations relevant to the topic category.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section identifies potential impacts based on the identified significance criteria. Potentially significant impacts are numbered and summarized in **bolded** text, followed by text that describes

the impact in more detail. Mitigation measures (indented text) that can reduce such impacts follow this discussion with a number that corresponds to the number of the impact. A code indicating the level of significance of each impact before and after mitigation follows the impact statements and mitigation measures. The code "PS" stands for "potentially significant" and "LTS" stands for "less than significant." The code "SU" stands for "significant and unavoidable."

4.1 AESTHETICS

INTRODUCTION

This section of the EIR for the Southern Humboldt Community Park considers and evaluates the potential impacts of the proposed project on aesthetic and visual resources. Visual resources are an important component to the quality of life and identity of any geographic area. When people experience a place, their primary sensory interaction with that place is visual in nature.

This section describes the existing visual character of project area and the surrounding area, including the identification of physical and visual features and conditions, which give the project area its unique visual character. The protection of scenic resources and open space areas can increase opportunities for recreation opportunities, pedestrian and bike access, and land use buffering.

DEFINITIONS

The term "aesthetic value" refers to the observation of the natural beauty of an area and other features that create or enhance the areas visual quality. While aesthetic value is subjective, it is included as a measure for evaluating those components that contribute to the qualities that characterize an area.

Most communities recognize scenic resources as an important asset. What is considered "scenic" may vary according to local settings and values. Scenic resources can include natural open spaces, scenic vistas, special trees, rock outcroppings and unique landscapes. These resources can be maintained and enhanced to promote a positive image in the future. Natural landforms and landscapes with scenic resources, such as woodlands, lakes, rivers, streams, and some historical areas are commonly considered scenic and visual resources. Scenic resources can also include open spaces and elements of the man-made environment. Examples of these would include parks, trails, pathways, nature centers, archaeological and historical resources, and architectural features.

SETTING

The Southern Humboldt area offers a variety of scenic features. The region attracts approximately one-million tourists annually who come to see the redwood forests, pristine beaches and the natural beauty of this rural area. The range of scenic resources within the Southern Humboldt area include a variety of scenic elements and viewsheds that include Richardson Grove State Park, Rockefeller Forest, redwoods forests, King Range Conservation Area, Sinkyone Wilderness, Benbow Lake State Recreation Area, Shelter Cove, Bear Buttes with its unique rock formations and outcroppings, the South Fork Eel River, and the surrounding forested mountains and valleys.

VISUAL RESOURCES

The visual resources section evaluates the existing visual resources of the project area and the potential for the proposed project to impact these visual resources. The project consists of several separate elements including a change in zoning, land use designation, operational activities and projects requiring conditional permitting; some of these elements have a potential to impact visual resources in the area and are discussed below.

EXISTING CONDITIONS

Visual Character

Located just one mile outside the small rural town of Garberville in northern California, the project site has a variety of visual features including meadows, grasslands, upland forests, farmland, and native redwoods. Under past ownership, significant landform changes were made. The existing streambeds were channeled into straight drainage ditches that cross the project site. Irrigation channels were created with mounding of soil. The open fields have been contoured and a series of serviceable ranch roads were built. Visual features, by type, are described in more detail below after the discussion of viewsheds.

Existing Viewsheds

Viewsheds represent the range of vision in which scenic resources may be observed. A viewshed is an area defined by terrain or objects that a viewer can see from a particular viewing area. Some of the important viewsheds from which the site can be seen are from Sprowel Creek Road, from Kimtu Road, and from U.S. Highway 101. **Figures 4.1-1 through 4.1-3** illustrate views of the site from these locations. As can be seen in the photos, the area is heavily forested except where there are open meadows and agricultural fields.

Existing Visual Resources

Natural Features

Juxtaposed to the mountainous hillsides and steep terrain, the open space quality of the Southern Humboldt Community Park is visible from two rural roads and Highway 101.

- **Open Space.** The project area has approximately 150 acres of open fields in the South Fork Eel River valley. It is a grassland area that was mostly rangeland under previous ownerships. This area is partially visible from the hilltop above on U.S. Highway 101, which adjoins the property's eastern boundary (Figure 4.1-5). Large trees along the edge of the highway are growing above the horizon line obstructing the site view in several locations. Sprowel Creek and Kimtu Roads are secondary rural roads that pass through the property and also provide have views of the open space areas of the SHCP.



View of the South Fork Eel River and the Community Park (Tooby Playground) are visible in the upper portion of the photo.



View along Sprowel Creek Road with Community Park on both sides of the road. Figure shows the tree lined roadway and vegetation which would remain unchanged.

Figure 4.1-1

VIEWS FROM SPROWEL CREEK ROAD

SOURCE: SHCP, 2014



Park entrance on Sprowel Creek Road. Projects proposed within the Park are not readily visible from this section of the roadway due to the dense vegetation barrier.



View from Kimtu Road park entrance and existing parking area, looking northeast. Kimtu Road is a residential rural road leading to a grouping of homes along a cul-de-sac. It is a non-through road that is primarily used by residents and park users. This area is the designated to be the Community Recreational Facilities area. The proposed sports fields, parking area and concession would be visible from this Kimtu Road location.

Figure 4.1-2

SOURCE: SHCP, 2014

VIEWS FROM SPROWEL CREEK ROAD AND KIMTU ROAD



View from Highway 101, southbound lane, ½ mile from Garberville. This view shows the open space, farm, river valley, and forested hills of the Southern Humboldt Community Park. The arrow locates the Community Recreational Facilities area. Parts of the ranch complex are visible from this point.



View from Rivercrest Drive residential area looking across the river toward the Community Park. This figure shows the dense riparian and redwood trees (center) on the far bank that buffer these homes from visual impacts.

Figure 4.1-3

SOURCE: SHCP, 2014

VIEWS FROM U.S. HIGHWAY 101 AND RIVERCREST DRIVE

- **The South Fork Eel River** runs through the project site for approximately 1 mile. Though the river has scenic qualities, particularly on the western border. The river also provides recreational opportunities, irrigation and household water, and wildlife habitat. The river's scenic qualities are diminished by the several long standing manmade features including the Sprowel Creek Road Bridge, a gravel extraction facility on the river level, and a shale extraction site on the hillside on the southern boundary of the property (Figure 4.1-1).
- **Forested Areas.** The SHCP has many distinctly different ecological zones. The forested hillsides are highly visible from a number of locations and are not proposed to be altered.

Manmade Elements

The primary manmade elements within the project site include the ranch complex buildings and the existing gravel extraction activities.

- **Tooby Memorial Park.** This park includes play structures that are fenced as well as picnic facilities and restrooms (see **Figure 4.1-4**).
- **The Ranch Complex** is the location where the early white settlers, the Wood family, established residence. While none of the remaining structures on the site are from this period, they are a good example of the utilitarian, make-do style of construction common in the past century. This area includes residential dwellings and barns (see **Figure 4.1-5**).
- **Gravel Extraction, Shale Extraction, Sprowel Creek Road Bridge.** Gravel and shale extraction at two locations adjacent to the project area (see Figure 4.1-1) are visible in close proximity to the project site as is the Sprowel Creek Road Bridge (see Figure 4.1-5) which dissects the property over the South Fork Eel River.

Scenic Resources

While there is no comprehensive list of specific features that automatically qualify as scenic resources, certain characteristics can be identified which contribute to the determination of a scenic resource. Following is a partial list of visual qualities and conditions which, if present, may indicate the presence of a scenic resource:

- A tree that displays outstanding features of form or age.
- A landmark tree or a group of distinctive trees accented in a setting as a focus of attention.
- An unusual planting that has historical value.
- A unique, massive rock formation.
- An historic building that is a rare example of its period, style, or design, or which has special architectural features and details of importance.
- A feature specifically identified in applicable planning documents as having special scenic value.
- A unique focus or a feature integrated with its surroundings or overlapping other scenic elements to form a panorama.
- A vegetative or structural feature that has local, regional, or statewide importance.



a) View of entrance to Tooby Memorial Park playground showing playground equipment and fencing.



b) Additional view of Tooby Memorial Park playground.

Figure 4.1-4

SOURCE: A. Skewes-Cox, 2014

VIEWS OF TOOBY MEMORIAL PARK



a) View from Tooby Memorial Park looking northwest towards the Sprowel Creek Road bridge.



b) View of onsite barn located near the cluster of residential buildings.

Figure 4.1-5
**VIEWS OF SPROWEL CREEK ROAD BRIDGE
AND RANCH COMPLEX BARN**

SOURCE: A. Skewes-Cox, 2014

Examples of scenic resources at the project site include large expanses of forestlands, open fields, and a barn that provides the historical context for long-term operations at the project site.

REGULATORY FRAMEWORK

California State Scenic Roadways Program

The California State Scenic Roadways Program, established in 1963 by the State legislature, identifies key roadways in California that contribute to the state's scenic resources by providing viewsheds with aesthetic value. The program establishes the State's responsibility for the protection and enhancement of California's natural scenic beauty through regulations pertaining to scenic roadways and their function.

There are no officially recognized scenic roadways in the project area. While many in the Southern Humboldt County area offer residents and visitors a glimpse at the natural beauty of the region, none of the roadways is formally designated as part of this State program.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would have a significant effect on visual resources if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

LESS-THAN-SIGNIFICANT IMPACTS

Scenic Resources Visible from State Scenic Highway

No designated state scenic highways exist in the vicinity of the site and thus no visual impacts to scenic resources from such highways would occur. In addition, the project would not impact rock outcroppings or historic buildings.

POTENTIALLY SIGNIFICANT IMPACTS

Impact AESTHETICS-1: Implementation of the project would result in construction of new community facilities including recreation fields, a skatepark, a dog park, concessions stands, and visitor amenities and parking areas that would be visible from Kimtu Road and that would change the scenic vista from this road. Such new features could also visually contrast with the natural surroundings. (PS)

New recreational features and buildings could conflict with the predominantly natural surroundings of the project site, especially if such features contrasted significantly in color or materials from the natural surroundings. No landscape plans have been submitted for the project site; thus, it cannot be determined if new landscaping may screen some features from the view of motorists on Kimtu Road. Area 5, the Sports Area, would have the most significant permanent changes on the project site. During construction, the construction staging area may contain worker vehicles and construction equipment.

Park events such as the medium and large festival events would change the site's visual character in terms of bringing in many people and cars to the project site; however, this use would be very short-term and would not require mitigation.

The project would not result in significant amounts of vegetation loss, substantial alteration of the site's natural character, or extensive grading visible from beyond the site boundaries. The sports fields would require some grading to level the fields. The view from U.S. Highway 101 would not be significantly altered due to the distance of the site from the highway where new facilities would be developed, the orientation and speed of the driver (e.g., that would generally require motorists to stop by the road to take in views of the site), and the fact that the site is at a much lower elevation than the highway. The Community Facility/Sports Field area is approximately 1 mile from the highway. The open space nature of sports fields and the distance from Highway 101 would not have a significant impact on the overall visual aesthetics.

While the installation of sport fields may require some changes to the sites typography, the area that is now a large open area would primarily remain a large open area. There are no potentially significant features that would be affected in the area such as distinctive landmark trees, unique rock formations, or other rare features.

Mitigation Measure AESTHETICS-1a: New landscaping shall be planted at the edge of the gravel parking area fronting on Kimtu Road in Area 5, the Sports Area. This landscaping shall be low evergreen shrubs that would partially screen parked cars from view from Kimtu Road. All vegetation planted as mitigation shall be planted outside the County-maintained road right-of-ways, meet the County visibility ordinance, not block county road drainage, or cause additional maintenance for the road crew. Prior to installing vegetation, the planting plan should be reviewed by the Department of Public Works.

Mitigation Measure AESTHETICS-1b: Similar evergreen shrubbery shall be planted. After 5 years the shrubs shall be at least 4 feet in height and provide a visual screen for a minimum of 85 percent of the view of the parking areas for Area 5 adjacent to Kimtu Road adjacent to Kimtu Road to screen the proposed skatepark and dog park in Area 5 from view. However,

landscaping plans shall be reviewed and approved by the Public Works Department to ensure that landscaping would not interfere with sight visibility for safety reasons.

Mitigation Measure AESTHETICS-1c: All new buildings and other built features at the project site shall be painted in neutral colors to blend into the surroundings and shall not include reflective materials.

The combination of these measures would reduce the potential impact to less than significant. (LTS)

Impact AESTHETICS-2: Project components such as special events would have a need for nighttime lighting that would create a new source of nighttime light or glare that may adversely affect nighttime views in the area (see Appendix I: Lighting Plan). (PS)

Except for Areas 6 and 7, new lighting would be added to the project site to provide light to restroom facilities, parking areas, on-site residences, and other components of the site. During festivals, the exit to the event site would also be lit. Low-voltage lighting would be used to light the portable toilets during festival events. Portable solar and battery-powered lighting would be used when possible. Craft and food booths that remain open after dark would also provide their own lights.

Mitigation Measure AESTHETICS-2a: The applicant shall prepare a lighting plan that shall address the facility lighting placement and design for ongoing operations. This plan shall be reviewed and approved by the County's Planning Department. To avoid intrusion into neighboring properties and visibility from nearby roads, all lighting shall be shielded and directed downwards, and shall use the minimum wattage to allow safe conditions. Pathway lighting shall be placed low to the ground to minimize excess lighting. Temporary lighting of parking areas during festival events shall be shielded and directed to minimize glare.

Mitigation Measure AESTHETICS-2b: Lighting shall be on timers to minimize the number of hours of lighting at the project site.

Mitigation Measure AESTHETICS-2c: During festival events, all concession participants shall be informed of the need to minimize lighting at the project site. This requirement shall be included in the Conditional Use Permit for the project site.

The combination of the above measures would reduce this potential impact to less than significant. (LTS)

REFERENCES

State of California, 2013. State's Scenic Highway Program. Website <http://www.dot.ca.gov/hq/LandArch/scenic/schwly.htm>, accessed August 6, 2014.

4.2 AGRICULTURE AND FORESTRY RESOURCES

INTRODUCTION

This section reviews existing agricultural and forestry resources in the project site vicinity, describes the regulations and programs that relate to these resources, and provides an assessment of the potential impacts of implementing the project. The California Agricultural Land Evaluation and Site Assessment (LESA) prepared for the project site is included in **Appendix B** and was used in the preparation of this section of the Draft EIR, along with sources listed in the “References” section below.

ENVIRONMENTAL SETTING

AGRICULTURAL RESOURCES

Overview

Agricultural production is an important component of farming in Humboldt County and is viable due to the significant precipitation, fertile soils, and mild climate. The total agricultural acreage in 2008 was approximately 345,238 acres, covering approximately 15 percent of the county’s total land area (Humboldt County, 2012).

The project site is located within the Garberville/Redway/Alderpoint/Benbow Community Planning Area in southern Humboldt County. The total acreage with an agricultural land use designation in this planning area is approximately 7,146 acres, covering approximately 60 percent of the planning area’s total land area (Humboldt County, 1987).

The project site encompasses approximately 405.7 acres. The South Fork Eel River borders the site to the northwest and north. The project site primarily contains agricultural and forest lands that are zoned Agricultural Exclusive (AE). The Humboldt County General Plan land use designations for these lands are AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres); and AL(20) (Agricultural Lands, one dwelling unit per 20 acres). Approximately 12 acres of land in the northern part of the project site are zoned MH-Q (Heavy Industrial-Qualified) and have a General Plan designation of IR (Industrial, Resource Related).

Historically, the project site was used mainly for grazing cattle. Currently, the primary agriculture activity is hay production.

Agricultural Soil Definitions

Storie Index

The Storie Index is a soil rating based on soil properties that govern a soil's potential for cultivated agriculture in California. Storie Index ratings are represented by six grade classes ranging from non-agricultural to excellent.

California Public Resources Code

California Public Resources Code Section 21060.1 contains the following definition of agricultural land:

- a) "Agricultural land" means prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California.
- b) In those areas of the state where lands have not been surveyed for the classifications specified in subdivision (a), "agricultural land" means land that meets the requirements of "prime agricultural land" as defined in paragraph (1), (2), (3), or (4) of subdivision (c) of Section 51201 of the Government Code.

California Government Code

Section 51201(c)(5) of the Government Code defines "prime agricultural land" as land that has returned from the production of unprocessed agricultural plant products an annual gross value of not less than \$200 per acre for 3 of the previous 5 years.

Humboldt County General Plan

Under the existing Humboldt County General Plan, "prime farmland" is identified by any of the following definitions:

- a) Rated Class I or II by the Soil Conservation Service land use capability classifications.
- b) Land which qualifies for rating 80 through 100 in Storie Index Rating.
- c) Land that has a livestock carrying capacity of one animal unit per acre.
- d) Land planted with fruit or nut-bearing trees, vines, bushes or crops which have a non-bearing period of less than five years and which will normally provide a return adequate for economically viable operations during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production.
- e) Land capable of producing an unprocessed plant production adequate for economically viable operations.

- f) Additional lands in proximity to a, b, or c above which are necessary to provide for physically and economically viable, coherent agricultural areas. These lands are included to prevent the establishment of incompatible land uses within an area defined by natural or man-made boundaries.

Agricultural Soils on the Project Site

According to a soil map for Humboldt County from the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), there are 13 soil types on the project site. These soil types are identified on Figure 2, Soils Map, and described in Table 1, Soil Types on the Southern Humboldt Community Park Site, in the LESA (Appendix B).

Based on the agricultural land definitions described above, using the results from the NRCS soil survey (NRCS, 2013) and the LESA results (see Appendix B), approximately 35.7 acres of the project site are considered “farmland of statewide importance;” 188.7 acres of the project site are considered “prime farmland (if irrigated),” and 45.3 acres are irrigated; and approximately 8.5 acres are “prime agricultural land” based on Section 51201(c)(5) of the Government Code (i.e., the approximate acreage being used for hay production with annual gross greater than \$200 per acre for 3 of the previous 5 years at the time this analysis was prepared). **Figure 4.2-1** illustrates farmland classifications on the project site, and **Figure 4.2-2** shows the area that was used for hay production on the site between 2008 and 2012.

FORESTRY RESOURCES

Overview

The forest product industry represents 8 percent of the total economy in Humboldt County (Humboldt County, 2012). The total forest land acreage is approximately 1.9 million acres, covering more than 80 percent of the county’s total land area (Humboldt County, 2012). The total acreage with a Timber Production land use designation in the Garberville/Redway/Alderpoint/Benbow Community Planning Area is approximately 2,073 acres, covering approximately 17 percent of the planning area’s total land area (Humboldt County, 1987).

Forestry Resource Definitions

California Public Resources Code

Under California Public Resources Code Section 12220(g), forest land is defined as land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

Under California Public Resources Code Section 4526, timberland means land, other than land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land, that is available for, and capable of, growing a crop of trees

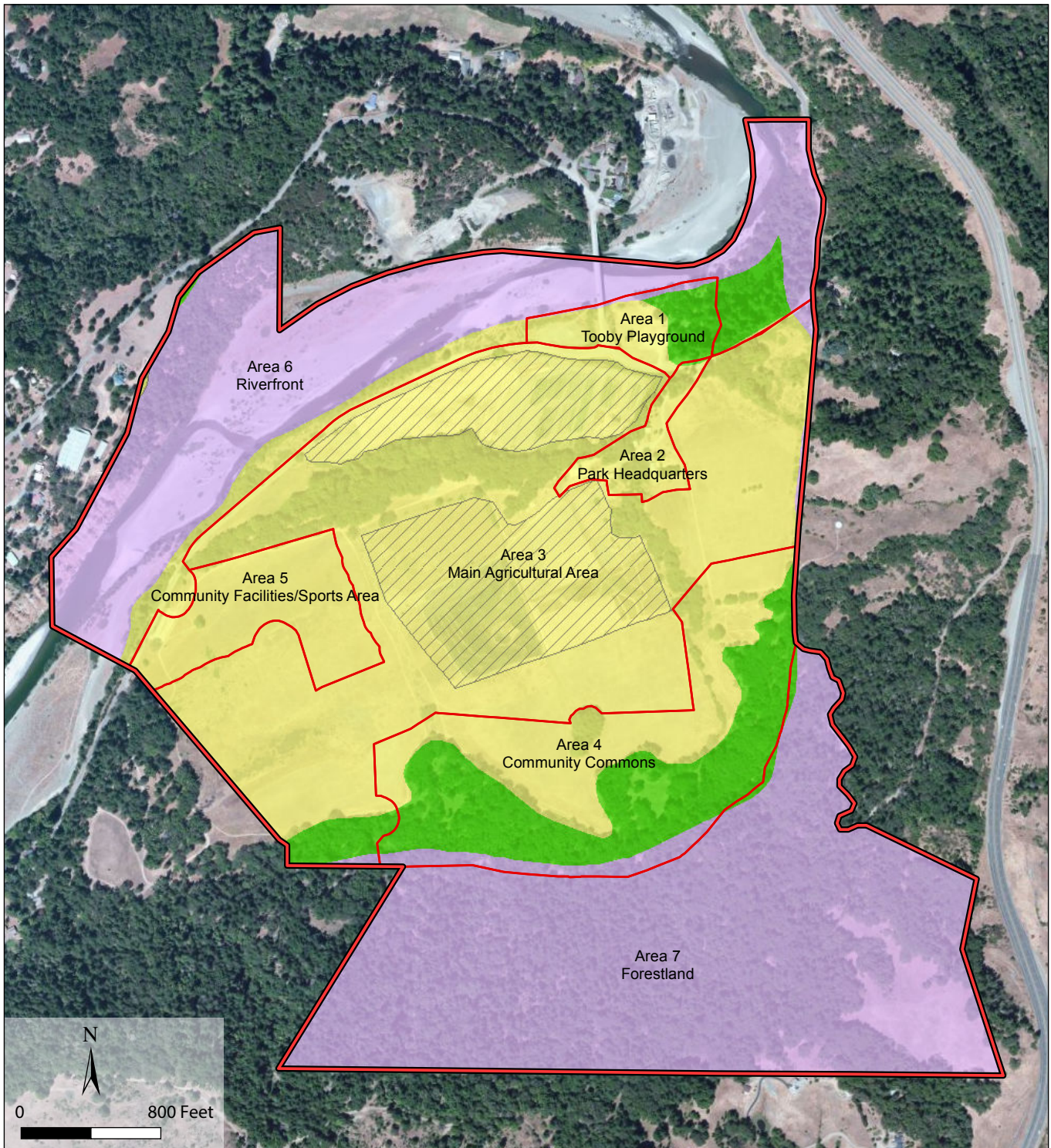
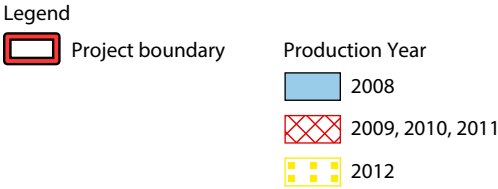


Figure 4.2-1

REDUCED AREA ALTERNATIVE SOIL RATING

SOURCE: Manhard Consulting Ltd., March 2013



SOURCE: Manhard Consulting Ltd., March 2013

Figure 4.2-2
HAY PRODUCTION (2008 - 2012)

of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species must be determined by the Board on a district basis.

California Government Code

Section 51104(g) of the Government Code defines a Timberland Production Zone (TPZ) as an area that has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.

Forestry Resources on the Project Site

The project site contains approximately 186 acres of forest land that supports native tree cover. The project site does not contain timberland or TPZs. There is no area within the project site that has zoning or a land use designation for forest or timber land.

REGULATORY FRAMEWORK

FEDERAL REGULATIONS AND POLICIES

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) administers the Farmland Protection Policy Act (FPPA), which addresses farmland in the following categories: prime farmland, farmland of statewide importance, and unique farmland.

The FPPA is in place to reduce the impact that federal programs have on the unnecessary conversion of farmland to non-agricultural uses. The FPPA assures that federal programs are administered in a manner that is similar to state and local government and private programs and policies established to protect farmland (7 U.S.C. Section 4201). Projects are subject to the FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to non-agricultural use and review of compliance is completed by a federal agency or with assistance from a federal agency. The FPPA does not authorize the federal government to regulate the use of private or nonfederal land or, in any way, affect the property rights of owners (U.S. Department of Agriculture, 2013).

There are no federally owned lands or federally funded projects within the project site vicinity.

STATE REGULATIONS AND POLICIES

To conserve California's farmland and open space resources, the California Department of Conservation's Division of Land Resource Protection (DLRP) operates the Farmland Mapping and Monitoring Program (FMMP), the Williamson Act Program, and the Farmland Conservancy Program (Herson and Lucks, 2008).

Non-federal timberland in California is governed by the Forest Practice Act (Public Resources Code Section 4511 et seq.) and the Timberland Productivity Act (Government Code Section 5110 et seq.) (Herson and Lucks, 2008).

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called prime farmland. The maps are updated every 2 years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

At the time that this EIR section was prepared, Humboldt County was not included in the FMMP (Humboldt County, 2012; State of California Department of Conservation, 2014).

Williamson Act Program

The Williamson Act, also called the California Land Conservation Act (Government Code Section 51200 et seq.), offers agricultural landowners reduced property tax assessments if they contract with counties or cities to voluntarily restrict their land to agriculture and open spaces uses.

The project site is not under a Williamson Act contract.

Farmland Conservancy Program

The California Farmland Conservancy Program (CFCP) seeks to encourage the long-term, private stewardship of agricultural lands through the voluntary use of agriculture easements. Funding for the program is available under the CFCP Act (Public Resource Code Sections 10200-10277). The CFCP provides grant funding for projects that use and support agricultural conservation easements for protection of agriculture lands.

There are no agricultural conservation easements within the project site vicinity.

Forest Practice Act

The Forest Practice Act, also known as the Z'berg-Nejedly Forest Practice Act of 1973, governs harvesting of non-federal timberland in California. The Forest Practice Act is designed to protect, enhance, and restore California's timberlands. The Forest Practice Act is implemented by the Board of Forestry and Fire Protection through a series of regulations called the California Forest Practice Rules.

The project site does not contain timber harvesting uses, and the project does not propose timber harvesting.

Timberland Productivity Act

The Timberland Productivity Act implements a state policy to keep timberlands in production, rather than converted to other uses. The Timberland Productivity Act offers landowners within a TPZ property assessments based on the value of the land when restricted to timber growing. Uses within TPZs are limited to those compatible with timberland production, as defined by local ordinance.

There are no TPZs within the project site vicinity.

LOCAL REGULATIONS AND POLICIES

Humboldt County implements the California Land Conservation Act and TPZ and oversees compliance with CEQA and the Humboldt County General Plan as they relate to agriculture and timber resources.

The Humboldt County General Plan (Humboldt County, 1983) contains goals and policies to protect agricultural and timber lands, as follows.

Humboldt County General Plan – Agricultural Lands

The Humboldt County General Plan, Section 2522, states the following goal: “The optimum amount of agricultural land shall be conserved for and maintained in agricultural use to promote and increase Humboldt County’s agricultural production.” Policies listed in the General Plan relevant to the project site vicinity are as follows:

1. *Agricultural lands shall be conserved and conflicts minimized between agricultural and non-agricultural uses through the following:*
 - B. *By focusing future conversions in areas where land use conflicts would not threaten the viability of existing agriculture.*
 - C. *By promoting in-filling to achieve a more logical urban/agricultural boundary.*
 - E. *By assuring that public service facility expansions and non-agricultural development do not inhibit agricultural viability through degraded water supplies, access systems, air quality, and other relevant considerations, such as increased assessment costs.*
4. *Prime agricultural land should be retained in parcel sizes large enough to provide for an economic management base.*
10. *The conversion of agricultural land should only be considered where continued agricultural production is not economically feasible and proposed development is consistent with Remote Rural Development Section 2550.*

Humboldt County General Plan – Timberlands

The Humboldt County General Plan, Section 2511, states the following goal: “To actively protect and conserve timberlands for long-term economic utilization and to actively enhance and increase county timber production capabilities.” Policies listed in the General Plan relevant to the project site vicinity are as follows:

1. *Timberlands shall be retained for timber production, harvesting and compatible uses, and reclassification of Timberland Production Zones (TPZ) shall be done in accordance with statutory requirements.*

2. *Avoid, wherever practical, the location of any state or local public improvements and any improvements of public utilities, and the acquisition of land therefore, in TPZs where the project will have a significant adverse effect on the production of timber.*
3. *Encourage the long-term management of timberlands.*
6. *Encourage, consistent with the Rural Development Section 2550, improved site productivity, timber growth and harvesting through intensive forestry management.*

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on agriculture or forestry resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined by Public Resources Code section 12220(g)), or timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

LESS-THAN-SIGNIFICANT IMPACTS

Conflicts with Agricultural, Forest Land, or Timberland Zoning

The project would not create any conflicts with existing agricultural, forest land, or timberland zoning. The impact would be less than significant, and no mitigation is required.

As discussed under “Environmental Setting” above, most of the 405.7-acre project site is currently zoned Agricultural Exclusive (AE); the only exception is a 12-acre area in the northern part of the site that is zoned MH-Q (Heavy Industrial-Qualified). None of the project site has forest land or timberland zoning.

Under the project, the 12-acre area would retain its MH-Q zoning, and approximately 307 acres of the site would remain zoned AE but would have a Qualified (Q) combining zone that would allow public recreation uses. Approximately 87 acres would be rezoned to a new Public Facility (PF)

zoning classification with a Q combining zone that would allow agricultural uses. (See further discussion in Chapter 3, Project Description, of this EIR.)

The project proposes to continue existing agriculture activities and forest land management on the project site. The project does not propose timber production.

With implementation of the project, the same areas of the site that are currently zoned for agricultural use would continue to have zoning that allows agricultural use. The proposed zoning of PF with a Q combining zone, which would apply to 87 acres of the site, would allow agricultural uses as well as recreational uses and would not cause significant conflict with the existing AE zone, which allows agricultural uses. Similarly, adding the Q combining zone to allow public recreation uses in the existing AE zone, as proposed by the project, would not cause significant conflict within the existing AE zone. The project includes rezoning as necessary to accommodate the proposed uses. The proposed project uses and zoning therefore would not conflict with the existing zoning of the project site. The project therefore would not create any conflicts with agricultural, forest land, or timberland zoning. The impact would be less than significant, and no mitigation is required.

The issue of project conversion of farmland to non-agricultural use is different from project consistency with existing agricultural zoning. The farmland conversion impact is addressed under Impact AGFR-1 below.

Conflict with Williamson Act Contract

As discussed under “Regulatory Framework” above, the project site is not subject to a Williamson Act contract. The project therefore would not create a conflict with a Williamson Act contract. The impact would be less than significant, and no mitigation is required.

Conversion of Forest Land to Non-Forest Use

The project would not result in conversion of forest land to non-forest use. The impact would be less than significant, and no mitigation is required.

As discussed under “Environmental Setting” above, the project site contains approximately 186 acres of land that supports native tree cover. No changes to the existing management of this land are proposed by the project. The impact would therefore be less than significant, and no mitigation is required.

POTENTIALLY SIGNIFICANT IMPACTS

Impact AGFR-1: The project would convert farmland (approximately 4 acres in Area 3 and 16 acres in Area 5) to non-agricultural use, reducing the overall inventory of agricultural land in Humboldt County and conflicting with Humboldt County General Plan policies for protecting agricultural land. (PS)

The conversion of farmland can occur through direct conversion to urban uses or the land falling idle due to conflicts with nearby urban uses, subdivision of the land, or change in use to parkland

or open space. While the project would generally increase agricultural production on the project site, it would convert farmland to non-agricultural uses in certain limited areas of the site, representing a significant impact.

Appendix G of the CEQA Guidelines states that a project would have a significant impact if it would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP of the California Resource Agency, to non-agricultural use (see “Significance Criteria” above). Humboldt County does not participate in the statewide FMMP; thus, it is not possible to analyze project impacts on these lands. However, the NRCS Soil Survey provides soil maps and data for the project area (NRCS, 2013). The NRCS soil survey data were used to analyze impacts on agricultural resources on the project site.

Significance of Farmland Conversion Based on LESA Model

According to Appendix G of the CEQA Guidelines, in determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California LESA model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. The LESA model uses soil types and characteristics, relative project size, water availability, and surrounding uses as factors to rate the project based on its agricultural value. A final score is determined based on weighted ranks of the individual factors.

The LESA model was used to confirm the significance of the conversion of farmland on the project site. For the purpose of this analysis, the LESA model is used to assess the significance of the conclusions presented in this report. The LESA model report and findings are included in Appendix B.

The final LESA score for the project was 45, with a Land Evaluation subscore (soil types and characteristics to agriculture) of 27.9 and a Site Assessment subscore (project size, water availability, surrounding agriculture) of 17.1. This score is considered significant only if Land Evaluation and Site Assessment subscores are each greater than or equal to 20 points. Since the Site Assessment subscore was less than 20 points for the project site, pursuant to the LESA model, the proposed conversion of the site to non-agricultural uses would not be considered significant.

Significance of Farmland Conversion Based on Humboldt County General Plan Policies

Although the proposed project would not have a significant impact based on the LESA model results, it would conflict with the Humboldt County General Plan policies for protecting agricultural land. The policies state that “agricultural lands shall be conserved” and that “the conversion of agricultural land should only be considered where continued agricultural production is not economically feasible and the proposed development is consistent with the Remote Rural Development Section 2550” (see “Regulatory Framework” above).

In general, agricultural activities on the project site would continue as part of the project, and most of the existing agricultural buildings would remain in use. In addition, proposed physical changes to

the project site would allow expanded and new opportunities for agricultural uses of the site. The project proposes community uses of existing agricultural land to increase the productivity of the land by allowing multiple farmers, community groups, and individuals to use the land and existing facilities (see further discussion in Chapter 3, Project Description, of this EIR).

In Area 3, however, the project would include 500 spaces of temporary on-site parking for moderate- and large-sized events. This parking area would cover approximately 4 acres of Prime Farmland that are not irrigated (see Figure 4.2-1). According to the project applicant, this field is currently producing a hay crop every spring (see Figure 4.2-2), and the field would be used for parking after crop harvest (Lobato, 2014). Under the project, Area 3 would retain its AE zoning but have a Q combining zone to allow recreational uses. (See further discussion in Chapter 3, Project Description, of this EIR.)

In addition, in Area 5, the project proposes a community facilities and sports area. Area 5 has a soil rating of excellent and a farmland classification of "Prime Farmland (if irrigated)" (see Figure 4.2-1). According to the project applicant, however, Area 5 is not currently irrigated and is not under agricultural production, and similar soils in this area have had poor crop production (Lobato, 2014). Under the project, Area 5 would be rezoned to PF. (See further discussion in Chapter 3, Project Description, of this EIR.)

The total of approximately 20 acres of farmland (approximately 4 acres in Area 3 and 16 acres in Area 5) that would be converted to non-agricultural use by the project would represent less than 0.01 percent of Humboldt County's total agricultural acreage (approximately 345,238 acres) and the total acreage with an agricultural land use designation in the Garberville/Redway/Alderpoint/Benbow Community Planning Area of southern Humboldt County (approximately 7,146 acres).

Applicant Rationale for Farmland Conversion

According to the project applicant, the project was designed so that many of the proposed activities would occur outside the areas of the site that are suitable for agriculture. The proposed Community Commons Area (Area 4) that would be used for educational camps and events is within a forested area that was selected for this proposed use to avoid impacts on agriculture. According to the applicant, Area 5 was chosen for the proposed community facilities and sports area in part due to the poorer soil compared to other areas of the site and the lack of agricultural productivity in this area of the site. Also according to the applicant, project timing would allow for compatible recreation and agricultural uses; for example, in Area 3, harvest of hay (conducted in mid-spring) would be completed before events that would use field parking (late spring through summer) (Lobato, 2015). (See Chapter 3, Project Description, of this EIR for further description of the timing of the hay harvesting and temporary parking use.)

Conclusion

Although the LESA model score resulted in a scoring decision of "Less than Significant," the project would conflict with Humboldt County General Plan policies that encourage conservation of agricultural land and only allow the conversion of agricultural land where continued agricultural production is not economically feasible and the proposed development is consistent with the

Remote Rural Development Section 2550. While the project would generally increase agricultural production on the project site, conversion of farmland to non-agricultural uses in certain areas of the site would represent a significant impact.

Mitigation Measure AGFR-1: The 4-acre temporary parking zone in Area 3 shall be not be used for parking until after the hay crop is harvested. The project applicant shall remove all trash and debris from fields used for parking and return the field to productive use for the next season.

To protect the continued agricultural use of Area 3, the applicant shall record a deed restriction on the Area 3 part of the property that would convey to the County the development rights for any development other than the existing uses. This restriction shall preclude any improvements in the area except those for agricultural purposes, such as greenhouses and barns. The restriction would allow the use of the area for parking for temporary events, and the use of ranch roads for moving people and equipment associated with those events, because no new development would be needed for these temporary uses. The deed restriction may include a clause releasing the restriction at the time the zoning and general plan are changed to limit the use of the property to agricultural uses.

No additional mitigation is available for the loss of farmland. This measure would help reduce the farmland conversion impact, but the project would still result in a net loss of farmland. The impact would therefore be significant and unavoidable. (SU)

CUMULATIVE IMPACTS

The potential impacts of proposed development on agriculture and forestry resources tend to be site-specific, and the overall cumulative effect would depend on the degree to which resources are protected on a particular site. Further environmental review of specific development proposals in the vicinity of the project site should serve to ensure that important agriculture and forestry resources are identified, protected, and properly managed, and to prevent any significant adverse development-related impacts.

As discussed in the above project-specific analysis, the project would not result in a significant impact on existing forestry resources. The project would convert certain limited areas of farmland to non-agricultural use, representing a significant, unavoidable impact as discussed in Impact AGFR-1 above. Overall, however, the project could be expected to increase agricultural production on the project site. Therefore, the effect of the project on agriculture and forestry resources, in combination with other past, present, and foreseeable projects, would be less than significant. The project would not result in or contribute to any significant cumulative impacts on these resources.

REFERENCES

Herson, A.I. and G.A. Lucks, 2008, California Environmental Law and Policy: A Practical Guide. Point Arena, CA. Solano Press Books, pages 287-292 and 365-367.

Humboldt County, 1983, *Humboldt County General Plan: Volume I Framework Plan*.

Humboldt County, 1987, *Garberville/Redway/Alderpoint/Benbow Community Plan*, adopted by the Board of Supervisors, June 30, 1987, Sections 2724, 2725, and 2752. Website <http://www.humboldt.gov/DocumentCenter/Home/View/285>.

Humboldt County, 2012, *Humboldt County General Plan Update*.

Lobato, Kathryn, Executive Director, Southern Humboldt Community Park, 2014. E-mail communication re. "4.XX _AgForestry," August 16.

Lobato, Kathryn, Executive Director, Southern Humboldt Community Park, 2015. E-mail communication re. "SHCP Ag. Land Issues," June 22.

State of California Department of Conservation, 2014, *Farmland Mapping and Monitoring Program*.

U.S. Department of Agriculture, Natural Resources Conservation Service, 2013. Farmland Protection Policy Act. Last revised: unknown. Website http://www.nrcs.usda.gov/wps/portal/nrcs/detail/?ss=16&navtype=SUBNAVIGATION&cid=nrcs143_008275&navid=10017018000000&position=Welcome.Html&ttype=detail accessed April 29, 2013.

4.3 AIR QUALITY

INTRODUCTION

This section provides background information regarding air resources within the project area, the regulations and programs that relate to air quality, and an assessment of the potential impacts of implementing the proposed project.

The project site is located within North Coast Air Basin (NCAB) which includes all of Humboldt, Del Norte, Trinity, and Mendocino counties, as well as a portion of Sonoma County. The North Coast Unified Air Quality Management District (NCUAQMD) regulates air quality in the Humboldt, Del Norte and Trinity County portions of the NCAB.

Air Quality is affected by both the rate and location of pollutant emissions and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

ENVIRONMENTAL SETTING

HUMBOLDT COUNTY AND NCAB

In general, the climate of northern coastal California is characterized by cool summers and mild winters with frequent fog and significant amounts of rain. In coastal areas, the ocean helps to moderate temperatures year-round. Further inland, the summers are hotter and drier and the winters colder and more snowy. At higher elevations in inland areas, it is cooler in the summers and snowier in the winter. The average annual rainfall in the County ranges from 38 inches in Eureka to 141 inches in Honeydew. Approximately 90 percent of the annual precipitation falls between October and April. Higher rainfall in winter often influences high river levels. Winter snowfall is common at higher elevations. The dry season is between May and September.

Average temperatures on the coast in Eureka range from the low 60s in the summer to the low 40s during the winter. Inland average temperatures, such as in Willow Creek or Hoopa, range from the 90s to the 30s. On the coast, summer fog is common when inland temperatures rise.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to drive the movement and dispersal of air pollutants. Winds control the rate and dispersion of local pollutant emissions. In the California North Coast Air Basin, dominant winds exhibit a seasonal pattern, especially in coastal areas. In the summer months, strong north to northwesterly winds are common and during the winter, storms from the South Pacific increase the percentage of days with winds from southerly quadrants. Wind direction often assumes a daily pattern in the river canyons that empty into the Pacific. In the morning hours, cool air from higher elevations flows down the valleys while later in the day as the lower elevation air heats up, this pattern is reversed and the airflow heads up the canyon. These airflows are often

quite strong. Offshore and onshore flows are also common along the coast and are associated with pressure systems in the area. Onshore flows frequently bring foggy cool weather to the coast, while offshore flows often blow fog away from the coast and bring sunny warm days.

Humboldt County commonly experiences two types of inversions, vertical and horizontal, that affect the vertical depth of the atmosphere through which pollutants can be mixed. Vertical air movement is important in spreading pollutants through a thicker layer of air. Horizontal movement is important in spreading pollutants over a wider area. Upward dispersion of pollutants is hindered wherever the atmosphere is stable; that is, where warm air overlies cooler air below.

As a result of the region's topography and coastal air movements, inversion conditions are common in the NCAB. Inversions are created when warm air traps cool air near the ground surface and prevents vertical dispersion of air. Valleys, geographic basins, and coastal areas surrounded by higher elevations are the most common locations for inversions to occur. During the summer, inversions are less prominent, and vertical dispersion of the air is good. However, during the cooler months between late fall and early spring, inversions last longer and are more geographically extensive; vertical dispersion is poor, and pollution may be trapped near the ground for several concurrent days.

Radiation inversion occurs when the air layer near the surface of the ground cools and may extend upward several hundred feet. Radiation inversion in Humboldt County is found in the night and early mornings almost daily, but is more prominent from late fall to early spring when there is less sunlight and it is cooler. Radiation inversion tends to last longer into the morning during the winter months than in the summer.

Subsidence inversion is caused by downward moving air aloft, which is common in the area of high pressure along and off the coast. The air warms at a rate of 5.5 degrees Fahrenheit (°F) per 1,000 feet as it descends. Thus, it arrives at a lower height warmer than the air just below and limits the vertical mixing of air. Subsidence inversion often affects a large area and is more common during the summer months. This inversion, which usually occurs from late spring through the early fall, can be very strong and shallow given the cooling of the lower layers from the cool ocean water.

In the NCAB, air quality is predominantly influenced by the climatic regimes of the Pacific. In summer, warm ground surfaces draw cool air in from the coast, creating frequent thick fogs along the coast and making northwesterly winds common. In winter, precipitation is high, winter time surface wind directions are highly variable, and weather is more affected by oceanic storm patterns.

AIR POLLUTANTS OF CONCERN AND HEALTH EFFECTS

The most problematic pollutant in the project area is particulate matter. The health effects and major sources of these pollutants, as well as other key pollutants, are described below. Toxic air contaminants are a separate class of pollutants and are discussed later in this section.

Ozone

Ground-level ozone (O_3), commonly referred to as smog, is greatest on warm, windless, sunny days. O_3 is not emitted directly into the air, but is formed through a complex series of chemical reactions between reactive organic gases (ROG) and nitrogen oxides (NO_x). These reactions occur over time in the presence of sunlight. O_3 formation can occur in a matter of hours under ideal conditions. The time required for O_3 formation allows the reacting compounds to spread over a large area, producing a regional pollution concern. Once formed, O_3 can remain in the atmosphere for 1 or 2 days.

O_3 is also a public health concern because it is a respiratory irritant that increases susceptibility to respiratory infections and diseases, and because it can harm lung tissue at high concentrations. In addition, O_3 can cause substantial damage to leaf tissues of crops and natural vegetation and can damage many natural and human-made materials by acting as a chemical oxidizing agent. The principal sources of the O_3 precursors (ROG and NO_x) are the combustion of fuels and the evaporation of solvents, paints, and fuels.

Particulate Matter

Particulate matter (PM) can be divided into several size fractions. Coarse particles (PM_{10}) are smaller than 10 microns in diameter and arise primarily from natural processes, such as wind-blown dust or soil. Fine particles ($PM_{2.5}$) are less than 2.5 microns in diameter and are produced mostly from combustion or burning activities. Fuel burned in cars and trucks, power plants, factories, fireplaces, and wood stoves produces fine particles. $PM_{2.5}$, and to some extent PM_{10} , contain particles formed in the air from primary gaseous emissions. Examples include sulfates formed from sulfur dioxide (SO_2) emissions from power plants and industrial facilities; nitrates formed from NO_x emissions from power plants, automobiles, and other combustion sources; and carbon formed from organic gas emissions from automobiles and industrial facilities.

The level of $PM_{2.5}$ in the air is a public health concern because it can bypass the body's natural filtration system more easily than larger particles and can lodge deep in the lungs. The health effects vary depending on a variety of factors, including the type and size of particles. Research has demonstrated a correlation between high PM concentrations and increased mortality rates. Elevated PM concentrations can also aggravate chronic respiratory illnesses such as bronchitis and asthma.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas that is formed by the incomplete combustion of fuels. Motor vehicle emissions are the dominant source of CO in the NCAB. At high concentrations, CO reduces the oxygen-carrying capacity of the blood and can cause dizziness, headaches, unconsciousness, and even death. CO can also aggravate cardiovascular disease. Relatively low concentrations of CO can significantly affect the amount of oxygen in the bloodstream because CO binds to hemoglobin 220 to 245 times more strongly than oxygen.

CO emissions and ambient concentrations have decreased significantly in recent years. These improvements are due largely to the introduction of cleaner-burning motor vehicles and motor

vehicle fuels. CO is still a pollutant that must be closely monitored, however, due to its severe effect on human health.

Elevated CO concentrations are usually localized and are often the result of a combination of high traffic volumes and traffic congestion. Elevated CO levels develop primarily during winter periods of light winds or calm conditions combined with the formation of ground-level temperature inversions. Wintertime CO concentrations are higher because of reduced dispersion of vehicle emissions and because CO emission rates from motor vehicles increase as temperature decreases.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO₂ are combustion devices such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Construction devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO₂. The combined emissions of NO and NO₂ are referred to as NO_x. Because NO₂ is formed and depleted by reactions associated with O₃, the NO₂ concentration in a particular geographic area may not be representative of the local NO_x emission sources.

Inhalation is the most common route of exposure to NO₂. Because NO₂ has relatively low solubility in water, the principal site of toxicity is in the lower respiratory tract. The severity of adverse health effects depends primarily on the concentration inhaled rather than the duration of the exposure. Exposure can result in a variety of acute symptoms, including coughing, difficulty with breathing, vomiting, headache, and eye irritation. Symptoms that are more significant may include chemical pneumonitis or pulmonary edema with breathing abnormalities, cyanosis, chest pain, and rapid heartbeat.

Sulfur Dioxide

Sulfur dioxide (SO₂) is produced by such stationary sources as coal and oil combustion, steel mills, refineries, and pulp and paper mills. The major adverse health effects associated with exposure to SO₂ pertain to the upper respiratory tract. SO₂ is a respiratory irritant, with constriction of the bronchioles occurring with inhalation of SO₂ at 5 parts per million (ppm) or more. On contact with the moist mucous membranes, SO₂ produces sulfurous acid, which is a direct irritant. Similar to NO₂, the severity of adverse health effects depends primarily on the concentration inhaled rather than the duration of the exposure. Exposure to high concentrations of SO₂ may result in edema of the lungs or glottis and respiratory paralysis.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of

exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Diesel particulate matter (DPM) is a TAC of growing concern in California. According to the California Almanac of Emissions and Air Quality (CARB, 2009), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being DPM. In 1998, after a 10-year scientific assessment process, CARB identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. The exhaust from diesel engines contains hundreds of different gaseous and particulate components, many of which are toxic. Many of these compounds adhere to the particles, and because diesel particles are so small, they penetrate deep into the lungs. DPM has been identified as a human carcinogen. Mobile sources, such as trucks, buses, automobiles, trains, ships, and farm equipment, are by far the largest source of diesel emissions. Studies show that DPM concentrations are much higher near heavily traveled highways and intersections.

Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. No ambient monitoring data are available for DPM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses CARB's emissions inventory PM₁₀ database, ambient PM₁₀ monitoring data, and the results from several studies to estimate concentrations of DPM. In addition to DPM, benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene pose the greatest existing ambient risk, for which data are available, in California. However, DPM poses the greatest health risk among the TACs mentioned. Since 1990, the health risk from DPM has been reduced by 52 percent. Overall, levels of most TACs have decreased since 1990 except for para-dichlorobenzene and formaldehyde (CARB, 2009).

Unlike criteria pollutants like carbon monoxide, TACs do not have ambient air quality standards. Since no safe levels of TACs can be determined, there are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. Two types of risk are usually assessed: chronic non-cancer risk and acute non-cancer risk. DPM has been identified as a carcinogenic material but is not considered to have acute non-cancer risks. The State of California has begun a program of identifying and reducing risks associated with DPM. The program consists of new regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles; new retrofit requirements for existing on-road, off-road, and stationary diesel-fueled engines and vehicles; and new diesel fuel regulations to reduce the sulfur content of diesel fuel as required by advanced diesel emission control systems.

Land uses where individuals could be exposed to high levels of diesel exhaust include:

- Railroad operations;
- Warehouses;
- Schools with a high volume of bus traffic;
- High-volume highways; and
- High-volume arterials and local roadways with a high level of diesel traffic.

Sensitive Receptors

Some groups of people are more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks.

The project site is located within 0.25-mile of sensitive receptors, a residential subdivision – Rivercrest Drive, including a residence that is located within 1,000 feet to the northeast. Other sensitive receptor sites in the area are the Jerold Phelps Community Hospital and Cedar Street Senior Housing, 1.5 miles to the northeast, which is well outside the project area, across Highway 101 and on the northeast corner of the town of Garberville. Currently, there are no schools for young children in the Garberville area.

REGULATORY FRAMEWORK

Air quality in the NCAB is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies primarily responsible for improving the air quality in Humboldt County are discussed below along with their individual responsibilities.

AMBIENT AIR QUALITY STANDARDS

Both the U.S. Environmental Protection Agency (EPA) and CARB established ambient air quality standards for common air pollutants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. The federal and State ambient air quality standards for important pollutants are summarized in **Table 4.3-1**. The federal and State ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, federal and State standards differ in some cases. In general, California standards are more stringent. This is particularly true for nitrogen dioxide (NO₂) and coarse particulate matter (PM₁₀).

TABLE 4.3-1 FEDERAL AND STATE AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone (O ₃)	1-Hour	--	0.09 ppm
	8-Hour	0.075 ppm	0.07 ppm
Coarse Particulate Matter (PM ₁₀)	24-Hour	150 µg/m ³	50 µg/m ³
	Annual Average	--	20 µg/m ³
Fine Particulate Matter (PM _{2.5})	24-Hour	35 µg/m ³	--
	Annual Average	12µg/m ³	12 µg/m ³
Carbon Monoxide (CO)	1-Hour	35 ppm	20 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO ₂)	1-Hour	0.100 ppm	0.18 ppm
	Annual Average	0.053 ppm	0.03 ppm
Sulfur Dioxide (SO ₂)	1-Hour	0.075 ppm	0.25 ppm
	24-Hour	0.14 ppm	0.04 ppm
	Annual Average	0.03 ppm	--

Notes: ppm = parts per million; µg/m³ = micrograms per cubic meter
 Source: BAAQMD, 2014; EPA, 2013.

AMBIENT AIR QUALITY MONITORING

Air quality monitoring has been conducted in the North Coast Air Basin since 1982 when the NCUAQMD was formed. The California Air Resources Board (CARB) operates a regional network of air pollution monitoring stations that provide information on ambient concentrations of criteria air pollutants and toxic air contaminants. Monitoring results have shown that the principal pollutant of the North Coast, including Humboldt County, is particulate matter 10 microns or less in diameter, designated as PM₁₀. NCUAQMD measures PM₁₀ at sites in Crescent City, Eureka, and Weaverville. Data for Humboldt County is collected at air quality stations, located in Eureka on Jacobs Avenue and Humboldt Hill. The Eureka air quality stations also monitor for the federal Particulate Matter Standard (PM_{2.5}). Data from the monitoring stations indicate that the air quality in the vicinity of the monitoring station is improving.

The NCUAQMD is considered in “attainment” for the criteria pollutants of ozone and PM_{2.5}, attainment for the federal PM₁₀ standard, and in “nonattainment” for the State 24-hour particulate (PM₁₀) standard. **Table 4.3-2** shows historical occurrences of pollutant levels exceeding State and federal ambient air quality standards for the 3-year period of 2011 through 2013. Monitoring data is reported from the Humboldt Hill site, unless otherwise noted as from the Jacobs Avenue site.

AMBIENT AIR QUALITY ATTAINMENT STATUS

Table 4.3-3 shows the federal and State attainment status for the NCAB. The region is nonattainment for State PM₁₀ standards.

Areas with air quality that exceeds adopted air quality standards are designated as “nonattainment” areas for the relevant air pollutants. Nonattainment areas are sometimes further classified by degree (marginal, moderate, serious, severe, and extreme for ozone, and moderate and serious for

TABLE 4.3-2 AMBIENT AIR QUALITY MONITORING DATA IN EUREKA, 2011-2013

Pollutant	Pollutant Concentration by Year		
	2011	2012	2013
Ozone			
Maximum 1-hour concentration (ppm)	0.047	0.053	0.055
Maximum 8-hour concentration (ppm)	0.043	0.049	0.049
Coarse Particulate Matter (PM₁₀)			
Maximum 24-hour concentration (µg/m ³)	53.9^a	28.8	44.6
Annual average (µg/m ³)	19.1 ^a	9.6	11.9
Fine Particulate Matter (PM_{2.5})			
Maximum 24-hour average (µg/m ³)	22.1	21.2	21.1
Annual average (µg/m ³)	ND	6.7	ND

Note: ND = No data; ppm = parts per million; µg/m³ = micrograms per cubic meter

Bold = in excess of standards; ppm = parts per million; µg/m³ = micrograms per cubic meter.

^a Data reported from the Jacobs Avenue monitoring station.

Source: CARB, 2014.

TABLE 4.3-3 FEDERAL AND STATE AMBIENT AIR QUALITY MONITORING ATTAINMENT STATUS FOR NCAB

Pollutant	Federal	State
Ozone	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Particulate Matter 2.5 Microns or Smaller	Attainment	Unclassified
Particulate Matter 10 Microns or Smaller	Attainment	Non-attainment
Sulfates	Not applicable	Attainment
Lead	Attainment	Attainment
Hydrogen Sulfide	Not applicable	Attainment
Vinyl Chloride	Not applicable	Attainment
Carbon Monoxide	Attainment	Attainment

Source: NCUAQMD, 2014a and 2014b.

carbon monoxide and PM₁₀) or status (“nonattainment-transitional”). Areas that comply with air quality standards are designated as “attainment” areas for the relevant air pollutants. “Unclassified” areas are those with insufficient air quality monitoring data to support a designation of attainment or nonattainment, but are generally presumed to comply with the ambient air quality standard. State Implementation Plans (SIPs) must be prepared by states for areas designated as federal

nonattainment areas to demonstrate how the area will come into attainment of the exceeded federal ambient air quality standard.

As detailed in the discussion below, both CARB and the EPA have established air pollution standards in an effort to protect human health and welfare. Geographic areas are designated attainment if these standards are met and nonattainment if they are not met. In addition, each agency has several levels of classifications based on severity of the problem.

FEDERAL REGULATIONS

The EPA is responsible for enforcing the federal Clean Air Act and the 1990 amendments to it, as well as the national ambient air quality standards (federal standards) that the EPA establishes. These standards identify levels of air quality for six criteria pollutants, which are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect public health and welfare. The six criteria pollutants are O₃, CO, NO₂, SO₂, PM₁₀, and lead. The EPA also has regulatory and enforcement jurisdiction over emission sources beyond State waters (outer continental shelf) and sources that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs.

STATE REGULATIONS

California Air Resources Board

The California Air Resources Board (CARB), a department of the California Environmental Protection Agency, oversees air quality planning and control throughout California. It is primarily responsible for ensuring implementation of the 1989 amendments to the California Clean Air Act (CCAA), responding to the federal Clean Air Act (federal CAA) requirements, and regulating emissions from motor vehicles and consumer products within the State. CARB has established emission standards for vehicles sold in California and for various types of equipment available commercially. It also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish ambient air quality standards for the State (State standards) and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same six criteria pollutants as the federal CAA and also include sulfate, visibility, hydrogen sulfide, and vinyl chloride. They are more stringent than the federal standards and, in the case of PM₁₀ and NO₂, far more stringent.

DPM emissions in California are projected to decrease in the future and are reflected in the EMFAC2011 emissions data. New CARB regulations require on-road diesel trucks to be retrofitted with particulate matter controls or replaced to meet new 2010 engine standards that have much lower DPM and PM_{2.5} emissions. This regulation will substantially reduce these emissions between

2013 and 2023, with the greatest reductions occurring in 2013 through 2015. While new trucks and buses will meet strict federal standards, this measure is intended to accelerate the rate at which the fleet either turns over so there are more cleaner vehicles on the road or is retrofitted to meet similar standards. With this regulation, older, more polluting trucks would be removed from the roads much more quickly.

Tanner Air Toxics Act

California regulates TACs primarily through the Tanner Air Toxics Act (Tanner Act) and the Air Toxics 'Hot Spots' Information and Assessment Act of 1987 (Assembly Bill (AB) 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. Once a TAC is identified, CARB then adopts an Airborne Toxics Control Measure (ATCM) for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate best available control technology (BACT) to minimize emissions.

AB 2588 requires that existing facilities that emit toxic substances above a specified level 1) prepare a toxic-emission inventory, 2) prepare a risk assessment if emissions are significant, 3) notify the public of significant risk levels, and 4) prepare and implement risk reduction measures. (See more discussion under "AB 2588 Air Toxics 'Hot Spots' Information and Assessment Act of 1987" below.) CARB has adopted diesel exhaust control measures and more stringent emission standards for various on-road mobile sources of emissions, including transit buses and off-road diesel equipment (e.g., tractors, generators).

Senate Bill 656

In 2003, the California Legislature enacted Senate Bill (SB) 656 to reduce public exposure to PM₁₀ and PM_{2.5}. In 2004, CARB approved a list of the most readily available, feasible, and cost-effective control measures that can be employed by air districts to reduce PM₁₀ and PM_{2.5} (collectively referred to as PM). The list is based on rules, regulations, and programs existing in California as of January 1, 2004, for stationary, area-wide, and mobile sources. In 2005, air districts adopted implementation schedules for selected measures from the list. The implementation schedules identify the appropriate subset of measures and the dates for final adoption, implementation, and the sequencing of selected control measures. In developing the implementation schedules, each air district prioritized measures based on the nature and severity of the PM problem in their area and cost-effectiveness. Consideration was also given to ongoing programs such as measures being adopted to meet national air quality standards or the State ozone planning process.

Assembly Bill 2588 Air Toxics "Hot Spots" Information and Assessment Act of 1987

In 1987, the California Legislature established the Air Toxics "Hot Spots" Information and Assessment Act of 1987, AB 2588 (Health and Safety Code Sections 44300-44394). It requires facilities to report their air toxics emissions, ascertain health risks, and notify nearby residents of significant risks. The emissions inventory and risk assessment information from this program has

been incorporated into this report. In 1992, the “Hot Spots” Act was amended by SB 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

REGIONAL REGULATIONS

Humboldt County is located within the North Coast Air Basin. The North Coast Air Basin is comprised of Del Norte, Humboldt, Mendocino, and Trinity counties, as well as the northern and western portion of Sonoma County (as defined in the California Code of Regulations, Title 17, Division 3, Chapter 1, Article 1). The NCUAQMD is responsible for developing air quality plans, monitoring air quality, and reporting air quality data for the North Coast Air Basin. In addition, the NCUAQMD has the following responsibilities: overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality related sections of environmental documents required by CEQA.

Air Quality Plans

According to the PM₁₀ Attainment Plan adopted by NCUAQMD (May 11, 1995), Humboldt County’s air quality has violated the California PM₁₀ ambient standard, and as a result, the district has been classified as a PM₁₀ non-attainment area. Humboldt County PM₁₀ emissions are generated by a variety of sources. The PM₁₀ Attainment Plan includes control strategies that are intended to achieve the attainment goals that are identified in the Plan. Control strategies include transportation control measures such as encouraging the use of public transit and replacing the diesel powered bus fleet with natural gas fueled models, encouraging car-pooling and bicycle commuting, removal or repair of vehicles with inefficient emission control systems, and traffic flow improvements that reduce idling and VMT. Land use control measures encourage mixed use or more dense development. The PM₁₀ Attainment Plan also includes measures that limit residential burning as well as various measures to encourage the installation of EPA certified woodstoves.

HUMBOLDT COUNTY GENERAL PLAN

The adopted Humboldt County General Plan addresses air quality in Chapter 3260. However, no specific policies address air quality. The Plan discusses concerns about particulate matter and industrial air emissions.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

In accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines, air quality impacts are considered significant if implementation of the proposed project would:

- Conflict with or obstruct implementation of an applicable air quality plan;

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

LESS-THAN-SIGNIFICANT IMPACTS

Conflict With or Obstruction of Implementation of Air Quality Plan

As discussed below under Impact AIR-1, operation of the project would not involve substantial emissions of PM₁₀, the only criteria pollutant for which the area is non-attainment. Construction emissions due to project implementation would be mitigated to a less-than-significant level. Therefore, it is determined that the project would not conflict with or obstruct implementation of the 1995 PM₁₀ Attainment Plan and this impact would be less than significant.

Violation of Air Quality Standards

As discussed under Impact AIR-1, operation of the project would not involve substantial emissions of PM₁₀, the only criteria pollutant for which the area is non-attainment. Construction emissions due to project implementation would be mitigated to a less-than-significant level.

Carbon monoxide emissions from traffic generated by the project would be the pollutant of greatest concern at the local level. Congested intersections with a large volume of traffic have the greatest potential to cause high, localized concentrations of carbon monoxide. However, the area is attainment from carbon monoxide standards at both the State and federal level. As a point of reference, Bay Area Air Quality Management District (BAAQMD) screening guidance indicates that a project would have a less-than-significant impact with respect to carbon monoxide levels if project traffic projections indicate traffic levels would not increase at any affected intersection to more than 44,000 vehicles per hour. Because intersection volumes in the project area are far less, the project would have a less-than-significant impact with respect to carbon monoxide.

Objectionable Odors

The project would generate localized emissions of diesel exhaust during construction equipment operation and truck activity. These emissions may be noticeable from time to time by adjacent receptors. However, they would be localized and are not likely to adversely affect people off-site by resulting in confirmed odor complaints. The project would not include any sources of significant odors that would cause complaints from surrounding uses. The project's odor impacts would therefore be less than significant.

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Health risks from TACs are a function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. The proposed project would have a significant effect if it would allow the exposure of sensitive receptors to substantial levels of TAC.

The use of construction-related off-road heavy-duty diesel equipment would be temporary and limited. In addition, the CARB adopted emission standards whereby engine manufacturers are now required to meet stricter exhaust standards for NO_x and PM, making emissions from off-road engines substantially less. The closest sensitive receptors (residences) are located over 800 feet from proposed construction of the Community Facilities/Sports Area, the area with the greatest magnitude of proposed construction equipment. As a result, construction-related TACs emissions would not expose sensitive receptors to substantial emissions of TACs. It is also important to note that compliance with the construction dust mitigation requirements listed under Mitigation Measure AIR-1 below would also reduce PM exhaust emissions.

There would be no stationary sources of TACs as part of the project operation. Because construction-related sources are temporary in nature, and the majority of emissions would occur at a substantial distance from nearby receptors, the community health risk impact posed by temporary construction equipment would be a less-than-significant impact.

POTENTIALLY SIGNIFICANT IMPACTS

This section addresses the potentially significant air quality impacts of the project and recommends mitigation measures.

Construction Emissions

Impact AIR-1: During construction, the project could result in a cumulatively considerable net increase of criteria pollutants (i.e., PM₁₀) for which the project region is nonattainment under an applicable national or State ambient air quality standard. (PS)

Humboldt County is in attainment of all federal and State criteria air pollutant standards, except for State PM₁₀ levels, for which the entire North Coast Air Basin is currently designated as a non-attainment area.

During grading and construction activities, dust would be generated. Most of the dust would result during grading activities. The amount of dust generated would be highly variable and is dependent on the size of the area disturbed at any given time, amount of activity, soil conditions, and meteorological conditions. Unless controlled, fugitive dust emissions during construction of the proposed project would be a potentially significant impact. Implementation of Mitigation Measure AIR-1 would assure that best management practices are implemented to feasibly control fugitive dust emissions, and this impact would be considered less than significant with mitigation.

Construction activities also generate exhaust emissions from construction equipment and the hauling materials to and from construction sites, and from motor vehicles transporting construction

crews. Exhaust emissions from construction activities vary daily as construction activity levels change. However, fugitive dust from a project construction site is typically the main source of PM₁₀ emissions and, for the most part, the proposed project would not require substantial use of heavy-duty construction equipment.

Area 1 – Tooby Memorial Park

Construction in this area would involve minimal grading, and heavy equipment would be limited to less than one single dump truck and small tractor.

Area 2 – Park Headquarters

The new construction and conversion of structures is expected to involve minimal grading, and heavy equipment would be limited to less than one single dump truck and small tractor.

Area 3 – Main Agricultural Area

Construction activity in this area is anticipated to be limited and is not expected to require heavy equipment.

Area 4 – Community Commons

The proposed new trail in this area would be constructed from hand tools and the bridge would be constructed using a flat-bed trailer.

Area 5 – Community Facilities/Sports Area

There would be direct exposure of soils when the ball fields, parking area, service road, skate park, playground, and proposed buildings are constructed. Substantial grading may be needed to create a level play field and parking areas.

While the depth of grading would be less than 24 inches, there is a large area that would be graded; approximately 9 acres (14,333 cubic yards) of soil may be disturbed during construction of the ball fields, structures, and parking area. Grading would be graduated from 0 to a maximum of 24 inches.

Construction would require the use of several types of heavy equipment, including graders, backhoes, loaders, and dump trucks.

After grading occurs, the exposed soils are proposed to be covered with material that would prevent dust emissions. The parking areas are proposed to be covered with 3 inches of gravel, and the ball fields would be covered by turf.

Area 6 – Riverfront

Construction in this area would be limited to a single dump truck and small tractor.

Area 7 – Forestland

The proposed trails in this area would have unpaved surfaces and would be constructed with hand tools.

Installation of Water Tanks

All tanks would be installed without soil removal or disturbance. Installation would require one pickup truck for materials.

Water Pipe Installation

Installation of proposed pipeline and waterline is expected to take less than three days (with the installation of the waterline from Area 3 to the Sports Facilities – Area 5 occurring at the same time as installation of the ball fields). All soil removed during trenching would be replaced after installation, and equipment proposed for use includes two delivery trucks.

Mitigation Measure AIR-1: The project lies within the jurisdiction of North Coast Unified Air Quality Management District (NCUAQMD). All project construction and management shall comply with NCUAQMD ordinances for dust control. Project grading and construction shall use best available fugitive dust control measures during operations in order to reduce the amount of particulate matter that is present in the air as a result of man-made fugitive dust sources.

The following best management practices shall be implemented to reduce emissions and control dust during all project construction and grading activities that involve ground disturbance of 1,000 square feet or more:

- 1. Water all active construction areas at least twice daily;*
- 2. Maintain at least 2 feet of freeboard for haul trucks;*
- 3. Cover all trucks hauling soil, sand, and other loose materials;*
- 4. Plant vegetative ground cover in disturbed areas as soon as possible;*
- 5. Cover inactive soil storage piles; and*
- 6. Treat accesses to a distance of 100 feet from the paved or gravel road with a 6- to 12-inch layer of wood chips or mulch, or treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel. (LTS)*

Operational Emissions

Impact AIR-2: The project would result in the potential release of fugitive PM₁₀ emissions from temporary large and medium-sized events due to a temporary increase in the number of vehicles on dirt roads. (PS)

The proposed project would lead to increases in the number of vehicle trips and the distance of vehicle trips in the vicinity of the project site. Visitors attending events at the site, or playing or watching games at the new ball fields, would result in increased PM₁₀ emissions, for which the North Coast Air Basin is in non-attainment for State standards.

The California Emissions Estimator Model (CalEEMod) version 2013.2.2 was used to predict greenhouse gas (GHG) emissions from operation of the project assuming full buildout. The project land use type and size, trip generation rate and other project-specific information were input to the model. The use of this model for evaluating emissions from land use projects is recommended statewide. Unless otherwise noted below, the CalEEMod model defaults for Humboldt County were used. CalEEMod provides emissions for transportation, areas sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, and solid waste land filling and transport. CalEEMod output worksheets are included in **Appendix C**.

Land Use Descriptions

The proposed project land use was input into CalEEMod as 405.7 acres entered as “City Park.”

Trip Generation Rates

Trip generation rates were input to CalEEMod using the daily trip numbers provided in the project traffic report by W-Trans.

Model Year

The model uses mobile emission factors from the California Air Resources Board’s EMFAC2011 model. This model is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to fuel efficiency standards and low carbon fuels. The year 2016 was analyzed since it is the first full year that the project sites could conceivably be occupied, assuming construction were to occur in 2015.

Other Inputs

Default model assumptions for emissions associated with area sources, solid waste generation and water/wastewater use were applied to the project.

Computed Emissions

Table 4.3-4 shows computed project operational emissions. As shown in Table 4.3-4, PM₁₀ emissions from project operation would be 0.9 tons per year. For comparison, stationary sources in the air basin are restricted to 15.0 tons of PM₁₀ emissions per year (NCUAQMD 2014c). While there are no thresholds of significance established by the Air District for PM₁₀, predicted operational emissions are relatively low. Operation of the project would include events ranging from small (800 people) to large (up to 5,000). The air quality impact would be potentially significant unless mitigated. Implementation of Mitigation Measures AIR-2a and AIR-2b would reduce this impact to a less-than-significant level.

***Mitigation Measure AIR-2a:** On-site access roads used for movement of people and goods shall be watered at least twice daily for large and medium-sized events to reduce PM₁₀ emissions. Access roads shall be treated to a distance of 100 feet from the paved or gravel road with a 6- to 12-inch layer of wood chips or mulch, or accesses shall be treated to a distance of 100 feet from the paved road with a 6-inch layer of gravel.*

TABLE 4.3-4 PROJECT OPERATIONAL EMISSIONS (ANNUAL TONS PER YEAR)

	ROG	NO _x	PM ₁₀	PM _{2.5}
Total Emissions	90.6	2.7	0.9	0.3

Note: ROG = reactive organic gases, NO_x = nitrogen oxides, PM₁₀ = coarse particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, PM_{2.5} = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less

Source: Illingworth & Rodkin, Inc., 2014.

Mitigation Measure AIR-2b: For large and medium-sized events, the Traffic Control Plan (see Appendix E) shall be implemented. The Traffic Control Plan demonstrates how shuttle ridership and carpools would be strongly encouraged in an effort to reduce traffic on Sprowel Creek Road; how the use of shuttle buses from both Redway, Garberville, Benbow, and Richardson Grove campground would help reduce the impact of vehicles on park properties, and how all attendees and volunteers would be encouraged to use the shuttle (e.g., by charging parking fees while shuttles would be free).

The combination of the two measures would reduce this impact to a less-than-significant level. (LTS)

CUMULATIVE IMPACTS

Project emissions of criteria air pollutants or their precursors would not make a considerable contribution to cumulative air quality impacts. Air pollution, by nature, is mostly a cumulative impact. While the Air District has no significance thresholds applicable to construction and operational aspects of a development project, such as the proposed project, as discussed under Impact AIR-2, project operational PM₁₀ emissions would be well below those established for stationary sources. The proposed project's construction- and operational-period fugitive dust emissions would be adequately controlled through implementation of Mitigation Measures AIR-1, AIR-2a, and AIR-2b. Therefore, project construction and operation would not make a considerable contribution to cumulative air quality impacts.

A review of cumulative construction projects that are planned and approved in the project vicinity (see Chapter 6 of this Draft EIR) revealed the Garberville Sanitary District Water System Improvement Project, which is adjacent to the proposed project site and currently under construction. Because the Garberville Sanitary District project would implement Mitigation Measure III-01 to control PM₁₀ and fugitive dust emissions (Garberville Sanitary District, 2010), and because the nearest sensitive receptors to the project site are located over 800 feet from the proposed Community Facilities/Sports Area, as described above under "Less-than-Significant Impacts" above, the potential cumulative construction health risk impact would be considered less than significant.

REFERENCES

Bay Area Air Quality Management District (BAAQMD), 2011. *California Environmental Quality Act Air Quality Guidelines*.

Bay Area Air Quality Management District (BAAQMD), 2014. *Air Quality Standards and Attainment Status*. http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm, accessed August 12, 2014.

California Air Resources Board (CARB), 2005. *Air Quality and Land Use Handbook*.

California Air Resources Board (CARB), 2009. *The California Almanac of Emissions and Air Quality: 2009 Edition*.

Garberville Sanitary District, 2010. *Initial Study and Environmental Checklist for Garberville Sanitary District Water System Improvement Project*, April.

North Coast Unified Air Quality Management District (NCUAQMD), 1995. *Particulate Matter (PM₁₀) Attainment Plan*, May 11.

North Coast Unified Air Quality Management District, 2014a. Website <http://www.ncuaqmd.org/index.php?page=northcoast.airbasin>, accessed August 12.

North Coast Unified Air Quality Management District, 2014b. Personal communication with Casey Zaglin, Illingworth & Rodkin, Inc. and Brian Wilson, NCUAQMD, August 12.

North Coast Unified Air Quality Management District, 2014c. *Regulation 1: Rules 101 – Definitions*. Revised February 20.

United States Environmental Protection Agency (EPA), 2013. *Federal Register Vol. 78, No. 10, 40 CFR Parts 50, 51, 52 et al, National Ambient Air Quality Standards for Particulate Matter, Final Rule*, January 15.

4.4 BIOLOGICAL RESOURCES

INTRODUCTION

This section of the EIR addresses existing biological resources at the project site and provides an evaluation of the potentially significant impacts on sensitive resources. Biological resources were identified through the review and compilation of existing information and by conducting a field reconnaissance survey of the project site. The review provided information on general resources in the area, the extent of sensitive natural communities, jurisdictional wetlands, and the distribution and habitat requirements of special-status species that have been recorded from or are suspected to occur in the South Humboldt County area and Garberville vicinity. Documents prepared by the applicant's consulting biologist and arborist were also reviewed, and are available for the public to review at the Humboldt County Planning and Building Department. These provided detailed information on the extent of jurisdictional waters, results of systematic surveys for special-status plant species and habitat assessment for special-status animal species, and descriptions of existing vegetation and wildlife habitat on the project site. These consist of the following:

- *Southern Humboldt Community Park Feasibility Study (SHCPFS)* (Mad River Biologists, 2002) which provides descriptions of existing vegetation and wetland habitat types on the entire site, potential for occurrence of special-status plant and animal species, and conclusions and management recommendations.
- *Botanical Survey, Wetland Delineation, and Stream Assessment Results (BSWDSAR), Southern Humboldt Community Park* (Wear, 2011) provides descriptions of vegetation and site conditions on the 186-acre portion of the site proposed for zoning changes and possible future development, methods used in conducting systematic surveys for special-status plant species, wetlands and streams, and results and recommendations.
- *Special-Status Wildlife Survey Report (SSWSR)* (Lovelace & Associates, 2012) provides an update the potential for occurrence of special-status animal species on the site, including the results of field surveys performed in 2012.
- *Independent Review of Southern Humboldt Community Park Water Supply and Demand Analysis and Potential Impacts on Surface Water and Aquatic Habitat (WSDAPISWAH)* (Pacific Watershed Associates, 2015) provides a description of existing aquatic habitat conditions, an assessment of the potential impacts associated with projected water demand from the proposed project, and recommendations to minimize potential cumulative impacts on surface water and aquatic habitat of South Fork Eel River.

A field reconnaissance survey was conducted by Environmental Collaborative for this Draft EIR on August 10, 2014, to confirm existing conditions, review the accuracy of mapping prepared as part of the BSWDSAR and descriptions provided in the SHCPFS, the SSWSR, and the WSDAPISWAH by the applicant's consulting biologists and hydrologists, and assess potential impacts of the proposed project.

ENVIRONMENTAL SETTING

The discussion below addresses existing biological resources at the project site.

VEGETATION

Vegetation on the site was most recently described in the BSWDSAR, but descriptions are also provided in the SHCPFS. Non-native grasslands dominate the majority of the site, bordered by areas of seasonal freshwater marsh where wetlands are present, riparian forest and scrub along stream channels and the banks of the South Fork Eel River, and woodland and forest on the southern slopes. Stands of coyote brush (*Baccharis pilularis*) scrub and thickets of introduced Himalayan blackberry (*Rubus americanus*) are scattered in grasslands, riparian corridors and forest margins. **Figure 4.4-1** shows the extent of wetland features, mapped streams and riparian corridors, extent of grassland and forested cover discernable in the aerial base map, and the relationship of the site to the South Fork Eel River. Figure 4.4-1 also shows a 100-foot buffer around all streams, riparian corridors and wetland features on the site. The following provides a summary of the various plant community types found on the site.

Non-Native Grasslands

The grasslands occupying a majority of the site are dominated by non-native grasses such as orchard grass (*Dactylis glomerata*), soft chess (*Bromus hordeaceus*), sweet vernal grass (*Anthoxanthum odoratum*), Italian ryegrass (*Lolium multiflorum*), rat's tail fescue (*Vulpia myuros*), harding grass (*Phalaris aquatica*), wild oats (*Avena fatua*), and colonial bent grass (*Agrostis capillaris*). The majority of the low-lying grasslands have been disturbed by past and on-going agricultural practices, including farming and grazing, which has affected the composition of the grassland cover.

Seasonal Freshwater Marsh

Much of the low-lying grassland areas support seasonal freshwater marsh where saturated soil conditions through the winter and spring months support transitional wetland indicator species such as harding grass and pennyroyal (*Mentha pulegium*). Stands of native perennial wetland species are also present in some locations where disturbance has been limited or saturated conditions remain for longer periods, dominated by western rush (*Juncus patens*), slough sedge (*Carex obnupta*), diffuse rush (*Juncus effusus*), and California blackberry (*Rubus ursinus*).

Riparian Vegetation

Riparian habitat along the South Fork Eel River includes a canopy of black cottonwood (*Populus trichocarpa*), red alder (*Alnus rubra*), and willows (*Salix* spp.). Understory species include California wild grape (*Vitis californica*) and Himalayan blackberry (*Rubus discolor*). The riparian canopy along the tributary seasonal streams is often not well developed, but stands of willows and Oregon ash (*Fraxinus latifolia*) are present. Smaller stands of willows and Oregon ash also occur away from seasonal streams on the site.

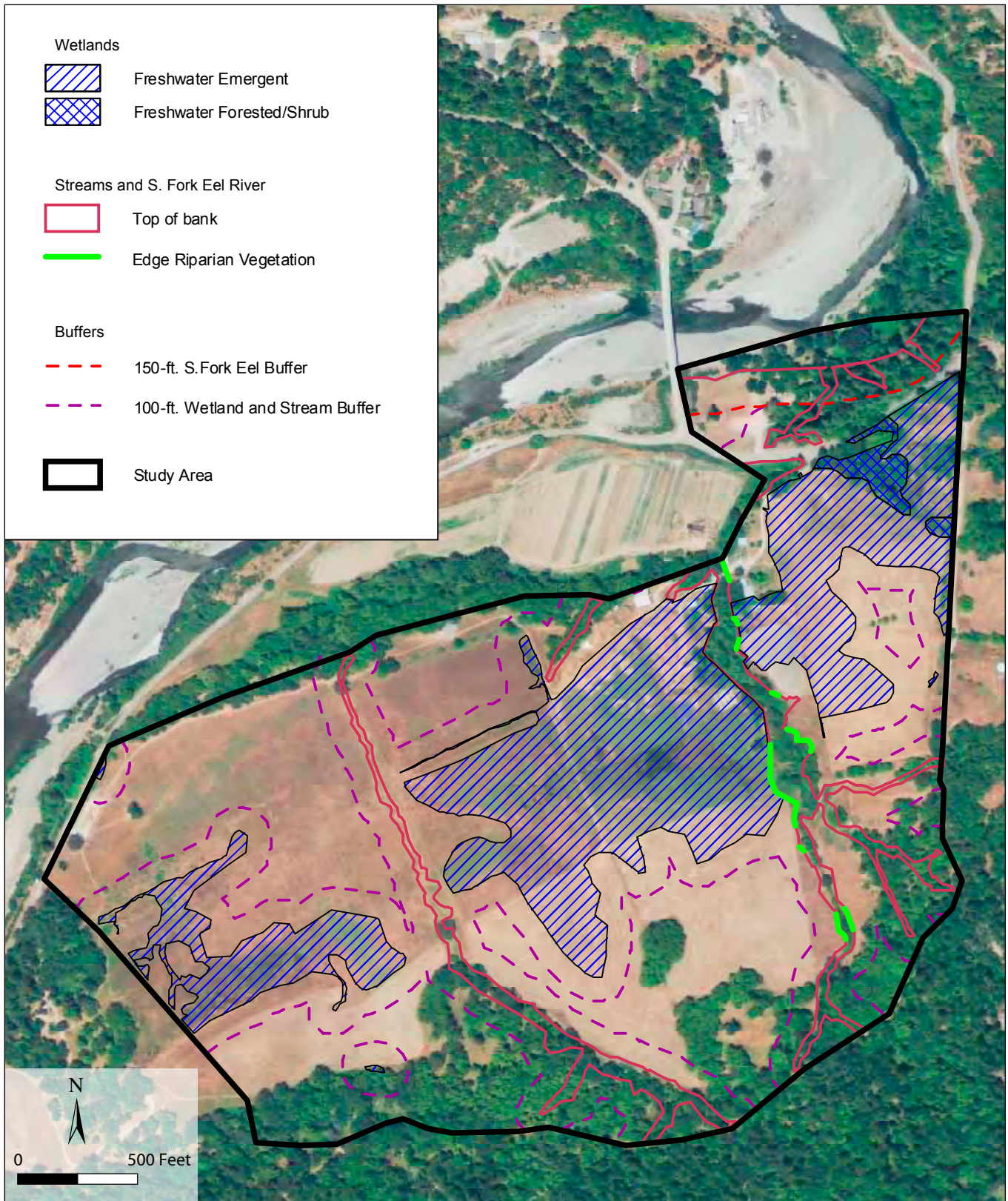


Figure 4.4-1

MAPPED WETLANDS/STREAMSIDE MANAGEMENT AREAS

SOURCE: Huber C&D, 2014

Redwood Forest

The forest at Tooby Park is dominated by redwoods (*Sequoia sempervirens*). Characteristic understory species include sword fern (*Polystichum munitum*), redwood sorrel (*Oxalis oregana*), and Hooker's fairy bells (*Disproum hookeri*). California bay, Oregon ash and other mature trees occur along the fringe of the redwood forest.

Mixed Douglas-Fir and Hardwood Forest

Mixed Douglas-fir (*Pseudotsuga menziesii*) and hardwood forest occurs on the southern slopes and in a band through the central portion of the site. Hardwoods occupy the lower to middle slopes where they transition into grasslands. These include black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), Oregon white oak (*Quercus garryana*), California bay (*Umbellularia californica*), California buckeye (*Aesculus californica*), and Pacific madrone (*Arbutus menziesii*). Douglas fir becomes the dominant tree species in the upper elevations, where a multi-layered canopy is present with frequent gaps, providing a greater degree of stand structural complexity. The forest understory varies, but tends to be fairly open with a low shrub cover made up primarily of hazelnut (*Corylus cornuta*) and poison oak (*Toxicodendron diversilobum*). Herbaceous cover in the understory consists of various woodland species such as wood strawberry (*Fragaria vesca*), sanicle (*Sanicula crassicaulis*), mountain sweet cicely (*Osmorhiza berteroi*), honeysuckle (*Lonicera hispidula*), trail plant (*Adenocaulon bicolor*), yerba buena (*Satureja douglasii*), sword fern (*Polystichum munitum*), and wood fern (*Dryopteris arguta*).

WILDLIFE HABITAT

The mosaic of wildlife habitat on the site supports a wide variety of resident and migrant wildlife species. Predominant wildlife habitat types on the site include grassland, riparian, forest and woodlands, redwood forest, and developed areas. Many species of wildlife utilize more than one vegetative cover type, foraging in grasslands and woodland openings, and finding protective cover in areas of dense shrubs, woodlands and forest. The following provides a summary of the various wildlife habitat types found on the site, and characteristic wildlife species.

Grassland and Seasonal Freshwater Marsh Habitat

Grasslands and seasonal freshwater marsh provide habitat for a wide variety of wildlife adapted to low-growing herbaceous communities that tend to be structurally heterogeneous. Characteristic species include: common garter snake, western terrestrial garter snake, northern harrier, barn owl, burrowing owl, western kingbird, Say's phoebe, barn swallow, western meadowlark, savannah sparrow, grasshopper sparrow, broad-footed mole, Botta's pocket gopher, western harvest mouse, black-tailed jackrabbit, and black-tailed deer. In addition, grasslands and marshlands often serve as foraging habitat for raptors and other predatory species such as red-tailed hawk, American kestrel, western bluebird, big brown bat, striped skunk, coyote, bobcat and mountain lion.

Riparian Habitat

Riparian habitats tend to have an exceptionally high value for both aquatic and terrestrial wildlife species. In general, riparian scrub/woodlands and aquatic habitats provide nesting opportunities, food, and shelter and may serve as corridors or islands during migration for a variety of fish and

wildlife species. Riparian vegetation provides foraging and nesting opportunities for migrant and resident birds. Birds often utilize the riparian scrub and forest for protective cover and nesting opportunities, and forage in nearby open grasslands. Typical mammals include western gray squirrel, dusky-footed woodrat, northern raccoon, black-tailed deer, and a variety of bat species. Terrestrial salamanders such as slender salamander and ensatina utilize adjacent woodlands, and aquatic salamanders such as rough-skinned newt and California giant salamander utilize channels seasonally.

The WSDAPISWAH provides a description of existing riparian habitat conditions on the site. With the exception of the South Fork Eel River, the streams on the site are seasonal in nature, which limits their suitability as permanent aquatic habitat and precludes occupation by resident and anadromous fish species. Dabbling ducks such as mallards and waterbirds such as belted kingfisher, herons, and egrets are frequently observed foraging along the permanent waters of the Eel River. River otters are closely tied to this aquatic system of the Eel River, foraging on fish and a variety of aquatic organisms, but most likely avoid dispersal along the on-site streams due to their seasonal nature and lack of foraging opportunities.

Forest and Woodlands

Forest and woodlands provide habitat for a variety of wildlife species. Trees provide cover, roosting sites, food storage sites, and nesting opportunities for native wildlife. Oaks and bays have long been considered important to birds and mammals as a food resource, especially when acorn and nut crops are plentiful. Commonly associated species include: California quail, warblers, woodpeckers, gray and eastern fox squirrels, deer mouse, and black-tailed deer, among many others.

Redwood Forest

Redwood habitats provide food, cover, or special habitat elements for numerous wildlife species for at least one or more seasons of the year. Characteristic species include: northern saw-whet owl, hairy woodpecker, flycatchers, Steller's jay, nuthatches, brown creeper, winter wren, chestnut-backed chickadee, dusky-footed woodrat, and deer mouse. Where intact stands existing, redwood forests provide habitat for a number of special-status species such as northern spotted owl and bats known to roost in tree cavities and under exfoliating bark, but the small size of the size and on-going human activity in the stand at Tooby Memorial Park limits the likelihood of presence of any special-status species in this location.

Agricultural and Developed Areas

The wildlife habitat value of developed areas is generally considerably less than that of the surrounding remaining natural habitats. Impervious surfaces, turf, and routine maintenance limit protective cover and foraging opportunities. Wildlife in these developed areas are typically more acclimated to human activity, and include species common in suburban habitats such as western scrub-jay, California towhee, mourning dove, house finch, house sparrow, American robin, mockingbird, Norway rat, house mouse, northern raccoon, and Virginia opossum. Mature trees do provide roosting and potential nesting substrate for numerous species of birds, particularly where they occur in close proximity to open space, riparian corridors and native woodlands, and other undeveloped lands.

SPECIAL-STATUS SPECIES

A number of special-status species (see “Regulatory Framework” below for definition) are known or suspected to occur in the Garberville vicinity, occupying the aquatic habitats of the South Fork Eel River, riparian habitats along perennial and intermittent streams and marshlands, serpentine and other native grasslands, and forest and woodland habitats where suitable conditions are present. The BSWDSAR and SHCPFS provide detailed information on special-status species known from the South Humboldt County area, and conclusions regarding the potential for occurrence on the site.

Special-Status Plant Species

A number of special-status plant species were considered to have varying potential for occurrence in the different habitat types on the site. These include: Humboldt milk-vetch (*Astragalus agnicidus*), dissected-leaved toothwort (*Cardamine pachystigma* var. *dissectifolia*), streamside daisy (*Erigeron bioletti*), coast fawn lily (*Erythronium revolutum*), Howell’s montia (*Montia howellii*), maple-leaved checkerbloom (*Sidalcea malachroides*), and beaked tracyina (*Tracyina rostrata*), among others. None of these have any legal protective status under the State and/or federal Endangered Species Acts, but most are considered rare and endangered by the California Native Plant Society and would be subject to review under Section 15380 of the CEQA Guidelines.

As described in the BSWDSAR, systematic surveys were conducted in 2011 of the portion of the site proposed for zoning changes and possible future development. The surveys were conducted according to the California Department of Fish and Wildlife (CDFW) *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*. No special-status plant species were encountered, and based on the results of the systematic surveys, none are suspected to occur in areas proposed for zoning changes and possible future development.

- **Long beard lichen (*Usnea longissima*)**. An uncommon lichen, long beard lichen was encountered along a seasonal stream on the site, but this species has no special-status. It is mostly restricted to coastal regions that receive substantial amounts of precipitation in the form of fog and rain. In California it is generally restricted to forests along the coast dominated by redwood, Douglas-fir (*Pseudotsuga menziesii*), and Sitka spruce (*Picea sitchensis*), but occasionally is found inland along riparian corridors and drainages that receive sufficient fog from large river systems.

Special-Status Animal Species

As described in the SHCPFS, a number of special-status animal species are known or suspected to possibly occur in the South Humboldt area. Detailed information on 40 special-status animal species was reviewed in the SHCPFS and SSWSR, consisting of three species of fish, four mammals, one reptile, four amphibians, and 28 species of birds. Eight of these species were observed on the site during the field surveys conducted as part of the SSWSR (see **Figure 4.4-2**). Information on the status, typical habitat characteristics and distribution of each of these species is summarized below, together with conclusions regarding their potential for occurrence on the site.

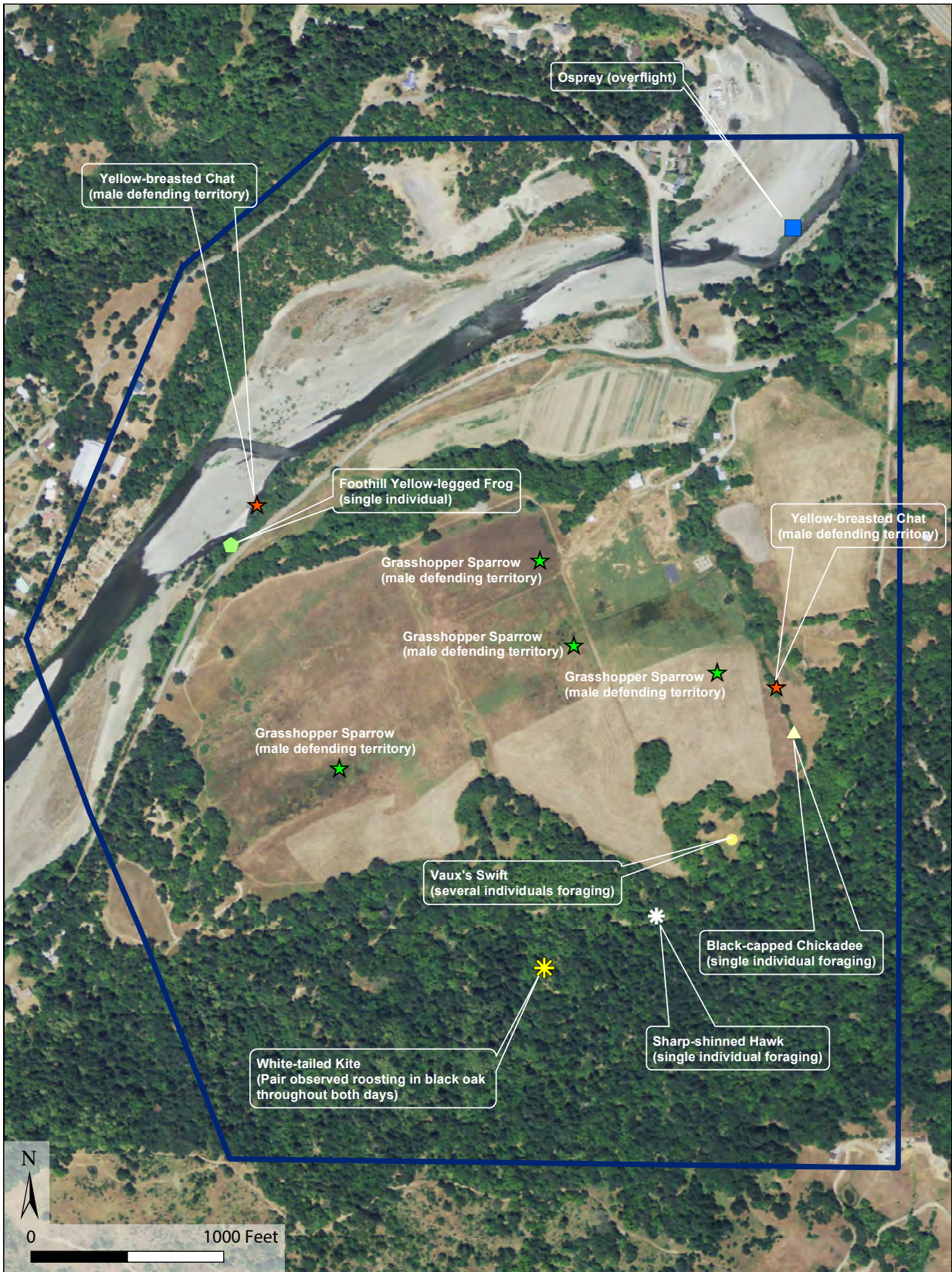


Figure 4.4-2

SOURCE: J. B. Lovelace & Associates, 2012

SPECIAL-STATUS ANIMAL SPECIES OBSERVATIONS

Fish Species

- **Coho salmon – Southern Oregon/Northern California Evolutionarily Significant Units (ESUs) (*Oncorhynchus kisutch*).** Coho salmon are found in the North Pacific Basin from California to Alaska and from Russia to Japan. While populations seem relatively healthy in Alaska and parts of British Columbia, selected populations in the continental U.S. have declined dramatically and a few of the ESUs have been designated Threatened or Endangered, including the Southern Oregon/Coastal California ESU that was designated Threatened by the U.S. Fish and Wildlife Service (USFWS) in 1997. The CDFW has also designated this ESU as Threatened and considers it a Species of Special Concern (SSC) in California. Coho salmon are known to occur along the South Fork Eel River. “Fall run” Coho enter the estuary as early as August with the peak occurring in November.
- **Steelhead – Northern California ESU (*Oncorhynchus mykiss*).** Steelhead are found in the North Pacific Ocean from the Kamchatka Peninsula in Asia to the northern Baja Peninsula. Many of the populations in California have been designated as Endangered or Threatened. The Northern California Province ESU was listed as Threatened by the federal government in August 2000 and is considered a SSC by the CDFW. Northern California steelhead is known to occur in the South Fork Eel River. The winter steelhead start moving into the river in November running through March, with peak activity during January.
- **Chinook salmon – California Coastal ESU (*Oncorhynchus tshawytscha*)** Chinook (or King) salmon were historically distributed along the coast of North America from the Ventura River in southern California to Point Hope, Alaska, and the Mackenzie River area in Canada. In the western Pacific they were found in Northeast Asia from Hokkaido, Japan, to the Anadyr River, Russia. While populations seem relatively healthy in Alaska and parts of British Columbia, selected populations in the continental U.S. have declined dramatically. The California Coastal ESU was listed as Threatened in November 1999. Chinook are known to occur in the South Fork Eel River. Chinook generally start entering the river in August, where they tend to hold in the waters below Fernbridge until rains allow them upstream. The Chinook run from August through December, with the peak in late October.

Amphibian and Reptile Species

- **Southern torrent salamander (*Rhyacotriton variegatus*).** The southern torrent salamander is found primarily along the coast from the Olympic Peninsula to Sonoma County, California. It is an inhabitant of cold, clear streams, springs and seeps in Douglas-fir and redwood forests, rarely straying away from the splash zone. The southern torrent salamander is recognized as a SSC by CDFW. Suitable habitat for the Torrent Salamander does not occur on the site due to the lack of perennial streams in forested habitat areas.
- **Tailed frog (*Ascaphus truei*).** Found in most of northwestern California, the tailed frog is typically common in suitable habitat. It is found in and near clear, cold streams in conifer or hardwood/conifer forests. The tailed frog is more often found in wet stands than in moderately wet stands and is absent from dry stands. Their distribution may be limited by the presence of cold, year-round flowing streams. The larvae, which are restricted to an aquatic existence, take 2 to 3 years to transform into adults. Tailed frog is recognized as a SSC by the CDFW. Suitable habitat for this species does not occur on the site due to the lack of perennial streams in forested habitat areas.

- **Northern red-legged frog (*Rana aurora*).** The northern red-legged frog is typically found in ponded areas along the Coast and Cascade Ranges from northern California to southern British Columbia. On the north coast of California it is widespread in ponds and along rivers where there is still water and emergent aquatic vegetation providing cover. When not breeding, individuals of this species disperse widely in damp woods, including riparian and coniferous forests. Breeding takes place in late winter and early spring. Red-legged frogs have a weak voice and are consequently inconspicuous. Egg masses are deposited in water up to six inches deep. Most young are completely transformed into adults by mid-summer or earlier. The diet of red-legged frogs consists primarily of insects captured near water. The northern red-legged frog is considered a SSC by the CDFW. There is a remote possibility that northern red-legged frog may be present on the site, but the absence of permanent ponds and streams precludes possible breeding locations.
- **Foothill yellow-legged frog (*Rana boylei*).** The Foothill yellow-legged frog is found in coastal and foothill habitats throughout northern California. Its preferred habitat is along perennial streams and rivers, especially where riffles are present. The yellow-legged frog escapes into the water and hides among vegetation or in the bottom when disturbed. It is less likely to use the riparian forests and other adjacent habitats than other frogs. Breeding takes place later in the spring, when high water flows have subsided. Eggs are laid in a masses attached to rocks in shallow, flowing water. Larvae transform into frogs during the summer. This species is considered a SSC by the CDFW. Yellow-legged frogs most likely occur along the South Fork Eel River in the site vicinity, but the absence of perennial flows in the seasonal creeks precludes their occurrence on the site. A single frog was observed along the South Fork Eel River during the field surveys conducted as part of the SSWSR (see Figure 4.4-2).
- **Northwestern pond turtle (*Emys marmorata*).** Western pond turtle is the only native aquatic turtle in California. It is widely distributed west of the Cascades and Sierra Nevada. Pond turtles are found near and in water, especially slow moving or quiet waters, primarily ponds, small lakes, reservoirs, and quiet streams and rivers. They can be found basking on rocks, logs or on the bank along aquatic vegetation. Basking perches seem to be an important component of their habitat needs. Females lay a clutch of eggs between April and August in a small hole in a dirt bank, sometimes a considerably distance from their aquatic habitat. Northwestern pond turtle is considered a SSC by the CDFW. Along the north coast of California, the species is sparsely distributed, mainly at ponds in the interior. Northwestern pond turtle most likely disperse along the South Fork Eel River in the site vicinity, but the absence of perennial flows in the seasonal creeks precludes their occurrence on the site.

Bird Species

- **Great egret (*Ardea alba*).** The great egret is a large, white heron that tends to return to communal roosting locations at night, and like many other herons will sometimes nest in mixed colonies, typically in undisturbed stands of tree. Great egret is considered a Sensitive Species by the California Department of Forestry (CDF), and communal roosts are considered sensitive habitat areas by the CDFW. This species is uncommonly found along the South Fork Eel River and may occasionally forage on the site, but no communal roosts have been reported from the vicinity.
- **Great blue heron (*Ardea herodias*).** Great blue herons are colonial nesters and sometimes nest in mixed colonies near wetland habitat. Nesting and roosting occur in undisturbed stands of trees or shrubs. They occur over much of North America and are the most widely distributed

heron in northwestern California. This species is a locally common resident and breeder. It is considered a Sensitive Species by the CDF, and communal roosts are considered sensitive habitat areas by the CDFW. This species is uncommonly found along the South Fork Eel River near the project site and in adjacent wetland habitats, but no communal roosts or nests have been reported from the vicinity.

- **Snowy egret (*Egretta thula*).** Snowy egret is a medium-sized wading bird with striking plumage. Suffering massive over-hunting in North America around the turn of the twentieth century, this species has made a dramatic comeback. Snowy egret is a gregarious bird and colonial nester. Although in some instances some populations may be recovering (due to enforced protection of nesting sites), their current or historic declining trend, combined with their vulnerability during the breeding season warrant on-going protection of nesting sites or “rookeries.” These “rookeries” are typically found in the tops of tall trees or those with few branches in the lower canopy to avoid predation by mammalian predators. Rookeries are considered sensitive habitat features by CDFW. This species is occasionally observed inland along the Eel River and in adjacent wetland habitats, but no roosts are known from the site vicinity.
- **Cooper’s hawk (*Accipiter cooperi*).** Cooper’s hawk is found throughout North America in a wide variety of forested and scrub habitats where it preys primarily on songbirds. Populations in North America have declined due to pesticide residues, habitat destruction, and the general decline of its major prey, songbirds. Locally, Cooper’s hawk is an uncommon winter resident and rare summer breeder. Cooper’s hawk is maintained on a Watch List by the CDFW. No records of raptor nests have been reported from the site vicinity, but suitable foraging and nesting habitat is present on the site.
- **Northern goshawk (*Accipiter gentilis*)** Northern goshawk is a rare resident and breeder in middle and higher elevation mature coniferous forests in northern California. It hunts in wooded areas, using snags and dead-top trees for observation and plucking perches. The status of northern goshawks in the coastal mountains of Southern Humboldt County is poorly known, but records at lower elevations along the Eel River are exceedingly scarce. Northern goshawk is considered a SSC by the CDFW. The few records of goshawks nesting in the coast range have been associated with meadow edges, and this species is not likely to be found breeding in the site vicinity.
- **Sharp-shinned hawk (*Accipiter striatus*).** Sharp-shinned hawk is found throughout North America. It is found in a wide variety of forested and scrub habitats where it preys primarily on small birds. Populations in North America have declined due to pesticide residues, habitat destruction, and the general decline of the hawks’ major prey, songbirds. Sharp-shinned Hawk is maintained on a Watch List by the CDFW. Locally, sharp-shinned hawk is an uncommon winter resident and rare summer breeder. No records of raptor nests have been reported from the site vicinity, but suitable foraging and nesting habitat is present on the site. A sharp-shinned hawk was observed in the forested slopes in the southern portion of the site during the field surveys conducted as part of the SSWSR (see Figure 4.4-2).
- **Golden eagle (*Aquila chrysaetos*).** Golden eagle is a widespread bird of North America that is uncommon in the site vicinity. Golden eagle is considered a Sensitive Species by CDF, a California Fully Protected Species by the CDFW, and nests in active use, birds, feathers and eggs are protected under the Bald Eagle Protection Act. Typically nesting habitat is generally absent from the site, and there have been no records of eagle or other raptor nests from the site vicinity.

- **White-tailed kite (*Elanus leucurus*).** White-tailed kite is a white, falcon shaped raptor with black shoulder patches, for which it was formerly named. Kites forage mostly on rodents that they catch by hovering over a field and dropping down on an unsuspecting animal. They nest and roost in trees or shrubs in semi-open areas. Kite populations exhibit swings in abundance. They are now uncommon to common throughout northern California, especially where open fields provide habitat for voles, their main prey. White-tailed kite is recognized as a California Fully Protected Species by the CDFW, which means it may not be taken at any time. No records of raptor nests have been reported from the site vicinity, but suitable foraging and nesting habitat is present on the site. A pair of white-tailed kites were observed foraging in open grasslands and roosting in an oak in the forested slopes in the southern portion of the site during the field surveys conducted as part of the SSWSR (see Figure 4.4-2).
- **Northern harrier (*Circus cyaneus*).** Northern harrier is easily identified by its low, floppy, close-to-the-ground flight. It cruises low across fields, meadows and marshes often hunting by sound. They typically nest on the ground in shrubs, cattails or tall vegetation. This species has declined almost everywhere in North America. Losses have been attributed to urbanization and pesticide exposure. In northwestern California this species is a common migrant and winter visitor, but uncommon as a breeder and summer resident, with the only confirmed breeding record reported from around Humboldt Bay. This species is recognized as a SSC by CDFW. Northern harriers may occasionally forage over the open grassland and marshlands on the site, especially during winter months, but are not expected to nest in the site vicinity.
- **Bald eagle (*Haliaeetus leucocephalus*).** Bald eagles are found throughout North America and occur widely in California. Concentrations of bald eagles are found where their preferred food is concentrated, such as major waterfowl wintering areas and along major salmon streams and rivers with adjacent snags for perching. Large stick nests are established high in a tree, living or dead, with good access. Eggs can be laid as early as January; incubation is typically from 30 to 45 days; and the young take their first flight about 2 months after hatching. Their food consists largely of fish, either caught themselves or stolen from ospreys. Bald eagles also feed upon a wide variety of small mammals, aquatic birds, and even carrion. This species has been delisted on the federal level, but is listed as Endangered by CDFW and is protected under the federal Bald Eagle Protection Act. The closest known nest sites for bald eagle are along the South Fork Eel River near Benbow, along the Mad River near Blue Lake, near the coastal lagoons near Orick, and along the South Fork of the Trinity River. Bald Eagles are known to forage along the South Fork Eel River in winter, and given their apparent increase in numbers, could potentially nest in the site vicinity in the future.
- **Osprey (*Pandion haliaetus*).** Osprey is a well-known fish-eating bird found throughout the world. Locally, it is a common nesting bird along all the major rivers, bays and lakes in northern California. Once considered in danger of extinction in North America, it has made an impressive comeback since the decline in use of DDT. Osprey is maintained on a Watch List by CDFW. No records of raptor nests have been reported from the site vicinity, but suitable foraging and nesting habitat is present for this species along the South Fork Eel River. An osprey was observed flying over the South Fork Eel River in the northern portion of the site during the field surveys conducted as part of the SSWSR (see Figure 4.4-2).
- **Merlin (*Falco columbianus*).** Merlin is found throughout North America in a wide variety of open habitats where it preys primarily on shorebirds and songbirds. Populations in North America have declined due to pesticide residues and habitat destruction. Merlin is maintained

on a Watch List by CDFW. They are occasionally seen in winter in Humboldt County and may use the project site for winter foraging, but are not expected to nest in the site vicinity.

- **American peregrine falcon (*Falco peregrinus anatum*).** Peregrine falcon is found throughout North America. It is often associated with aquatic habitats where it preys primarily on water birds, both shorebirds and ducks. Populations in North America had declined due to pesticide residues, nest disturbances, and habitat destruction. Recovery of the species led to its delisting on the federal and State endangered species lists. It remains a California Fully Protected Species by the CDFW, which means it may not be taken at any time. Suitable nesting habitat for this species is absent on the site, but it may occasionally forage in the site vicinity.
- **Western snowy plover (*Charadrius alexandrinus nivosus*).** Western snowy plover is a small shorebird that nests along sandy marine and estuarine, and alkali lake shores. In California, their nesting and roosting habitats are distributed along the length of the coast and at scattered inland localities—including selected gravel bars of the lower Eel River. The western snowy plover is listed as Threatened by the USFWS and is considered a SSC by the CDFW. Suitable nesting habitat for this species is not believed to occur in the site vicinity, although individuals may occasionally forage along the South Fork Eel River.
- **Marbled murrelet (*Brachyramphus marmoratus*).** Marbled murrelet is an uncommon and reportedly declining marine bird that depends on old growth forests for nesting sites. In North America, it is distributed between Alaska and central California. This species is federally listed as Threatened and State-listed as Endangered. Nest locations have been detected up to 52 miles inland in Washington. Marbled murrelet is typically associated with late successional/old-growth forests throughout most of their range, and must be available within flight distance of the ocean. There is no suitable nesting habitat for this species on the site.
- **Northern spotted owl (*Strix occidentalis caurina*).** Northern spotted owl is a medium-sized forest owl that occurs along the Pacific Coast from southwestern British Columbia to central California. It is strongly associated with late successional/old-growth forests. In northern California spotted owl also occurs in some types of relatively young forests, especially where those forests are structurally similar to late successional /old-growth forests. Northern Spotted Owl is federally-listed as a Threatened species and is recognized as a SSC by CDFW. The forested habitats on the site are marginally suitable for spotted owl roosting and foraging, although no nests have been reported from the site vicinity. Six northern spotted owl activity centers have been reported from within five miles of the site (HUM0282, HUM0477, HUM0756, HUM0757, HUM0927, and HUM 0991), with the closest (HUM0991) located approximately two miles to the west-south-west of the site.
- **Vaux's swift (*Chaetura vauxi*).** Vaux's swift is a small, insect-eating, summer resident bird of the coastal forests of northwestern California. It feeds high in the air, often above the canopy of the forests and over meadows, water, and many other habitats. It roosts and nests in hollow trees and snags, especially those that have been burned. Vaux's swift is recognized as a SSC by CDFW. Areas of forest habitat on the site and surrounding area provide suitable nesting habitat for this species. Although no nesting colonies were observed, Vaux's swifts were seen foraging in the southern portion of the site during the field surveys conducted as part of the SSWSR (see Figure 4.4-2).
- **Olive-sided flycatcher (*Contopus cooperi*).** Olive-sided flycatcher tends to breed in ecotonal transitions between forested and more open landscapes. Tall perches (emergent trees or

snags) with unobstructed views are often used by this species, from which they forage for insect-prey or defend breeding territory. This species has one of the longest migrations of all Nearctic migrants: breeding in western North America and wintering from southern Central America to the northern South American Andes Mountains. Their populations have declined significantly in recent years, and it is recognized as a SSC by CDFW. No olive-sided flycatchers have been reported from the site, but suitable habitat is present.

- **Willow flycatcher (*Empidonax trailii*).** Willow flycatcher was listed as Endangered by the State in 1990. Due to its rarity in northwestern California and the lack of breeding records, little attention has been paid to characteristics of nesting habitat in our region. The first record of possible nesting willow flycatchers historically was of egg sets taken along the Eel River near Miranda and Burlington in the southern part of Humboldt County. These egg sets were apparently taken in “typical” willow flycatcher habitat, described as large thickets of willows where all habitat requirements could be met. Although nesting in the site vicinity is unlikely for this species, it could occur along the South Fork Eel River during migration.
- **California horned lark (*Eremophila alpestris actia*).** Horned lark is a small ground-loving gregarious bird of open country. Horned Larks nest on the ground in shallow depressions lined with grass, plant fibers and roots. This species is maintained on a Watch List by the CDFW. The breeding range of this species extends along the California coast north to Humboldt Bay. Locally, the only known breeding records are along Bear River Ridge, in short-grass meadows, south of Humboldt Bay. This species is not expected to occur on the site due to lack of suitable habitat.
- **Purple martin (*Progne subis*).** Purple martin is a large swallow, uncommon to rare and locally distributed in northern California. It feeds and nests in a wide variety of habitats, including Douglas-fir forests. It nests in cavities (usually old woodpecker holes) in tall trees, often near water. Purple martin is recognized as a SSC by CDFW. No colonial nests of this species have been reported from the site vicinity, but individuals would be expected to forage in the area and could establish nests in forest habitat with suitable snags and large trees.
- **Bank swallow (*Riparia riparia*).** Bank Swallow is a scarce and local summer visitor to California. Although it is more widespread during migration, nesting localities are restricted to a few places, especially along riparian habitats. Bank swallows excavate their own nesting holes in dirt or sand banks. Nests are typically, but not always, in a colony and near water. Nesting requirements include vertical banks with soft-textured soil suitable for burrow excavation. Bank Swallow is listed as Threatened in California. Only two colonies of bank swallows are known in northwestern California – both in Del Norte County. Bank swallows could infrequently forage over the open fields in the site vicinity, especially during migration, but no suitable nesting locations are present on the site.
- **Black-capped chickadee (*Parus atricapillus*).** Black-capped chickadee is possibly the most abundant and best-known chickadee in North America. In California, it is found almost exclusively in willow/cottonwood habitats along the immediate north coast south to the vicinity of Ferndale, as well as locally inland along the larger streams and rivers. Black-capped chickadee is maintained on a Watch List by CDFW. Humboldt County is considered to represent the southern limit of the range of this species in California. An individual was observed foraging in the riparian-forested habitat on the site during the field surveys conducted as part of the SSWSR (see Figure 4.4-2).

- **California yellow warbler (*Dendroica petechia*).** Found throughout North America, yellow warbler has been declining as a breeding bird in California due to habitat destruction and brood parasitization by the brown-headed cowbird. It nests in deciduous riparian forests of almost any size. Yellow warbler is recognized as a SSC by CDFW. They are an uncommon breeding bird of coastal riparian habitats. This species may occasionally breed in the alder and willow thickets in riparian habitat on the site.
- **Yellow-breasted chat (*Icteria virens*).** Found throughout North America, yellow-breasted chat has been declining as a breeding bird in California due to habitat destruction. It nests in deciduous riparian forests of moderate or larger size. Yellow-breasted chat is recognized as a SSC by CDFW. This species could be expected to nest in dense thickets of blackberry and willow on the site. Singing male yellow-breasted chats were observed at two locations on the site during the field surveys conducted as part of the SSWSR (see Figure 4.4-2), located along a small riparian stream within the grassland habitat and along the riparian forested gravel bar along the South Fork Eel River. Given that these males appeared to be defending territories, it can be reasonably assumed that nesting was occurring in the vicinity of these locations in 2012.
- **Tricolored blackbird (*Agelaius tricolor*).** Tricolored blackbird is very closely related to the well-known red-winged blackbird but has a much more restricted range. With the exception of small scattered populations in southern Oregon, Washington and Baja California, its distribution is limited to California. Their decline is largely attributed to the draining of productive marsh lands for agriculture. A disjunct breeding population of less than 100 adults was discovered near Fortuna in blackberry brambles in 1992, but has not been documented since 1999. Occasionally, individuals are detected in mixed blackbird flocks. This species is recognized as a SSC by CDFW. Tricolored blackbirds are not expected to utilize the site for nesting due to the lack of developed freshwater marsh habitat with open water, their typical breeding habitat.
- **Grasshopper sparrow (*Ammodramus savannarum*).** Grasshopper sparrow is recognized as a SSC species by the CDFW. It inhabits grasslands with both barren, exposed areas allowing for ease while foraging, and more densely vegetated areas, where it makes its nest of woven grasses. It is an uncommon, but locally numerous, summer resident and breeder. Throughout its range, however, populations are in decline, primarily as a result of development and conversion of native grassland habitats such as prairies, and low-moderately-stocked agricultural pasturelands into intensive agricultural operations. Singing male grasshopper sparrows were observed in at least four locations on the site during field surveys conducted as part of the SSWSR (see Figure 4.4-2). These occurrences were somewhat widely dispersed throughout the open grassland habitats on the site, and given that these males appeared to be defending territories, it was assumed that nesting was occurring in the vicinity of these locations in 2012. Mowing and agricultural production may affect the suitability of the site for grassland nesting species, such as the grasshopper sparrow.
- **Migratory breeding birds.** In addition to the above described birds, a variety of other bird species occur throughout the various habitats on the site. Numerous bird boxes attached to trees and fence posts hosted some of these resident and migratory bird species, and it is assumed that many native bird species nest on the site. While most of these are relatively common and not considered to be of special-status, nests in active use are protected under the federal Migratory Bird Treaty Act (MBTA) and CDFW code. The breeding and nesting season varies depending on species and annual fluctuations in temperature, rainfall and other

factors, but the typical breeding and nesting season for most bird species extends from about February 15 to August 31.

Mammal Species

- **Pallid bat (*Antozous pallidus*).** Throughout California, the pallid bat is usually found in low to middle elevation habitats below 6,000 feet. It is known from a variety of habitats, including grasslands, shrublands, woodlands, and coniferous forests. They are a year-long resident in most of their range and hibernate in winter near their summer roost. Pallid bats are unusual in that most of their food consists of large insects captured on the ground. Day roosts may vary but are commonly found in rock crevices and tree hollows; and have been documented in large conifer snags, inside basal hollows of redwoods and giant sequoias, and cavities in oaks. This species, like many other bats, is extremely sensitive to disturbance at daytime and maternity roosting locations. Pallid bat is recognized as a SSC by CDFW. Suitable foraging and possible roosting habitat for the pallid bat occurs on the project site, although no occurrences have been reported from the site vicinity.
- **Townsend's big-eared bat (*Plecotus townsendii townsendii*).** Townsend's big-eared bat is widespread in California, and tends to be most abundant in mesic habitats. They roost in caves, mines, tunnels, and buildings, feeding along habitat edges. They are extremely sensitive to disturbance of roosting sites. This species is recognized as a SSC by CDFW. Suitable foraging and possible roosting habitat for the big-eared bat occurs on the project site, although no occurrences have been reported from the site vicinity.
- **Pacific fisher (*Martes pennanti pacifica*).** The Pacific fisher is a candidate for Federal listing and is recognized as a SSC species by CDFW. Once more numerous throughout boreal forests, populations of this species are in decline due to habitat loss as a result of timber harvesting, development, and wildfire. Pacific fisher is found from southern Canada, south to Wyoming in the Rocky Mountains, and into the southern Klamath Mountains and North Coast Ranges, and even further south into the Sierra Nevada Mountains. This species requires intact forests, typically late-seral and mature coniferous forests, with home ranges as large as 75 miles (diameter). Individuals can travel widely, revisiting some locations only once every 2 to 3 weeks. Dens are made in hollow trees and logs, brush piles, and cavities beneath boulders or rock ledges. Although no Pacific fisher have been reported from the site, occurrences have been reported elsewhere from southern Humboldt County, and there is a possibility that this species could frequent or establish a den in the more mature coniferous forested portions of the site.
- **California red tree vole (*Arborimus pomo*).** The red tree vole is a little-known rodent of the coastal fog belt in California with a range extending north from Sonoma County. It occurs in old growth and other Douglas-fir and redwood forests. Its diet is almost exclusively needles of Douglas-fir and grand fir. Nests are built of Douglas-fir needles in trees, sometimes at considerable heights. The red tree vole is a Species of Special Concern in California. This species could possibly occur in areas of established, older Douglas-fir forest habitat.

SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities are natural community types considered by the CDFW to have a high inventory priority because of their rarity and vulnerability to disturbance and loss. The most current version of the CDFW *List of California Terrestrial Natural Communities*, which was last

updated in 2010, indicates which natural communities have a high inventory priority and are therefore considered sensitive.¹

With the exception of the old growth stand of redwoods in Tooby Memorial Park, which has a CDFW vegetation alliance ranking of G3S3 and is therefore considered sensitive, no distinct stands of sensitive natural community types are present on the site. Areas of seasonal freshwater marsh and well-developed stands of riparian woodland are considered to have a high inventory priority by the California Natural Diversity Data Base of the CDFW. These wetland areas are also considered jurisdictional waters by regulatory agencies, as discussed below. Indicators of several vegetation alliances with State ranking of 3 are present on the site, including Black Cottonwood Forest Alliance along the South Fork Eel River and Slough Sedge Herbaceous Alliance scattered in the seasonal freshwater marshlands. However, these do not form distinct stands that could be mapped as separate vegetation alliances.

JURISDICTIONAL WATERS

Based on the BSWDSAR, a total of 48.6 acres of potential jurisdictional wetlands were identified on the portions of the site proposed for zoning changes and possible future development (see Figure 4.4-1). This consists of 47.1 acres of seasonal freshwater wetlands mapped as “Freshwater Emergent Wetlands” and 1.5 acres of perennial riparian wetlands mapped as “Forested/Shrub” wetlands. These potential jurisdictional wetlands are predominately 3-parameter wetlands, meaning that they contain all three criteria (hydrology, vegetation, and soils) to qualify as a wetland by the U.S. Army Corps of Engineers (Corps). Some of the data points were in areas that did not meet the hydrophytic vegetation criteria, but had indicators of hydric soil and wetland hydrology. These areas meet the CDFW wetland definition and were included in the wetland boundaries, providing a conservative estimate of the limits of State and federal jurisdictional waters on the site. An additional 13.4 acres are regulated as waters along seasonal creeks and the South Fork Eel River, extending to the top of bank or edge of riparian vegetation, whichever is greater. The Corps, CDFW and Regional Water Quality Control Board (RWQCB) regulate fills or modifications to jurisdictional waters, as discussed below under the “Regulatory Framework” section.

REGULATORY FRAMEWORK

Local, State, and federal regulations have been enacted to provide for the protection and management of sensitive biological and wetland resources. This section outlines the key local, state, and federal regulations that apply to these resources.

FEDERAL AND STATE REGULATIONS

The USFWS is responsible for protection of terrestrial and freshwater organisms through implementation of the federal Endangered Species Act (ESA) and the MBTA. The National Marine

¹ CDFW ranks natural communities (also referred to by CDFW as alliances) based on rarity rank, using a system derived from NatureServe, an established network of biological inventories. In this ranking system, an alliance is given both a global (“G”) and a state-level (“S”) rank of 1 to 5; 1: critically imperiled; 2: imperiled; 3: vulnerable; 4: apparently secure; 5: secure. CDFW considers alliances ranked 1, 2, or 3 at the State level to be sensitive. Those alliances ranked 4 and 5 at the State level are considered common enough to not be of concern.

Fisheries Service (NOAA Fisheries) is responsible for protection of anadromous fish and marine wildlife. The Corps has primary responsibility for protecting wetlands under Section 404 of the Clean Water Act (CWA). The Corps also regulates navigable waters under Section 10 (33 U.S.C. 403) of the Rivers and Harbors Act.

The CDFW is responsible for administration of the California Endangered Species Act (CESA), and for protection of streams and water bodies through the Streambed Alteration Agreement process under Section 1600 of the California Fish and Wildlife Code.

Certification from the RWQCB is also required when a proposed activity may result in discharge into navigable waters, pursuant to Section 401 of the CWA and U.S. Environmental Protection Agency (U.S. EPA) Section 404(b)(1) Guidelines. The RWQCB also has jurisdiction over waters of the state not regulated by the Corps under the Porter-Cologne Act.

The following discusses in more detail how state and federal regulations address special-status species and wetlands.

SPECIAL-STATUS SPECIES

Special-status species are plants and animals that are legally protected under the state and/or federal ESAs, the MBTA, the California Fish and Wildlife Code (Sections 3503, 3503.5, 3511, 3513, 3515, and 4700), or other regulations. In addition, pursuant to CEQA Guidelines Section 15380, special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Species with legal protection under the federal and state ESAs often represent major constraints to development, particularly when the species are wide ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

WETLANDS AND OTHER WATERS OF THE UNITED STATES

Although definitions vary to some degree, wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration and purification functions. The CDFW, Corps, and RWQCB have jurisdiction over modifications to river banks, lakes, stream channels and other wetland features. Technical standards for delineating wetlands have been developed by the Corps and the USFWS, which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation.

The CWA was enacted to address water pollution, establishing regulations and permit requirements regarding construction activities that affect storm water, dredge, and fill material operations, and water quality standards. The regulatory program requires that discharges to surface waters be controlled under the National Pollutant Discharge Elimination System (NPDES)

permit program, which applies to sources of water runoff, private developments, and public facilities.

Under Section 404 of the CWA, the Corps is responsible for regulating the discharge of fill material into waters of the United States. The term “waters” includes wetlands and non-wetland bodies of water that meet specific criteria as defined in the Code of Federal Regulations. All three of the identified technical criteria must be met for an area to be identified as a wetland under Corps jurisdiction, unless the area has been modified by human activity. In general, a permit must be obtained before fill can be placed in wetlands or other waters of the United States. The type of permit is determined by the Corps depending on the amount of acreage and the purpose of the proposed fill.

Jurisdictional authority of the CDFW over wetland areas is established under Section 1600 of the Fish and Wildlife Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Wildlife Code stipulates that it is unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake without notifying the CDFW, incorporating necessary mitigation, and obtaining a Streambed Alteration Agreement. The Wetlands Resources Policy of the CDFW states that the Fish and Wildlife Commission will strongly discourage development in or conversion of wetlands, unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage. The CDFW is also responsible for commenting on projects requiring Corps permits under the Fish and Wildlife Coordination Act of 1958.

In addition, the RWQCB is responsible for upholding state water quality standards. Pursuant to Section 401 of the CWA, projects that apply for a Corps permit for discharge of dredge or fill material, and projects that qualify for a Nationwide Permit, must obtain water quality certification from the RWQCB. The RWQCB is also responsible for regulating wetlands under the Porter-Cologne Act, which may include hydrologically isolated wetlands no longer regulated by the Corps under Section 404 of the CWA. Recent federal Supreme Court rulings have limited the limits of Corps jurisdiction, but the RWQCB in some cases continues to exercise jurisdiction over these features.

LOCAL REGULATIONS

Humboldt County Code

The Humboldt County Streamside Management Area (SMA) Ordinance (Title 3, Chapter 6, Section 314.16.1 of the County Code) sets minimum development and setback standards adjacent to blue line streams in unincorporated areas of County. The purpose of the Ordinance is to protect sensitive fish and wildlife habitats, and to minimize erosion, runoff, and other conditions detrimental to water quality. In Urban Development and Expansion Areas (UDEA), the outer boundaries for stream setbacks extend 100 feet from the stream transition line on either side of perennial streams and 50 feet for intermittent streams. For areas inside the UDEA, the setback distance is 50 feet on each side of perennial streams and 25 feet for intermittent streams. These widths may be modified (increased or decreased as appropriate) based on the results of a site-specific biological survey, mapping and habitat analysis prepared for specific projects.

Humboldt County General Plan

The Biological Resources section of the Humboldt County General Plan includes policies and standards related to biological and wetland resources. Most of the provisions in this section pertain to the protection and management of sensitive resources. These include the following policies and standards, numbered here as they are in the General Plan.

Section 3431 Policies

1. *Maintain values of significantly important habitat areas by assuring compatible adjacent land uses, where feasible.*
2. *Habitats for "critical species" shall be protected under provisions of NEPA and CEQA.*
3. *Development within stream channels shall be permitted when there is no less environmentally damaging feasible alternative, where the best feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to essential, nondisruptive projects as listed in Standard 6.*
4. *To protect sensitive fish and wildlife habitats and to minimize erosion, runoff and interference with surface water flows, the County shall maintain Streamside Management Areas (SMA), along its blue line streams as identified on the largest scale USGS topographic maps most recently published, and any significant drainage courses identified through the CEQA process.*
5. *Development within the Streamside Management Areas shall be permitted where mitigation measures (Standard 8) have been provided to minimize any adverse environmental effects, and shall be limited to uses as described in Standard 7.*

Project Review

7. *The County should request the Department of Fish and Game, as well as other appropriate agencies and organizations to review plans for development within sensitive habitat areas or Streamside Management Areas. Recommended mitigation measures shall be considered prior to project approval.*

Section 3432 Standards

Applicability

1. *Proposed development occurring within areas containing sensitive habitats shall be subject to conditions and requirements of this policy except for the exclusions as follows.*
 - A. *Timber management and harvest activities regulated by the Forest Practices Act.*
 - B. *Any area proposed for development which upon examination of the Biological Resource Maps and field inspection is not actually within or does not contain the indicated habitat, then the development is exempt from the requirements of this section.*
 - C. *Forest management activities needed to improve timber productivity regulated by other agencies.*
 - D. *Agricultural operations needed to improve agricultural productivity.*

2. *Recommendations from the Department of Fish and Game, agencies, and organizations shall be specific and cite relevant code sections and standards.*
3. *Critical habitats are sensitive habitats essential for a Federal or State designated endangered, threatened or rare species. This includes the portion of a critical species range which is essential to the existence of that species.*
4. *Sensitive habitats are defined as a unique, limited or economically important habitat type for a species whose habitat requirements, if significantly changed, would cause a threatening change to the species population and may include the following:*
 - A. *Critical Habitat*
 - B. *Migratory Deer Winter Range*
 - C. *Roosevelt Elk Range*
 - D. *Sensitive Species Rookery and Nest Sites*
 - E. *Streams and Streamside Areas*
 - F. *Natural ponds, springs, vernal pools, marshes, and wet meadows exhibiting standing water year-long or riparian vegetation.*
 - G. *Other sensitive habitat and communities listed in the Department of Fish and Game California Natural Diversity Data Base, if and when adopted.*
5. *Streamside Management Areas are identified and modified as follows:*
 - A. *In areas outside of Urban Development and Expansion Areas, the outer boundaries shall be defined as:*
 1. *100 feet, measured as the horizontal distance from the stream transition line on either side of perennial streams.*
 2. *50 feet, measured as the horizontal distance from the stream transition line on either side of intermittent streams.*
 - B. *In areas inside of Urban Development and Expansion Areas, the outer boundaries shall be defined as:*
 1. *50 feet, measured as the horizontal distance from the stream transition line on either side of perennial streams.*
 2. *25 feet, measured as the horizontal distance from the, stream transition line on either side of intermittent streams.*
 - C. *Where necessary, the width of Streamside Management Areas shall be expanded to include significant areas of riparian vegetation adjacent to the buffer area, slides and areas with visible evidence of slope instability, not to exceed 200 feet measured as a horizontal distance.*
 - D. *The Streamside Management Area may be reduced or eliminated where the County determines, based on specific factual findings, that:*

1. *The USGS mapping of the stream as perennial or intermittent is not accurate, and typical stream flow can be shown to be less than that required to be classified as either perennial or intermittent, or*
2. *It will not result in a significant adverse impact to fish, wildlife, riparian habitat, or soil stability.*

Stream Channels

6. *Development within stream channels is limited to the following projects.*
 - A. *Fishery, wildlife, and aquaculture enhancement and restoration projects.*
 - B. *Road crossings consistent with Standard 9 of this section.*
 - C. *Flood control and drainage channels, levees, dikes and floodgates.*
 - D. *Mineral extraction consistent with other County regulations.*
 - E. *Small scale hydroelectric power plants in compliance with applicable County regulations and those of other agencies.*
 - F. *Agricultural diversions and wells.*
 - G. *New fencing, so long as it would not impede the natural drainage or would not adversely affect the stream environment or wildlife.*
 - H. *Bank protection, provided it is the least environmentally damaging alternative.*
 - I. *Other essential projects, including municipal groundwater pumping stations, provided they are the least environmentally damaging alternative, or necessary for the protection of the public's health and safety.*

Streamside Management Areas

7. *Development within Streamside Management Areas shall be limited to the following uses:*
 - A. *Development permitted within stream channels.*
 - B. *Timber management and harvests not otherwise excluded by Applicability Section as well as noncommercial cutting of firewood and clearing for pasturage, provided:*
 1. *Cottonwoods are retained.*
 2. *Remaining willows and alders, as well as other unmerchantable hardwoods or shrubs should be protected from unreasonable damage.*
 - C. *Road and bridge replacement or construction, when it can be demonstrated that it would not degrade fish and wildlife resources or water quality, and that vegetative clearing is kept to a minimum.*
 - D. *Removal of vegetation for disease control or public safety purposes.*

8. *Mitigation measures for development within Streamside Management Areas shall, at a minimum, include:*
- A. *Retaining snags unless felling is required by CAL-OSHA, or by California Department of Forestry forest and fire protection regulations, or for public health and safety reasons, approved by the appropriate County department. Felled snags shall be left on the ground if consistent with fire protection regulations as long as they have no economic value.*
 - B. *Retain live trees with visible evidence of use as nesting sites by hawks, owls, eagles, osprey, herons, or egrets.*
 - C. *Replanting of disturbed areas with riparian vegetation (including such species as alders, cottonwoods, willows, sitka spruce, etc.) shall not be required unless natural regeneration does not occur within 2 years of the completion of the development project.*
 - D. *Erosion control measures (Standard 9).*
9. *Erosion control measures for development within Streamside Management Areas shall include the following:*
- A. *During construction, land clearing and vegetation removal will be minimized.*
 - B. *Construction sites will be planted with native or naturalized vegetation and mulched with natural or chemical stabilizers to aid in erosion control and insure revegetation.*
 - C. *Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction.*
 - D. *Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, nonerodible channels, diversion dikes, interceptor ditches, slope drains or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge where discharge is to natural ground or channels.*
 - E. *Runoff shall be controlled to prevent erosion by on-site or off-site methods. On-site methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. On-site methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by on-site retention or where retention will provide no benefits for groundwater recharge or erosion control. Off-site methods include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.*
 - F. *Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California Fish and Game and Regional Water Quality Control Board.*
- Winter operations (generally October 15 thru April 15) shall employ the following special considerations:*
- G. *Slopes will be temporarily stabilized by stage seeding and/or planting of fast germinating seeds such as barley or rye grass; and mulched with protective coverings such as natural or chemical stabilizations.*

H. Runoff from the site will be temporarily detained or filtered by berms, vegetated filter strips, and/or catch basins to prevent the escape of sediment from the site. Drainage controls are to be maintained as long as necessary to prevent erosion throughout construction.

Other Wet Areas

10. For natural ponds, springs, vernal pools, marshes and wet meadows (exhibiting standing water yearlong or riparian vegetation): Development except for wells and springboxes shall be consistent with the standards for streamside management areas, where appropriate.

Humboldt County Code

The Humboldt County Streamside Management Area (SMA) Ordinance (Title 3, Chapter 6, Section 314.16.1 of the County Code) sets minimum development and setback standards adjacent to blue line streams in unincorporated areas of County. The purpose of the Ordinance is to protect sensitive fish and wildlife habitats, and to minimize erosion, runoff, and other conditions detrimental to water quality. Outside the Urban Development and Expansion Areas, the outer boundaries for stream setback areas is defined in the SMA as 100 feet from the stream transition line for perennial streams and 50 feet for intermittent streams. Other wet areas such as marshes and wet meadows are also regulated under the SMA. The standard setback distances may be modified (increased or decreased as appropriate) based on a site-specific biological survey, mapping and habitat analysis prepared for specific projects. There are no perennial or intermittent blue-line streams on the site according to the U.S. Geologic Survey mapping of the Garberville vicinity. But the County considers each of the seasonal streams on the site to qualify as an intermittent stream under the SMA Ordinance. As the site is located outside the Urban Development and Expansion Area for Garberville, a 50-foot stream setback zone would apply to the streams and wetland features on the site.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on biological resources if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

LESS-THAN-SIGNIFICANT IMPACTS

Special-Status Species

In general, no significant impacts on special-status species are anticipated with implementation of the proposed project. No special-status plant species were encountered or are suspected to occur on the portion of the site proposed for zoning changes and future development, and no adverse impacts are anticipated. The uncommon long beard lichen would be retained in buffer areas established along the riparian corridors and the forested habitat that would remain largely undisturbed as part of the project.

Essential habitats for State or federally-listed special-status animal species are generally absent from the portions of the site proposed for zoning changes and future development, and none have been reported from these areas. Northern spotted owl may occasionally forage in the forested habitat in the southern portion of the site, but these areas would remain as natural habitat. The proposed Environmental Camp, Wedding Grove, and Temporary Event location would be dispersed along the edge of the forest and woodland cover where suitable foraging and roosting opportunities for northern spotted owl are limited. Modifications along the edge of the South Fork of Eel River, which is known for dispersal and possible foraging by bald eagle, are limited to improving existing parking areas and improvements to the facilities at Tooby Memorial Park, and would result in minimal changes to this important riparian corridor, known as dispersal and foraging habitat for bald eagle and State and federally-listed anadromous fish species. Potential impacts on State or federally-listed special-status animal species would be less than significant.

The WSDAPISWAH provides an assessment of the potential impacts of the project on aquatic habitat and a determination on the effects of the anticipated demand on surface water flows, including the South Fork Eel River. As described above, the on-site streams are ephemeral in nature and do not support suitable habitat conditions for special-status fish and amphibian species, and project implementation is not expected to result in any adverse impacts on existing aquatic habitat conditions along these riparian corridors. For potential effects on the aquatic habitat of the South Fork Eel River, even if the park's infiltration gallery were being pumped at the maximum diversion rate of 0.24 cfs as allowed under the applicant's Lake and Streambed Alteration Agreement with CDFW, the riffle crest water surface elevation would drop roughly about 1/8-inch when based on the low flows in July 2015 where the shallowest observed segment of channel was about 30 square feet with a minimum riffle crest depth of about 8 inches. The conclusion in the WSDAPISWAH was that this worst-case reduction in water depth during the critical dry period was unlikely to affect summertime juvenile fish passage along the reach of the South Fork Eel River on the site, and even under the projected maximum diversion rate allowed by the park's water rights, would not lead to a break in surface flows. Therefore, the project is not expected to result in any significant adverse impacts on surface water flows or aquatic habitat in the South Fork Eel River, including suitable habitat for state and federally listed anadromous fish species. Most of the special-status animals known or suspected from the site are bird and bat species recognized as

SSC species or maintained on a Watch List by CDFW. Proposed improvements have been sited to avoid most of the riparian corridors formed by the seasonal creeks and the broad expanse of seasonal freshwater marshlands on the site, protecting foraging, roosting and possibly nesting opportunities for most of these species. Suitable nesting and maternity roosting habitat for most of these species occurs in areas of dense riparian woodland and scrub, including potential nesting by olive-sided flycatcher, willow flycatcher, yellow warbler, yellow-breasted chat, pallid bat and Townsend's big-eared bat. **Figures 4.4-3 through Figure 4.4-6** show the mapped wetlands and riparian corridors in relation to proposed improvements, and demonstrate that both a 50-foot setback buffer called for under the County's SMA Ordinance and a minimum 100-foot buffer is achieved in most instances around these features. Similarly, the riparian and wetland avoidance and buffers would serve to protect the potential dispersal and foraging habitat for northern red-legged frog and other amphibians in the seasonal creeks and seasonal freshwater marshlands on the site. And most of the woodland and forest habitat would also be avoided by proposed improvements, protecting suitable roosting and nesting substrate for Cooper's hawk, sharp-shinned hawk, white-tailed kite and other raptors protected under the MBTA.

There remains a potential that vegetation clearing, construction of proposed improvements, and future maintenance and operations could result in inadvertent loss of nests in active use if careful controls are not implemented. This would be a violation of the MBTA and CDFW Code, and would be a potentially significant impact if active nests are located in the immediate vicinity of construction and other project-related activities as assessed further below under Impact BIO-1.

Sensitive Natural Communities

In general, the areas of sensitive natural communities, including the stand of old growth redwoods in Tooby Memorial Park and regulated waters would be avoided, and no adverse impacts are anticipated on sensitive natural communities (see Figure 4.4-3 through Figure 4.4-6). Areas of seasonal freshwater marsh and riparian forest/scrub are regulated by State and federal agencies, as discussed above under "Regulatory Framework". A review of the potential impacts of the project on regulated waters is assessed below under Impact BIO-2 and Impact BIO-3.

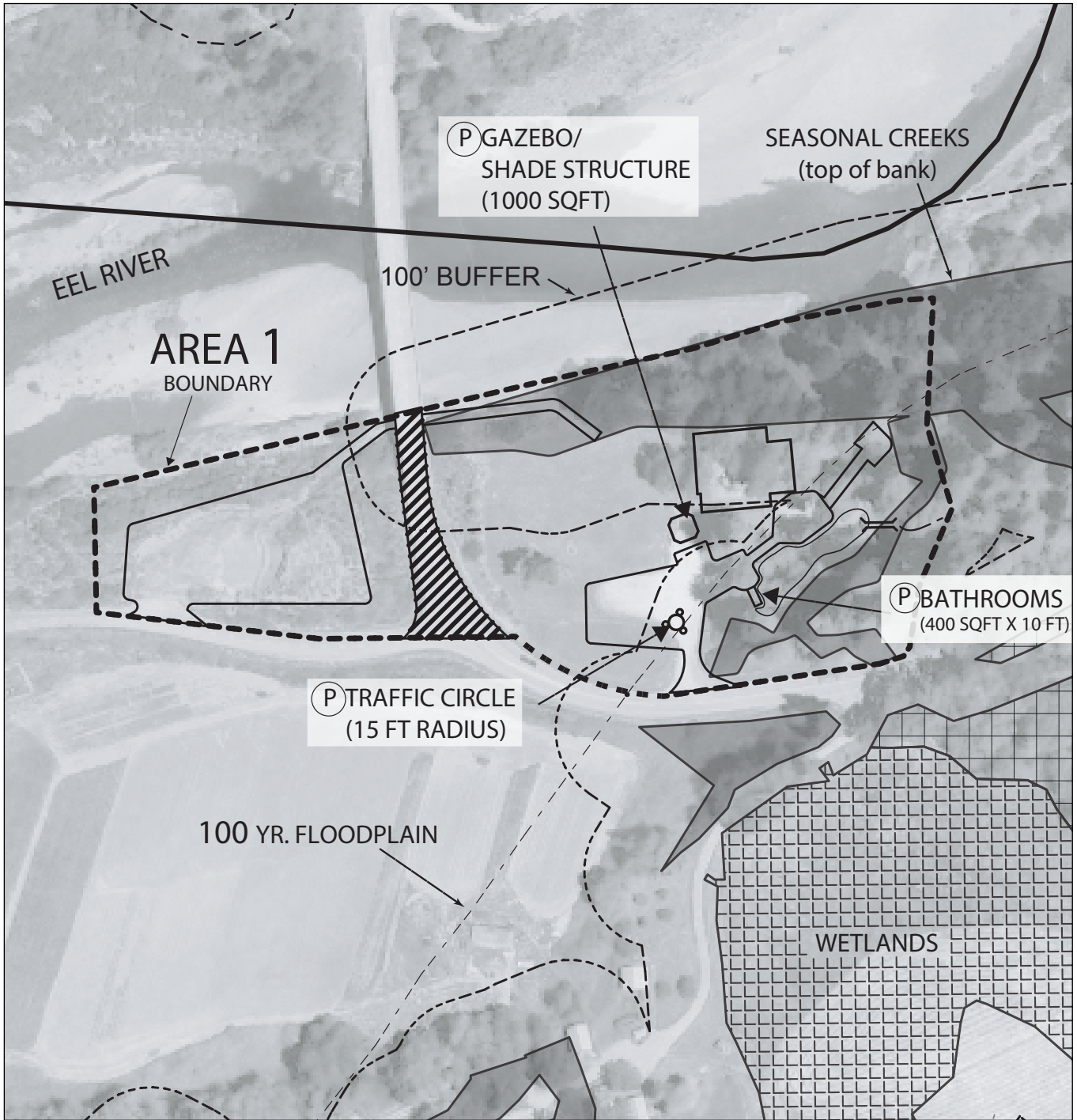
Adopted Habitat Conservation Plans

There are no adopted habitat conservation plans, natural community conservation plans, or other approved conservation plans encompassing the site or vicinity, and therefore there are no related potential impacts.



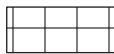


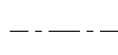
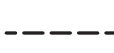

POTENTIALLY SIGNIFICANT IMPACTS

Impact BIO-1: Construction activities and site fire fuel management activities could result in the loss of bird nests in active use, which would be a violation of the federal Migratory Bird Treaty Act (MBTA) and State Code. (PS)

Proposed improvements are generally located in areas of past disturbance and non-native grassland cover. These include: the traffic circle and bathroom in the Tooby Memorial Park Area (Area 1); the temporary stage, new bathroom, improved parking and road improvements in the Park Headquarters Area (Area 2); the Wedding Grove and Temporary Event location in the



Legend

- | | | | |
|---|-------------------------|---|---------------------|
|  | Emergent wetlands |  | Area boundary |
|  | Forested/scrub wetlands |  | Property boundary |
|  | Seasonal creek |  | 100 year floodplain |
|  | 100' buffer |  | Existing road |

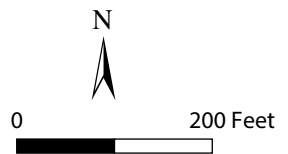
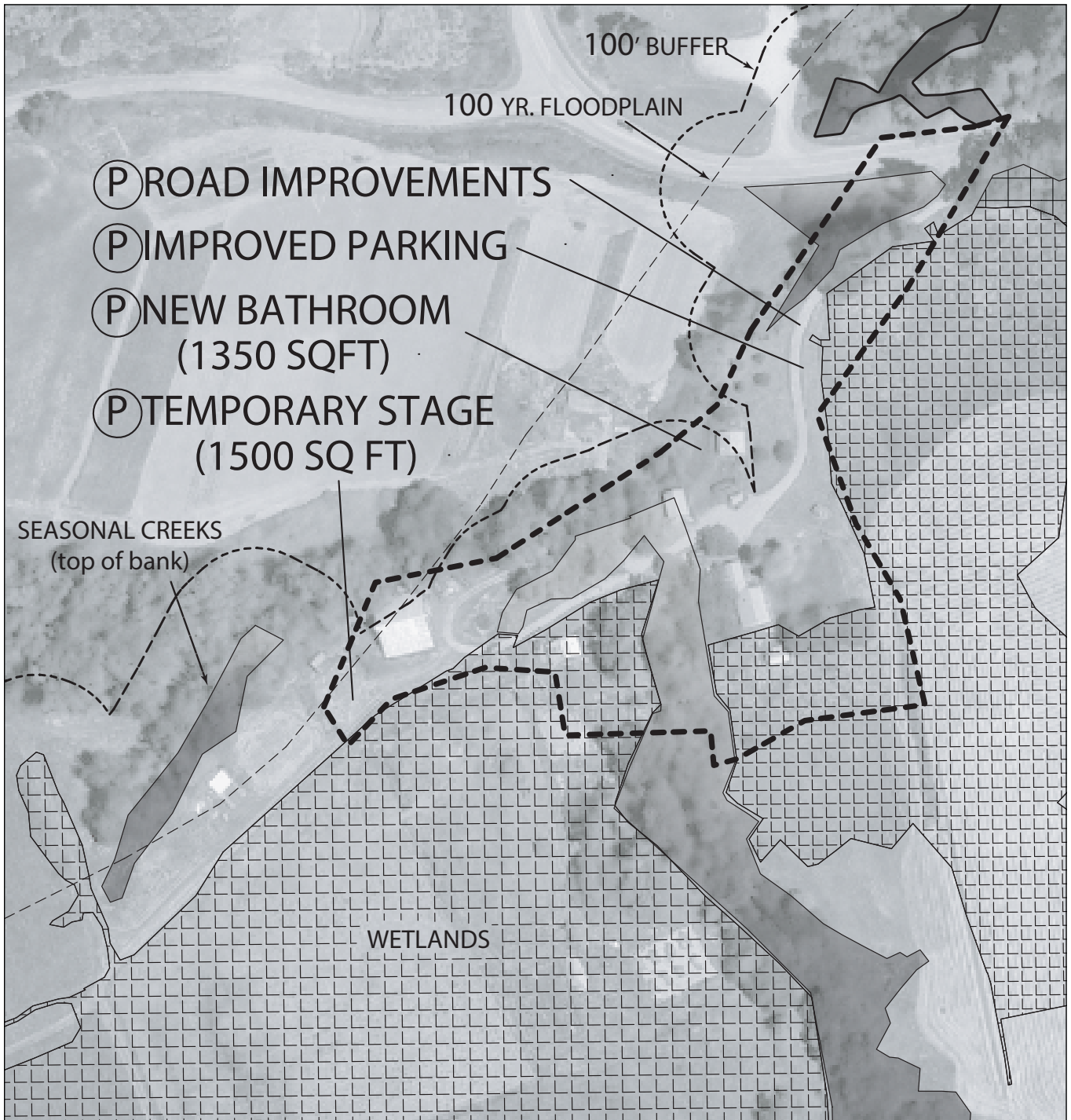


Figure 4.4-3

REGULATED WATERS IN TOOBY MEMORIAL PARK AREA (AREA 1)

SOURCE: Huber C&D, 2014



Legend

-  Emergent wetlands
-  Forested/scrub wetlands
-  Seasonal creek
-  100' buffer
-  Area boundary
-  100 year floodplain

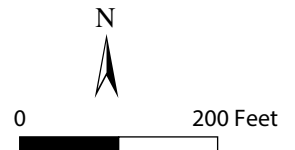




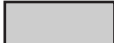
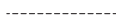
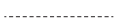


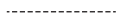
Figure 4.4-4

SOURCE: Huber C&D, 2014

REGULATED WATERS IN PARK HEADQUARTERS AREA (AREA 2)



Legend

- | | | | |
|---|-------------------|---|---------------------|
|  | Emergent wetlands |  | Property boundary |
|  | Seasonal creek |  | 100 year floodplain |
|  | 100' buffer |  | Existing road |
|  | Area boundary |  | Existing trail |

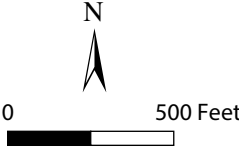
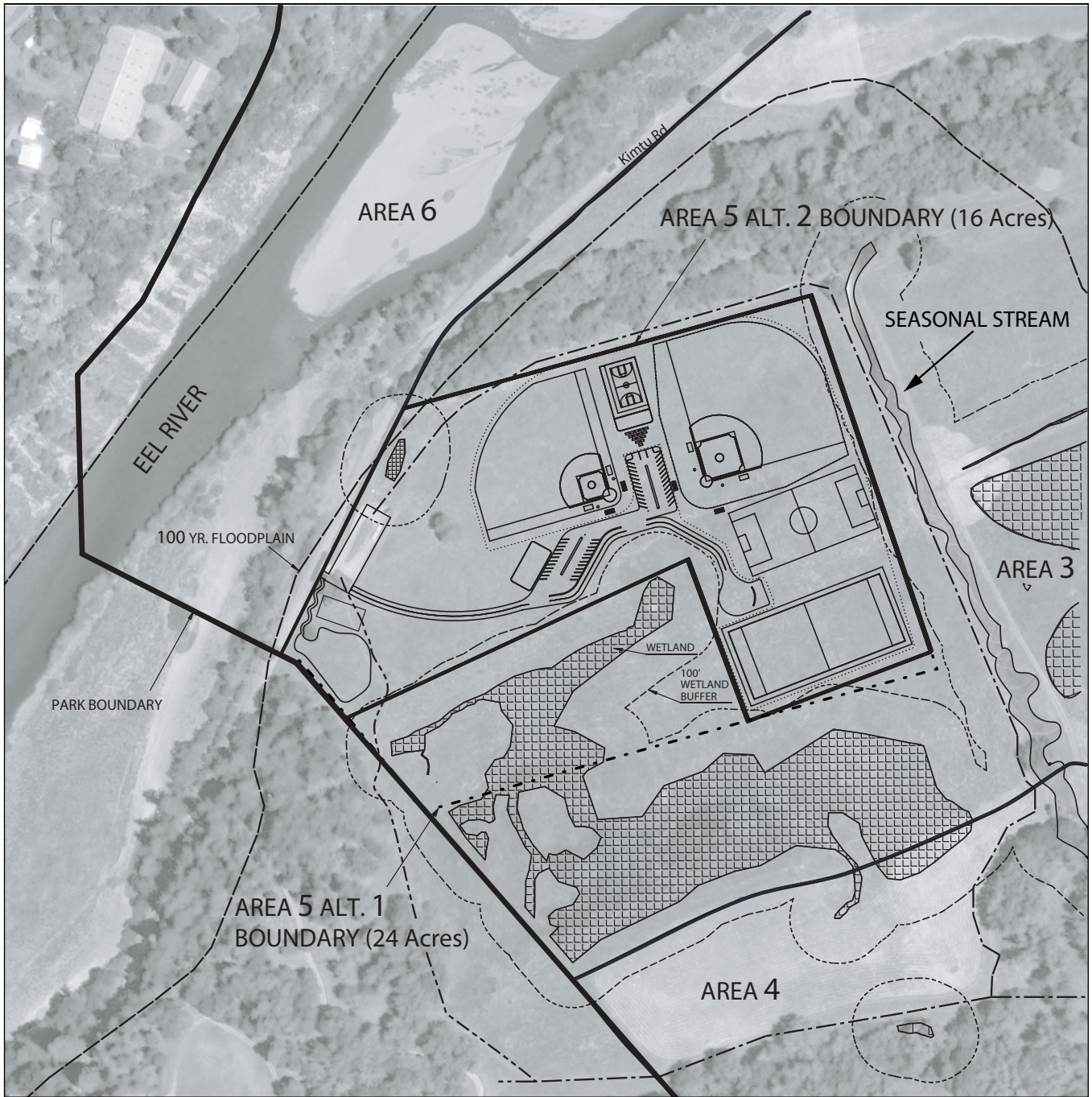




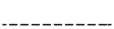




Figure 4.4-5

REGULATED WATERS IN COMMUNITY COMMONS AREA (AREA 4)

SOURCE: Huber C&D, 2014



Legend

-  Emergent wetlands
-  Seasonal creek
-  100' buffer
-  Area boundary
-  Property boundary
-  100 year floodplain
-  Existing road

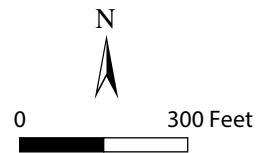


Figure 4.4-6

REGULATED WATERS IN SPORTS AREA (AREA 5)

SOURCE: Huber C&D, 2014

Community Commons Area (Area 4); and the play fields, roadways, buildings and other facilities in the Sports Area (Area 5). The likelihood of bird nesting is expected to be relatively low in these disturbed areas, and also low in areas subject to on-going activities and events where birds would either avoid nesting those areas or would have acclimated to the disturbance level and not be significantly affected by human presence. But locations where new, substantial disturbance to existing vegetative cover would occur, such as vegetation grubbing and grading associated with major construction activities initiated during the bird nesting season (generally from February 15 to August 31) could result in inadvertent loss of eggs and young of birds if present within the limits of construction, or abandonment of nests in active use if in close proximity to noise, movement, dust and other disturbance generated during construction. This could include loss or abandonment of nests of birds recognized as SSC species by CDFW and more common resident and migratory species protected under the MBTA and CDFW Code. The MBTA prohibits killing, possessing, or trading in migratory birds, except in accordance with regulations prescribed by the USFWS; this prohibition includes whole birds, parts of birds, and bird nests and eggs. This would be considered a potentially significant impact.

In addition to the relatively short-term construction-generated disturbance, vegetation management activities associated with fire fuel reduction could result in inadvertent loss or disturbance to nests in active use. Fire fuel management activities would typically occur in the spring and summer months when bird breeding and nesting occurs. Ideally, construction and vegetation removal for fire fuel management activities would be initiated during the non-nesting season (September 1 to February 14) to avoid the potential for disturbance to bird nests in active use. However, conduct of preconstruction surveys and implementation of appropriate avoidance measures would serve to ensure nests in active use during the breeding and nesting season are adequately avoided in compliance with the MBTA and CDFW Code. Birds typically acclimate to on-going vegetation management practices associated with farming and property maintenance, such as mowing for trail clearance, on-going maintenance of specific use areas, and set-up for special events that occur in designated areas. and no special avoidance measures are considered necessary for these activities.

The following mitigation measure has been recommended to recognize the potential for birds nesting on the site and to provide adequate avoidance for both construction and on-going management activities that could result in inadvertent take of nests in active use.

Mitigation Measure BIO-1: Major construction activities and vegetation management for fire fuel reduction shall be performed in compliance with the Migratory Bird Treaty Act (MBTA) and relevant sections of the California Fish and Wildlife Code to avoid loss of bird nests in active use. This shall be accomplished by preferably scheduling vegetation removal for fire fuel management and major construction activities outside of the bird nesting season (which occurs from February 15 to August 31) to avoid possible impacts on nesting birds if new nests are established in the future.

Alternatively, if these activities cannot be restricted to the non-nesting season (September 1 to February 14), a pre-construction nesting survey shall be conducted depending on the proposed activity as defined below. The pre-construction nesting survey(s) shall include the following:

- *A qualified biologist (Biologist) shall conduct a pre-construction nesting bird (both passerine and raptor) survey within 14 days prior to major construction and fire fuel*

management activities. Construction activities requiring pre-construction surveys include: sports field improvements in the Sports Area; Environmental Camp and concession stand in the Commons Area; the new restroom, new parking, and roadway improvements in the Park Headquarters Area; and traffic circle and replacement restroom in Tooby Memorial Park. Major tree limbing and brush thinning for fire fuel management shall also require a pre-construction nesting survey when performed during the nesting season. Birds typically acclimate to on-going vegetation management practices associated with farming and property maintenance, such as hay crop harvest, field tilling, and mowing for trail clearance, special event area maintenance and other property maintenance, and no preconstruction surveys or special avoidance measures are considered necessary for these activities.

- If no nesting birds are observed, no further action is required and scheduled activities shall be initiated within 14 days of the survey to prevent take of individual birds that could begin nesting after the survey.
- Another nest survey shall be conducted if more than 14 days elapse between the initial nest search and the beginning of the scheduled major construction activities or fire fuel management activity during the nesting season. Follow-up nest surveys are not required for on-going maintenance activities and events because birds typically acclimate to these activities or would avoid nesting in the vicinity if sensitive to the associated noise, increase in human activity and other disturbance levels.
- If any active nests are encountered, the Biologist shall determine an appropriate disturbance-free buffer zone to be established around the nest location(s) until the young have fledged. Buffer zones vary depending on the species (i.e., typically 75 to 100 feet for passerines and 300 feet for raptors) and other factors such as on-going disturbance in the vicinity of the nest location. If necessary, the dimensions of the buffer zone shall be determined in consultation with the California Department of Fish and Wildlife.
- Orange construction fencing, flagging, or other marking system shall be installed to delineate the buffer zone around the nest location(s) within which no construction-related equipment or operations shall be permitted. Continued use of existing facilities such as occupied buildings, existing parking, and site maintenance may continue within this buffer zone where the nesting birds have acclimated to these activities.
- No restrictions on activities outside the prescribed buffer zone are required once the zone has been identified and delineated in the field and workers have been properly trained to avoid the buffer zone area. But additional controls on lighting, noise amplification and other possible disturbance sources that could affect the viability of nest success shall be considered by the Biologist, and recommendations and restrictions defined, if necessary.
- Construction activities shall be restricted from the buffer zone until the Biologist has determined that young birds have fledged and the buffer zone is no longer needed.
- A survey report of findings verifying that any young have fledged shall be submitted by the Biologist for review and approval by the County prior to initiation of major construction activities and major fire fuel vegetation management within the buffer zone. Following written approval by the County, restricted activities within the nest-buffer zone may proceed. (LTS)

Impact BIO-2: Proposed development could result in filling or modifications to regulated waters, including areas of freshwater emergent wetland and seasonal creek channels. (PS)

Proposed improvements have generally been sited to avoid most of the riparian corridors formed by the seasonal creeks, the riparian forest along the edge of the South Fork Eel Creek, and the broad expanse of seasonal freshwater marshlands on the site. Figures 4.4-3 through Figure 4.4-6 show the mapped wetlands and riparian corridors in relation to proposed improvements, and demonstrate that both a 50-foot setback buffer called for under the County's SMA Ordinance and an even larger minimum 100-foot buffer is achieved in most instances around these features. The few exceptions to this larger 100-foot setback adherence include: the proposed traffic circle and replacement bathroom in Tooby Memorial Park (see Figure 4.4-3); the temporary stage, new bathroom, and the parking and roadway improvements in the Park Headquarters Area (see Figure 4.4-4); the pedestrian bridge crossings over the seasonal creeks, most of the temporary stage and booths associated with the Temporary Event location, and the layout of a portion of the Environmental Camp where about 9 tent sites would be located near the top of bank to the adjacent seasonal creek within the buffer setback in the Community Commons Area (see Figure 4.4-5); and a new irrigation line that would cross over the seasonal creek for the sports fields in Area 5 (see Figure 3-11).

Of these exceptions to the setback adherence, only the proposed new bridge crossings in Area 4, the irrigation pipeline in Area 5, and the roadway improvements in Area 2 would directly affect regulated waters. Detailed plans have not been prepared for these improvements, but the new bridges and irrigation pipeline crossing could affect existing riparian vegetation and aquatic habitat if initiated when surface waters are still present in the channels. For Area 2, the roadway improvements could result in loss of limited areas of seasonal freshwater marsh habitat for a distance of several hundred feet along the south side of the main entrance road to the Park Headquarters.

Proposed fills and modifications to jurisdictional waters would require authorizations from regulatory agencies, including the Corps, RWQCB, and CDFW as described above under "Regulatory Framework." Given the size of the proposed fills to areas of seasonal freshwater marsh, the project may qualify under the Nationwide Permitting Program of the Corps, which typically allows for smaller fills of up to half an acre in size as long as all standard and regional conditions are met. This includes compliance with the federal Endangered Species Act and provisions for adequate compensatory mitigation.

In addition to the potential for direct impacts on regulated waters, construction and long-term management activities could have indirect effects on the water quality of receiving waters. Improper drainage both during and after construction could interrupt important surface water flows or result in significant discharges of sediment-laden water into the downstream reaches of seasonal creeks and ultimately the South Fork Eel River. Adequate best management practices would be required to prevent transport of sediments into receiving waters, and to prevent long-term degradation as a result of increased urban pollutants, including oil and gasoline from vehicles parked in permanent and temporary parking areas, and fuel and lubricant spills from construction and property management equipment fueling and maintenance. A detailed discussion of the potential water quality impacts of the project is provided in Section 4.9, Hydrology and Water Quality. Collectively, these represent significant direct and indirect impacts on regulated waters.

Potential impacts on jurisdictional waters would be significant, and any modifications would require appropriate authorization by regulatory agencies, compensatory mitigation, and adherence to best management practices during construction, as indicated in the following mitigation measures.

Mitigation Measure BIO-2a: A Wetland Protection and Replacement Program (WPRP) shall be prepared by a qualified wetland specialist and implemented to provide compensatory mitigation for modifications to any areas of jurisdictional waters affected by the project, and to ensure compliance with County General Plan policies and the SMA Ordinance related to stream and wetland protection and mitigation. At a minimum, the WPRP shall contain the following components:

- *If on-site avoidance of jurisdictional waters, streams and wetlands identified in the SMA ordinance is not feasible, the WPRP shall provide compensatory mitigation at a minimum 2:1 ratio (ratio of mitigation acreage or credits to affected jurisdictional waters, streams and wetlands identified in the SMA ordinance), subject to the review and approval by the Planning Director in consultation with CDFW and other regulatory agencies. Any habitat created as compensatory mitigation shall be monitored for a minimum of 5 years or until success criteria are met, as defined in the WPRP to ensure successful establishment. The WPRP shall specify success criteria, maintenance and long-term management responsibilities, monitoring requirements, and contingency measures necessary to achieve a minimum survival rate of 85 percent of planted species following the first year of planting and 75 percent following the fourth year of planting.*
- *Annual monitoring reports shall be provided to the Planning Director, CDFW and other regulatory agencies before December 31 of each monitoring year, summarizing the status of revegetation efforts, and any maintenance activities performed or required. Photographs of the location from either side of the treatment area shall be included. Maintenance and monitoring shall continue until the area is completely revegetated with a minimum of 80 percent absolute cover of plants comprised of species similar to the undisturbed affected area as reviewed and approved in writing by the Planning Director in consultation with CDFW and other regulatory agencies.*
- *Orange construction fencing shall be installed at the edge of adjacent jurisdictional waters to be preserved to ensure no disturbance to these features. The construction fencing shall remain in place for the entire duration of construction to ensure construction equipment avoids these areas.*
- *A qualified biologist/restoration specialist shall meet with heavy equipment operators prior to the beginning of site-disturbing activities to explain the required mitigation, and be available during the initial phase of construction to provide situation-specific avoidance measures.*
- *Installation of the pedestrian bridges and other seasonal creek crossings or modifications shall be performed during the summer and fall months when the channels are dry, to minimize disturbance to aquatic habitat and avoid the need for temporary coffer dam and possible dewatering during construction.*
- *Any areas to be retained as natural habitat and disturbed as part of construction shall be restored to prevent erosion and contamination of nearby receiving waters. Monitoring shall be provided as part of the larger WPRP for a minimum of 5 years to ensure the disturbed area is successfully revegetated.*

- *Authorization for modifications to jurisdictional waters on the site shall be obtained by the applicant from the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act, the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act, and the California Department of Fish and Wildlife (CDFW) under Section 1602 of the State Fish and Game Code.*
- *All legally required permits or other authorizations shall be obtained by the applicant from the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NOAA Fisheries), and CDFW for the potential “take” of protected species under the federal and California Endangered Species Acts, if required. Although considered unlikely given the absence of suitable habitat for State- or federal-listed special-status species, the resource agencies make the determination on the need for any consultation or incidental take permits. This EIR specifically does not allow development that would require an incidental take permit. Subsequent environmental review would be required for approval of any development that requires an incidental take permit.*
- *Proof that all appropriate authorizations have been secured from the Corps, RWQCB, and CDFW and that adequate compensatory mitigation has been defined shall be furnished to the County prior to the issuance of a grading permit for any component of the project affecting jurisdictional waters.*

Mitigation Measure BIO-2b: To address potential indirect impacts on water quality and downgradient receiving waters in the vicinity of the site, the applicant shall implement best management practices under the Storm Water Pollution Prevention Plan (SWPPP) called for in Mitigation Measure HYDRO-1a and the Stormwater Control Plan (SCP) called for in Mitigation Measure HYDRO-1b.

The combination of the measures above would reduce this impact to less than significant. (LTS)

Impact BIO-3: Proposed development would replace areas of existing natural habitat and could disrupt wildlife use of the site unless adequate controls are taken to prevent significant disruption. (PS)

Installation of large playfields and other improvements, on-going recreational use, and temporary events would degrade the value of the remaining natural habitats on the site. Possible undesirable activities could include planting of highly invasive non-native plant species, vegetation clearance beyond that needed to accommodate proposed improvements, and unauthorized off-road vehicle activity. Sporting activities and the temporary special events would introduce additional visitors to the site, resulting in intensified human presence and disturbance from vehicles and event-generated noise, lighting, and other sources.

Detailed revegetation and landscaping plans have not been prepared for areas proposed for improvement areas such as the sports area, but many species used in landscaping are highly invasive, and could spread into open space areas to be retained as natural habitat, further reducing the habitat values of the site. The California Exotic Pest Plant Committee has identified plant species considered to be unsuitable due to their invasive character and tendency to out-compete native flora (California Exotic Pest Plant Council, 2006.). Although species such as Scotch broom (*Cytisus scoparius*) and French broom (*Genista monspessulana*) are currently not a severe

problem on the site, grading would create preferred habitat for these species and further development of the site could contribute to their spread. Unauthorized off-road vehicle activity could destroy groundcover vegetation, damage shrubs and trees, and contribute to sedimentation in drainages.

Wildlife species dependent on the resources currently available on the site would be displaced during construction and possibly as a result of special event activities when occupied. If not properly secured, trash and garbage generated by construction activities and events may attract opportunistic wildlife species and adversely affect healthy behaviors for these species. Increased vehicle and human activity, night-time lighting, and uncontrolled pets could all contribute to the reduction in value of the developed and adjacent undeveloped portions of the site to many wildlife species. Uncontrolled dogs and cats could contribute to loss of birds and small terrestrial wildlife, and harassment of larger mammals unless they are restricted or leashed on trails and natural areas. These would be potentially significant impacts on the existing wildlife habitat values of the site.

The following mitigation measures are recommended to minimize disruption to existing natural areas to be retained and to native wildlife use of the site:

Mitigation Measure BIO-3a: A qualified landscape architect or restoration ecologist who specializes in native habitat restoration shall be retained to incorporate the following provisions into the Landscape and Revegetation Plans for the project:

- *Prohibit the use of highly undesirable species in landscape improvements on the site which could spread into the adjacent open space areas. Unsuitable species include: blue gum eucalyptus (*Eucalyptus globulus*), acacia (*Acacia spp.*), pampas grass (*Cortaderia selloana*), broom (*Cytisus spp.* and *Genista spp.*), gorse (*Ulex europaeus*), bamboo (*Bambusa spp.*), giant reed (*Arundo donax*), English ivy (*Hedera helix*), German ivy (*Senecio milanioides*), cotoneaster (*Cotoneaster pannosus*), and periwinkle (*Vinca spp.*), among others identified in the CalEPPC List.*
- *Define maintenance and monitoring provisions to ensure the successful establishment and long-term viability of native plantings and the control and eradication of highly aggressive non-native broom and other noxious weeds. The maintenance and monitoring program shall be implemented during a minimum 5-year monitoring required as part of tree replacement and wetlands mitigation, and shall continue as part of long-term maintenance of open space areas.*
- *Provide adequate controls to prevent unauthorized vehicle access to natural areas to be retained. These can include appropriately placed bollards, gates, and wildlife friendly fencing that serves to control unauthorized vehicle access but allows for movement by larger terrestrial wildlife.*
- *Provide for reseeding of all graded slopes not proposed for roadways and other improvements with a mix of native grasses and forbs appropriate for the site rather than a conventional seed mix typically used for erosion control purposes to replace and improve existing habitat values of grasslands disturbed on the site.*

Mitigation Measure BIO-3b: Measures recommended in Mitigation Measures BIO-1, BIO-2a, BIO-2b, BIO-3a, and BIO-4 would serve to partially protect important natural habitat on the site

for wildlife, avoid the potential loss of nests in active use, and minimize disturbance to wetlands and provide for replacement of affected jurisdictional waters. The following additional provisions shall be implemented to further protect wildlife habitat resources that could otherwise be compromised as part of the project:

- *Permanent and temporary lighting shall be carefully designed and controlled to prevent unnecessary illumination of natural habitat on the site. Lighting shall be restricted to the immediate vicinity of areas necessary to provide the minimum level necessary for safety purposes to illuminate pathways and other outdoor areas. Lighting shall generally be kept low to the ground, directed downward, and shielded to prevent illumination into adjacent natural areas.*
- *Dogs and cats shall be kept on leash at all times when on trails and natural areas on the site.*
- *All garbage, recycling, and composting shall be kept in closed containers and latched or locked to prevent wildlife from using the waste as a food source. This shall include trash generated during temporary special events.*

The combination of the measures above would reduce this impact to less than significant.
(LTS)

Impact BIO-4: Proposed development has the potential to conflict with local regulations related to Stream Management Areas and the intent of relevant policies in the Humboldt County General Plan related to streams and wetlands. (PS)

The project generally complies with the relevant policies and standards in the County General Plan. As discussed above under Impact BIO-2, proposed improvements have generally been sited to avoid most of the riparian corridors formed by the seasonal creeks, the riparian forest along the edge of the South Fork Eel Creek, and the broad expanse of seasonal freshwater marshlands on the site. Figure 4.4-3 through Figure 4.4-6 show the mapped wetlands and riparian corridors in relation to proposed improvements, and demonstrate that a 50-foot setback called for under the County's SMA Ordinance and even a larger minimum 100-foot buffer is achieved in most instances around these features. The few exceptions to this setback adherence include: the proposed traffic circle and replacement bathroom in Tooby Memorial Park (see Figure 4.4-3); the temporary stage, new bathroom, and the parking and roadway improvements in the Park Headquarters Area (see Figure 4.4-4); and the pedestrian bridge crossings over the seasonal creeks, most of the temporary stage and booths associated with the Temporary Event location, and the layout of a portion of the Environmental Camp where about 9 tent sites would be located near the top of bank to the adjacent seasonal creek within the buffer setback in the Community Commons Area (see Figure 4.4-5).

The County's SMA Ordinance sets minimum development and setback standards adjacent to blue line streams in unincorporated areas of County. The SMA Ordinance defines development allowed within the designated setbacks and requires that a permit be secured for any development within or affecting SMAs or other wet areas. Development allowed within the SMA setback area is generally restricted to aquatic and habitat-related functions, such as restoration, agricultural diversions and wells, new crossings, bank stabilization, and other essential public projects. No blue line streams occur on the site, with the exception of the South Fork Eel River.

Most of the Temporary Event improvements and a portion of the Environmental Camp in the Community Commons (Area 4) and the temporary stage and improved parking in the vicinity of the Park Headquarters (Area 2) all occur within the 50-foot setback called for under the SMA Ordinance and some fall within the mapped 100-foot setback from the seasonal creeks in the area as well (see Figure 4.4-4 and Figure 4.4-5). However, none of these seasonal creeks are technically blue-line streams used in defining setback distances under the SMA Ordinance. The mapped 100-foot buffers in Figures 4.4-3 through Figure 4.4-6 were based on a recommendation made by CDFW in their response to the Notice of Preparation for the project in 2010 (CDFW, 2010) that a 100-foot buffer be provided from all drainages on the site, rather than the development restrictions under the SMA Ordinance that call for a 50-foot setback from intermittent streams.

Adjustment to some of these proposed facilities in the immediate vicinity of the seasonal creek features would be appropriate, together with seasonal restrictions on temporary activities when surface water is present. But the temporary events would presumably be scheduled during the late spring and summer, and would have only limited adverse effects on the nearby seasonal creek and associated riparian habitat. In some instances, there are no alternatives available to provide important improvements to existing facilities, such as replacing the existing bathroom in seasonal creek setbacks at Tooby Memorial Park (Area 1) and the road improvements and parking at the Park Headquarters (Area 2). Where direct fills and modifications to jurisdictional waters would occur, authorizations would be required from regulatory agencies, which would serve to ensure that appropriate controls and mitigation are incorporated into improvement plans.

The following measures are recommended to ensure compliance with the County General Plan policies and intent of the SMA Ordinance.

Mitigation Measure BIO-4: Implementation of Mitigation Measures BIO-3a and BIO-3b would ensure adequate mitigation is provided for the direct loss of jurisdictional waters on the site, that protection and restoration of nearby waters is provided by the project, and that required authorizations are secured by regulatory agencies with evidence of compliance provided to the County prior to issuance of a grading permit. The following additional provisions shall be implemented to ensure conformance with relevant policies and standards in the County's General Plan and to meet with the intent of the SMA Ordinance:

- *Provide compliance with Section 314-61.1, Streamside Management Area Ordinance of the Zoning Code and secure all required permits for any modifications to regulated habitat areas along streams and other wet areas.*
- *Relocate the portion of the Environmental Camp in Area 4 so that it is sited outside of the 50-foot buffer setback along the adjacent seasonal creek to the east. Although potential impacts associated with the few tents and other improvements near the top of bank are relatively minor, the buffer area is important to minimize vegetation removal, trampling and concentrated human activity along the seasonal creek.*
- *Restrict use of the Temporary Event facilities in Area 4 to the dry season (May 1 to October 31) to minimize disturbance to nearby seasonal aquatic habitat associated with the seasonal creeks. Exception to this restriction period may be authorized if field inspection verifies that surface water is no longer present in the spring months and that rains are not forecast in the fall months.*

- *Provide pedestrian bridge crossings over the seasonal creeks in the vicinity of the Temporary Event facilities and the Environmental Camp along designated trails to avoid concentrated pedestrian activity in the channel bottom.*
- *Install split rail fencing and interpretive signage to direct park users to designated creek crossing locations and minimize the potential for concentrated informal crossings of the creek channels. (LTS)*

CUMULATIVE IMPACTS

The analysis of potential cumulative impacts on biological resources considered anticipated development in the surrounding area, including the pending or approved developments. The potential impacts of proposed development on biological resources tends to be rather site-specific, and the overall cumulative effect would depend on the degree to which significant vegetation and wildlife resources are protected on a particular site. This includes preservation of well-developed native vegetation (marshlands, native grasslands, oak woodlands, riparian scrub and woodland, etc.), populations of special-status plant or animal species, and wetland features (including seasonal wetlands and drainages). Further environmental review of specific development proposals in the vicinity of the site should serve to ensure that important biological resources are identified, protected, and properly managed, and to prevent any significant adverse development-related impacts.

To some degree, cumulative development contributes to an incremental reduction in the amount of existing wildlife habitat, particularly for birds and larger mammals. Habitat for species intolerant of human disturbance can be lost as development encroaches into previously undeveloped areas, disrupting or eliminating movement corridors and fragmenting the remaining suitable habitat retained within parks, private open space, or undeveloped properties. Additional development may also contribute to degradation of the aquatic habitat in the tributary creeks. Grading associated with construction activities generally increases erosion and sedimentation, and urban pollutants from new development could reduce water quality if not properly treated and managed. Recommendations to control erosion and sedimentation after grading should serve to minimize the potential for water quality degradation.

With regard to development of the project site and its relationship to surrounding habitat, no cumulatively considerable impacts on biological or wetland resources are expected as a result of anticipated development. Terrestrial wildlife in the area have already become acclimated to human activity on the site, and proposed development is not expected to disrupt important movement corridors or access to surrounding habitat. Mitigation measures recommended above to address potential impacts on regulated waters, potential bird nesting activities, and wildlife habitat would serve to address project-specific impacts and mitigate them to less-than-significant levels, and would address any contribution the project would otherwise make to cumulative impacts.

BIO-5: The project would contribute to a cumulative reduction in the surface water flows to the South Fork Eel River, creating the potential for a significant cumulative impact on aquatic life. (PS)

As discussed above, the WSDAPISWAH provides an assessment of the potential impacts of the project on aquatic habitat and a determination on the effects of the anticipated demand on surface

water flows, including the South Fork Eel River. Project implementation is not expected to result in any adverse impacts on existing aquatic habitat conditions along the on-site ephemeral streams. And no significant adverse impacts on surface water flows or aquatic habitat in the South Fork Eel River are anticipated for the project itself. However, the project would contribute to a cumulative reduction in the surface water flows to the South Fork Eel River, including during the dry summer months when conditions become critical. As acknowledged in the WSDAPISWAH, the low-flow conditions that have existed for the past several summers are a limiting factor for survival of juvenile Coho and Chinook salmon, steelhead trout, and other aquatic species. During drought conditions, any reduction in flow could exacerbate the undesirable conditions of high water temperatures, low dissolved oxygen levels, and elevated nutrient concentrations, and could contribute to the creation of conditions that could be lethal for salmonids and other aquatic life. Because of these extreme low flows in the South Fork Eel River during current drought conditions, any further reduction in surface flows, including the relatively small diversion volume associated with the proposed project, could be cumulatively considerable and result in a significant cumulative impact on aquatic life.

The WSDAPISWAH included detailed recommendations to address the perception of using water to irrigate future playfields on the site, based on the principles of good environmental stewardship and water conservation, and to recognize that water use in the park must be adjusted based on the availability of water necessary to support the conservation values of the South Fork Eel River. These consist of 1) general recommendations for design and operation of the park, 2) adaptive management practices during times of water scarcity, and 3) controls on water availability through increased water storage capacity and restrictions on flow diversions from the South Fork Eel River during the dry season. Collectively, implementation of these recommendations from the WSDAPISWAH would serve to fully mitigate any project contribution to the potentially significant cumulative impact on aquatic life in the South Fork Eel River.

The following mitigation measure is recommended to minimize the project contribution to potentially cumulative impacts on aquatic life in the South Fork Eel River.

Mitigation Measure BIO-5: Recommendations contained in the Water Supply and Demand Analysis and Potential Impacts on Surface Water and Aquatic Habitat (WSDAPISWAH) shall be implemented to address the project's contribution to cumulative impacts on aquatic life in the South Fork Eel River. These consist of the following and are described in more detail below: 1) general recommendations for design and operation of the park, 2) adaptive management practices during times of water scarcity, and 3) controls on water availability through increased water storage capacity and restrictions on flow diversions from the South Fork Eel River during the dry season.

General Recommendations

The following are general recommendations to address the project contribution to cumulative impacts on aquatic life in the South Fork Eel River and to improve the beneficial effects of the project on improving habitat conditions. Some of these must be rigidly enforced, such as use of appropriate drought-tolerant turfgrass species and appropriate irrigation design that can substantially reduce water demand. These are very specific recommendations where compliance with the recommendation can be established as a performance standard for the measure.

- **Improvements to Water Storage Capacity** – As a goal of improving habitat conditions, the applicant shall work with the appropriate specialists to improve water storage capacity on the site. The project vicinity typically receives an average of 58 inches of precipitation, but the majority of the precipitation occurs between mid-October and mid-May. Thus, retaining water on-site during the wet season and allowing it to discharge back into the river during the dry season is the best means of further enhancing the hydrologic benefits that the park already provides. Water can be retained on-site by enhancing wetlands, restoring riparian areas, constructing infiltration or water storage ponds, and storing water in tanks. It is likely that enhancing groundwater recharge by enhancing wetlands, and restoring riparian areas would be the least expensive and infrastructure-intensive means of accomplishing this goal and would bring with it a suite of additional environmental benefits.
- **Installation of Drought-tolerant Turfgrass** – Drought-tolerant cool turfgrass species, such as Native Bentgrass™ from Delta Bluegrass, Zoysia 'De Anza', and/or Buffalo grass 'UC Verde' shall be used for turf plantings in the playfields and other areas of irrigated turf on the site. Each species and cultivar has differing benefits and advantages, but factors that shall be considered when selecting the type(s) of grass to be planted include evapotranspiration potential, drought tolerance, dormancy, soils structure and fertility, fertilizer demand, mowing height, invasive weed potential, and durability. Species that are recognized as an invasive species by the California Invasive Plant Council shall not be used. A landscaping firm experienced in turfgrass cultivation in similar Mediterranean climate zones shall be consulted by the applicant in selecting the exact species and cultivars for the playfields. Hybridized drought-resistant grass species and cultivars typically use about 70 percent of the water required by non-hybridized species.
- **Appropriate Design of Irrigation Systems** – Irrigation systems shall be designed with best available irrigation technologies, and be low-to-the ground and subsurface to reduce the potential for evaporation. Generally, sprinkler systems that apply water as close to the ground surface as possible will result in less evaporative loss. In addition, watering shall occur at night or in the early morning hours, which also reduces evaporation.
- **Seasonal Restrictions for Irrigation** – Most importantly, the irrigation allowance shall be determined based on the characteristics of each water year (when and how much precipitation falls) as that should influence how playfields are managed. Deciding when to cease irrigating the playfields is one of the most critical adaptive management measures for mitigating the potential adverse impacts associated with turf irrigation, and restrictions are defined further below under recommendations for adaptive management.

Adaptive Management Practices

There is a hierarchy of need for water in most communities during times of water scarcity. While sports fields are important for communities to congregate, turfgrass can be replanted after a drought in which irrigation is halted and grass dies. Water needed for direct human consumption often overrides most other uses, trailed closely by irrigation for food crops, and water needed to support instream beneficial uses. However, while alternative water supplies may sometimes be available for human needs, requirements for aquatic organisms can only be met through maintenance of life-sustaining minimum flows and viable water quality. Given the drought conditions that have been ongoing for at least 3 years (at the time of this writing),

irrigation of the sports field during extended drought conditions is likely to be highly scrutinized and of reduced priority compared to other needs.

For this reason, the WSDAPISWAH recommends establishing a water budget for various irrigation demands on the site, as well as a triggering mechanism for the reduction or cessation of irrigation during periods of water shortage, based on higher priority uses. There are likely to be several tiers of demand within the beneficial uses that currently need to be serviced at the site including direct human consumption, residential uses, irrigation of trees and other established semi-permanent vegetation, irrigation of annual row crops, irrigation of turfgrass, and irrigation of pasture/wetlands. This water budget and management procedures would be defined as part of an Adaptive Management Plan for the site, as required below.

The monitoring and management strategy defined in the Adaptive Management Plan shall consider current riverine, atmospheric, and antecedent precipitation conditions when determining the quantity of water available to irrigate turfgrass on the playfields. When the design and construction of new facilities is initiated, they shall be informed by the findings contained in the Adaptive Management Plan, and the findings shall be used in determining what type of and how many playfields are to be constructed. Phasing of the playfield construction would also allow field capacities to equilibrate with user demand and resource availability.

The WSDAPISWAH recommends that the irrigation cutoff threshold for the playfields be significantly higher than the 17-cubic-foot-per-second (cfs) flow conditions in the South Fork Eel River observed in July 2015. A threshold of 30 cfs beyond which the playfields could only be irrigated with stored or recycled water is recommended. This threshold would result in less vigorous turf at the onset of the wet season. One adaptation could be rotating the location(s) and layout(s) of fields in active use throughout the dry season in a manner that spreads the recreational impact on desiccated turf throughout the entire playfield area.

The following measures are recommended to provide adaptive management in future water use at the site:

- *Develop an Adaptive Management Plan by a qualified hydrologist/landscape contractor that establishes a reliable means of determining the annual irrigation water diversion cutoff date. The Adaptive Management Plan shall be in place by the onset of construction of any playing fields.*
- *Consult with turfgrass and sports field irrigation system experts before laying out sports fields and designing irrigation systems in order to determine the best drought-tolerant turfgrass and irrigation strategies to reduce water consumption.*
- *Refine the water demand summary for agricultural areas and turfgrass (from the 2014 "Water Supply and Demand Analysis Memorandum" prepared for the project applicant by GHD; see Appendix G of the Draft EIR) using the WSDAPISWAH Estimated Water Demand to provide more detail for the site.*

Future Water Storage and Restrictions on Flow Diversions

The Lake and Streambed Alteration Agreement (LSAA) with the California Department of Fish and Wildlife (CDFW) allows up to 2,000 gallons per day to be diverted from the spring

currently used by the applicant between November 1 and July 1 of each year. The other diversion serving the site is from an infiltration gallery in the South Fork Eel River that is allowed to operate at a maximum diversion rate of 0.24 cfs. Use of the infiltration gallery currently does not have a specified period of diversion in the LSAA.

The following measures are recommended to improve future water storage and ensure adequate restrictions on in-channel diversions that could otherwise result in a cumulatively significant contribution to adverse effects on the aquatic habitat of the South Fork Eel River during the dry season:

- The applicant shall install additional non-potable water storage facilities on the site for irrigation and as a source of fire suppression water for the Main Agricultural and Forestland areas.
- Diversion from the South Fork Eel River infiltration gallery shall cease when the flow at Sylvandale (USGS Gauge #11476500) is nominally less than 30 cfs, contingent on calculation of a more robust metric.
- Staff will track streamflow at Sylvandale (USGS Gauge #11476500), available from USGS website) between July 1st and October 31st. If streamflow drops below 40 cfs, streamflow data will be checked daily before diverting water from the South Fork Eel River infiltration gallery for sports field irrigation. No diversion from the South Fork Eel River infiltration gallery will occur when the collected streamflow data shows the flow at Sylvandale (USGS Gauge #11476500) is less than 30 cfs.
- The LSAA with the CDFW requires that streamflow be measured prior to any diversion if water is diverted between July 1 and October 31. Measurements shall be taken at USGS Gauge 11476500.
- A report consisting of streamflow measurements and diversion data will be submitted annually on December 31st to the Planning Director and the CDFW. The report shall also assess the effectiveness of the mitigation measure, and make recommendations for increasing the efficacy of the mitigation, if needed. This report shall be subject to the approval of the Planning Director in consultation with the CDFW.
- The applicant shall seek funding to install additional water storage tanks and other on-site facilities to improve availability during the dry season. The additional water storage capacity can be defined as part of the Adaptive Management Plan, and preferably implemented in conjunction with construction of the future sports fields. Depending on the location selected for these tanks and other storage facilities, additional environmental review may be required. Any necessary environmental review shall be conducted before the facilities are installed.
- The Southern Humboldt Community Park is a senior water rights holder on the South Fork Eel River. Complying with any and all agreements to conserve water in an effort to protect fish and wildlife during periods of prolonged drought has no effect on existing senior water rights.

The combination of the measures above would reduce the project's contribution to the cumulative impact to less than significant. (LTS)

REFERENCES

- California Department of Fish and Game (CDFW), 2010. *Notice of Preparation for the Southern Humboldt Community Park (SCH#2010092037)*, letter to Mr. Michael Richardson, Senior Planner, Humboldt County Planning and Building Department from Neil Manji, Regional Manager, October.
- California Exotic Pest Plant Council, 2006. *The CalEPPC List: Exotic Pest Plants of Greatest Ecological Concern in California*, March.
- Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*. Website <http://humboldtgov.org/DocumentCenter/View/4363>.
- J. B. Lovelace & Associates, 2012. *Special-Status Wildlife Survey Report*, Southern Humboldt Community Park, December.
- Mad River Biologists, 2002. *Southern Humboldt Community Park Feasibility Study*, prepared for Southern Humboldt Working Together, Incorporated, November.
- Pacific Watershed Associates, 2015. *Independent Review of Southern Humboldt Community Park Water Supply and Demand Analysis and Potential Impacts on Surface Water and Aquatic Habitat*. Memo to Kathryn Lobato, Southern Humboldt Community Park from Brad Job, P.E., Senior Civil Environmental Engineer, November 24.
- Wear, K.S., 2011. *Botanical Survey, Wetland Delineation, and Stream Assessment Results, Southern Humboldt Community Park*. Prepared for Southern Humboldt Community Park, October.

4.5 CULTURAL RESOURCES

INTRODUCTION

This section evaluates the proposed project's potential impacts on cultural resources. Cultural resources are sites, buildings, structures, objects, and districts that may have traditional or cultural value due to their historical significance. Cultural resources in the project site consist of prehistoric archaeological sites, historical archaeological sites, and historical buildings and structures associated with the Wood/Tooby Ranch Complex. The California Environmental Quality Act (CEQA) requires that effects on cultural resources by projects subject to discretionary action be considered in the planning process.

This section describes existing cultural resources conditions at the project site and the pertinent state and local laws and regulations related to cultural resources. Potentially significant impacts that could result from the proposed project are described and mitigation measures to reduce these impacts to less-than-significant levels are identified, as appropriate.

The following reports were prepared for the project site and, along with other references listed at the end of this section, were used to identify the baseline conditions for cultural resources in the analysis:

- Van Kirk et al., 2001. *A Cultural Resources Investigation of the Proposed Community Park at Tooby Flat, Garberville, Humboldt County, California.*
- Verwayen and Whiteman, 2008. *A Cultural Resources Management Plan for the Southern Humboldt Community Park.*

ENVIRONMENTAL SETTING

The prehistoric, ethnographic, and historical contexts for the project site and vicinity are summarized below.

PREHISTORY AND ETHNOGRAPHY OF PROJECT SITE AND VICINITY¹

Native Americans inhabited the region that encompasses the project site for millennia before the arrival of white settlers, including tribes such as the Wailaki, Lassik, Nongatl, and Sinkyone. These tribes traditionally lived near the Eel River and its tributaries, which, with its abundant plant and animal life, supported many villages along its banks.

Archaeological studies have provided insight into some of the major environmental and archaeological trends within the region over the past 8,000 years. The archaeological sequence for the region is divided as the Paleoindian Period (13,500 to 8,500 B.P.); the Archaic Period, which is

¹ The prehistory, ethnography, and historical settings are adapted from Van Kirk et al. (2001) and Verwayen and Whiteman (2008).

subdivided as the Lower Archaic (8,500 to 5,000 B.P.), Middle Archaic (5,000 to 2,500 B.P.), and Upper Archaic (2,500 to 1,100 B.P.); and the Emergent Period.

Native American sites from the Paleoindian Period occur in coastal and interior wetlands. Characteristic artifacts of this period include large, lanceolate, concave-base, fluted projectile points and chipped stone crescent tools. Subsistence adaptation during this period was highly mobile hunting and plant gathering within lacustrine or coastal habitats. Exchange between groups presumably took place on an individual, one-to-one basis, with social groups not being heavily dependent upon exchange.

The Lower Archaic Period is characterized as generalized hunting and gathering by small, highly mobile family groups. Lower Archaic assemblages include wide-stem projectile points, handstones and milling-slabs, ovoid and domes scrapers (usually chert), and cobble spalls, handstones and milling-slabs.

During the Middle Archaic Period, land and resource use was oriented toward low-elevation villages along salmon-bearing streams near acorn crops and occupied by larger concentrations of people during the winter months. During this period, storage facilities, particularly for fish and acorns, were developed to feed the population during the lean winter months. The variety and productivity of upland resources declined, whereas annual salmon runs were more productive and reliable in local rivers. Middle Archaic assemblages are marked by a greater variety of small projectile point forms and greater reliance on mortars and pestles (associated with acorn processing) over milling-slabs and handstones.

During the Upper Archaic Period, the growth of sociopolitical complexity is evidenced by development of status distinctions based upon wealth, and emergence of group-oriented religions. Obsidian became the preferred toolstone in many parts of the central North Ranges, often manifested by an elaborate obsidian biface reworking industry. This is seen as reflecting greater complexity of exchange systems characterized by occurrence of regular, sustained exchange between groups. Upper Archaic assemblages include large, side- and corner-notched projectile points, medium-to-large, shouldered lanceolate points, and leaf-shaped points. Mano-metate grinding technology is replaced by bowl mortars and pestles. During the early Late Holocene, non-utilitarian features and artifacts (e.g., beads, pendants, and rock art) begin to appear. In particular, shell beads become an important grave-good artifact² and may be indicators of sustained exchange and social status differentiation.

The Emergent Period in northwest California is characterized by complex hunter-gather populations that relied heavily on marine and/or riverine resources; these populations are ethnographically linked to the Wiyot, Yurok, Tolowa, and other north-coast tribes. Populations were concentrated in permanent villages around Humboldt Bay and coastal lagoons, along the coast, and adjacent to the major rivers. Significant traits include a well-developed wood-working technology, riverine fishing specialization, wealth consciousness, and distinctive artifact types including zoomorphs, large obsidian ceremonial blades, antler spoons, steatite bowls and pipes, and small "Gunther Series" projectile points. Trade is documented both archaeologically and ethnographically, with exchange relationships reaching north to Vancouver Island for Dentalium

² Grave-good artifacts can include *Olivella* shell beads, abalone ornaments, and tools made of obsidian and chert.

shells, east to the Warner Mountains and Medicine Lake Highlands for obsidian, and south to the San Francisco Bay region for clam shell disc beads.

Based on interviews by anthropologists with local Native Americans during the early 20th century, the area that is now the Southern Humboldt Community Park was the Sinkyone village site of *Kunteltcobi* or *Ken-tes-chang tahng-ah-te* (Baumhoff, 1958:190). More recently, when asked about the project site, Wailaki Elder Fred "Coyote" Downey reported the community park flat had been used as a Native American stickball court for games and thought that the use of the park flat for ball fields was appropriate to the site's history as it resembles indigenous people's use for ball games throughout the area.

HISTORY OF PROJECT SITE AND VICINITY

With the arrival of early white settlers, many changes occurred including the displacement of the indigenous people. Some were sent to distant reservations, such as Round Valley. Early pioneers routinely kidnapped and raised young Native American children as workers, and young kidnapped women were often kept as unwilling wives.

James E. Wood and Peter J. Wood were among the early settlers and where the first known white family to occupy the project site. The brothers came to the southern Humboldt area to establish homesteads and raise families. Both brothers had wives of native origins who bore them sons. James Wood's son, Wilson Wood, was born at Wood Ranch—which includes the project site—in 1866. While little is known of Wilson's mother, Nellie Woods, local stories suggest that she is buried on the project site. Wilson Wood is listed in the 1900 Federal Census as Wailaki. In 1870, James E. Wood married his second wife, Lucy. Together they had 17 children. At the time of Lucy's death in 1934, she left behind 69 grandchildren, 65 great grandchildren and one great, great grandchild.

As white settlers arrived in large numbers to southern Humboldt County and began to acquire and settle large portions of the land for ranching, more native people lost their way of life. Land ownership combined with ranching practices was highly destructive to the native ways and undermined native people's ability to provide for themselves.

Wood Brothers

In the years between 1872 and 1888, Peter J. Wood and James E. Wood began acquiring land in southern Humboldt County. At the time, settlers who inhabited and improved lands were given grants of public lands under Preemption Laws. Once the settler erected a dwelling and paid the fee of \$1.25 per acre, they were awarded a patent on the land that could be sold at market value. By 1888, the Wood brothers had either settled or purchased nearly 10,000 acres. Tax assessments show that the brothers were well on their way to developing a major livestock business, which included sheep, horses, mules, and hogs.

However, an 1882 tax assessment shows that the brothers had been financing their purchases with mortgages. As their land holdings and ranching operations grew in size, their financial position became tenuous. Fully aware of their predicament, they sold 9,681 acres to the mortgage holder, a businessman named James W. Henderson, for \$10,000 in 1896. In 1897, Henderson leased the

ranch and its livestock to Harry Hurlbutt. There also was an orchard on the ranch and equipment for processing and drying fruit for market. The 1897 lease agreement included many farming implements, but it is clear that, at that time, farming was subordinate to the livestock operation.

Tooby Brothers

In 1910, Henderson sold the ranch to Ernest Norton Tooby ($\frac{1}{2}$ interest), Frank H. Tooby ($\frac{1}{4}$ interest) and William G. Dauphiny ($\frac{1}{4}$ interest). The Tooby brothers and Dauphiny formed a corporation—Western Live Stock Company—and the ranch was part of the corporation. The ranch remained under that name until the corporation dissolved in 1967. The ranch remained in the Tooby family, in the names of Ernest Norton's children Arthur J. and Florence Tooby, with partner Harold Prior having a 12 percent ownership. Arthur Tooby managed the ranch, and the Tooby family retained ownership until its sale in 2000.

In 2000, the Southern Humboldt Community Park raised more than \$600,000 in community donations for the purchase of a 452-acre portion of Tooby Ranch. This land has been operated as a community park since the purchase. Currently, there are 11 buildings on the project site, 9 of which are of historical significance (Van Kirk et al., 2001). These historical buildings—as described under “Project Site Cultural Resources” below—serve as good examples of vernacular, utilitarian architecture due in part to their long association with ranching and farming operations at the site.

PROJECT SITE CULTURAL RESOURCES

Roscoe and Associates completed two cultural resource studies for the community park in 2001 and 2008 (Van Kirk et al., 2001; Verwayen and Whiteman, 2008). In 2001, Van Kirk et al. conducted a cultural resource investigation of the project site, which was designed to (1) identify all archaeological resources or sites of ethnic significance, (2) perform preliminary significance evaluations of identified cultural resources, (3) assess potential adverse effects to cultural resources, and (4) provide recommendations to reduce or eliminate adverse impacts on significant cultural resources. In 2008, Verwayen and Whiteman prepared a Cultural Resources Management Plan (CRMP) for the community park to identify existing and potential impacts on cultural resources identified in Van Kirk's 2001 study and provide management recommendations for these resources. The CRMP provides the basis for mitigation measures recommended in this section.

These previous studies identified prehistoric and historical resources on the project site, consisting of three archaeological sites (CA-HUM-316, CA-HUM-1257/H, and CA-HUM-1267/H) and the Wood/Tooby Ranch Complex. These cultural resources are described in greater detail below.

Five additional cultural resource investigations have also been conducted of portions of the current project site, consisting of studies for the Moody Bridge Project (Flynn, 1976, 1977); a proposed community park water intake site for the Garberville Sanitary District (Burns, 2008); a water pipeline installation along Kimtu Drive for the Kimtu Meadows Mutual Water Company (Roscoe, Rich, and Verwayen, 2008); and an *Arundo donax* removal project at Tooby Memorial Park for the Department of Fish and Game (Salisbury and Roscoe, 2012). Flynn (1976, 1977) identified prehistoric archaeological site CA-HUM-316 within the current project site, observing midden (culturally modified soil) and artifacts. Roscoe, Rich, and Verwayen (2008) confirmed the presence of prehistoric sites CA-HUM-316 and CA-HUM-1257/H in the current project site. Burns (2008) and

Salisbury and Roscoe's (2012) surveys did not identify cultural resources in the portion of community park included within their study areas.

For the current project, an archaeologist with LSA Associates, Inc. (LSA) conducted an updated records search at the Northwest Information Center (NWIC) at Sonoma State University and a site visit to verify the current conditions of recorded cultural resources in the project site. The baseline conditions for cultural resources in the project site, as determined by previous investigations and LSA, are summarized below.

Historical Architectural Resources

Eleven historic-period buildings were identified on the project site within Areas 2 and 3. All but two of these architectural resources—the Bunkhouse and Oil Storehouse—have historical significance, either individually or as contributing elements of the Wood/Tooby Ranch Complex (Kirk et al., 2001). The Wood/Tooby Ranch has a long history involving two prominent, early families of this area. James and Peter Wood financed the growth of the ranch to just under 10,000 acres when it was sold in 1897. The Tooby family purchased it in 1903 and, until its sale to the applicant, it was a working livestock ranch under family management. Both families and their ranching operation played important roles in the social, cultural, and economic life of the southern Humboldt community. Although none of the buildings appears to date to the original Wood Ranch period of the 19th century, features associated with the Wood's tenure, including a gravesite (described under "Archaeological Resources" below) and fencing, are recorded on the project site.

The Wood/Tooby Ranch Complex is significant under California Register of Historical Resources (CRHR) criteria 1 and 3 for its long association with local ranching operations and as a good example of vernacular, utilitarian architecture. (CRHR criteria are described in greater detail below.) **Figure 4.5-1** contains photographs of the Wood/Tooby Ranch Complex buildings.

The resources comprising the Wood/Tooby Ranch Complex are described below.

Bunkhouse

This one-story house measures 30 feet by 46 feet, including the front porch, which extends across the front of the house and within the roof line. It has a low, side gable roof covered with sheet metal. Entry is through a central door on the porch that is supported by posts and partially walled-in at its northern end. The house has both sliding aluminum and double-sash windows. Siding is v-rustic shiplap. This is a relatively modern house without architectural value.

Oil Storehouse

Sitting alongside the driveway, this hipped-roof building measures 8 by 14 feet, has exposed rafter ends, two entrances and small windows. It has a cement floor, v-rustic shiplap siding and interior work that indicates the use of previously used lumber. . The building appears to be contemporary and lacks architectural value.



Bunkhouse



Cabin



Chicken house



Garage



Haybarn



Horse barn

Figure 4.5-1

WOOD/TOOBY RANCH COMPLEX BUILDINGS



Oil storehouse



Old blacksmith shop



Ranch house



Scale shed



Slaughter house

Figure 4.5-1 (continued)

WOOD/TOOBY RANCH COMPLEX BUILDINGS

Horse Barn

The barn measures 24 feet by 30 feet with a second-story loft. The barn has a steep, front-facing gable roof line, vertical board siding and loft doors on the front and east sides. A large sliding door on the front is of sufficient size to accommodate a modern vehicle. The loft is lit at both gable ends by small, fixed windows with six panes. There appears to be a ground-level door in the rear wall. The interior has a central row of three large posts and wide, rough-wood boards provide the flooring. The loft is accessed by a wall ladder. Like other ranch buildings, the roof is covered with sheet metal. There are no interior features, such as stalls or managers, to indicate past use.

This barn is significant for its simple, vernacular architecture and for its long association with the ranch. It is a noteworthy contributor to the cultural landscape as part of a complex of buildings that, through the years, sustained the day-to-day operations of the ranch.

Cabin

Originally located about 100 yards southwest of its present location, this building was moved in 1987. It now sits at the south end of the main house. An 8-foot addition was built onto the west end of the cabin, so the building now measures 12 by 24 feet. It is a one-story, side-gable building with metal roof, exposed rafter ends, rough, unpainted v-rustic shiplap siding, and modern aluminum windows. A rear door is covered by a free-standing stoop and the front entrance by a porch.

As with the other ranch buildings, little information is available regarding the history of the cabin. However, it is a good example of vernacular, utilitarian construction, erected and adapted to provide housing for ranch workers. It is a contributor to the historical Wood/Tooby Ranch Complex.

Ranch House

The center and primary section of the house faces east and measures roughly 35 by 45 feet, including a 6½-foot-wide front porch that is under the roof line of the house. There are four square posts across the front porch and four sliding aluminum windows. Siding is clapboard and the roof is sheet metal. The south end of the porch has a small enclosure with cove-rustic shiplap siding. On the south wall of the house are two sliding aluminum windows. The rear roof, originally with two pitches, has been raised to create a straight roof line, perhaps to provide more head space in the rooms below. On the north wall is a large, 40-pane fixed window.

Attached to the north end of the house to the west of the big, multi-paned window, are two “cabins.” Joined together at the roof line, they are accessed from the outside by a small, open doorway with steps to the left into the section that is part of the house and to the right into the woodshed. Together they measure almost 37 feet in length and at the north end about 20 feet in width. Clapboard siding, sheet metal roof, exposed rafter ends, and modified windows describe these extensions of the house. On the north wall of the woodshed is an open window that allows for unloading wood into the shed. The rear wall of the woodshed measures 13 feet.

At right angles to the woodshed is another section with a gabled roof and an open porch facing north. Entry into both the woodshed and gabled section is via paneled doors that are 19th century. Siding is clapboard; there is a single porch post, and exposed rafter ends extend beyond the sheet metal roof. The clapboard siding appears to be old; however, the exposed rafter ends are

reminiscent of Craftsman period construction. As with the front porch, this porch is recessed within the roof line and measures about 12 feet in length. The west wall measures 12 feet across and has a small, fixed window with three vertical panes. The south wall has a small square window with six panes. These may be original windows and, if so, suggest the Craftsman period, roughly the late teens and 1920s.

On the west wall of the main house is an enclosed porch that measures 5 by 16½ feet. There are several fixed windows: two eight-pane vertical windows and a four-pane window on the west wall, along with the door which has an upper pane of glass. On the south wall is another fixed window of eight panes. This enclosure has both cove-rustic and clapboard siding and exposed rafter ends, and also recalls the Craftsman period. The rear wall of the main house measures 40 feet from the enclosed porch to the end of the house. It has cove-rustic shiplap siding and four sliding aluminum windows.

This house is an interesting mix of sections and materials, indicating enlargement of the original house with possibly moved-in additions, new construction, and the use of recycled lumber. Because the house is such a hodgepodge, it is not possible to use style or architectural features to date either the main house or its additions. Window styles are often used to date houses, particularly vernacular housing, but in this case, modern aluminum windows have replaced the original feature. However, the fixed, multi-paned windows in the enclosed porch and gabled section at the rear suggest Craftsman period construction, as do the exposed rafter ends. On the other hand, siding on the house includes clapboard, an early type of cladding in Humboldt County; cove-rustic shiplap, often found on 19th-century houses; and v-rustic shiplap that is late 19th and 20th-century siding. It is difficult to determine what is original and what is recycled.

Regardless of complexity of styles and materials, the house exemplifies a utilitarian resourcefulness embraced in rural areas. It has served well the various ranch families and workers over the years. Houses like this one, along with their associated agricultural buildings, are rapidly disappearing from the Humboldt County landscape, which contributes to the significance of this well-preserved example of rural, vernacular architecture.

Garage

Located at the northwest corner of the Ranch House, the garage measures 18½ feet by 24½ feet. It is a side-gabled structure with metal roof and exposed rafter ends. A large sliding door on the front provides access to the floored interior. It has a combination of sidings: cove-rustic shiplap across the front and clapboard on the side. The north end of the garage has a small, fixed window of six panes. This building should be considered part of the historical Ranch House and is a contributor to the ranch complex as a whole.

Chicken House

This farm building measures roughly 18 by 24 feet with vertical board siding and a gabled roof covered with sheet metal. Three doors on the east side access a feed room. Like the other unpainted ranch buildings, the siding has weathered to a rich brown. This building is a significant component of the historical Wood/Tooby Ranch Complex.

Old Blacksmith Shop

Originally used as a blacksmith shop, the building now contains two box stalls and a tack room. A roof extension on the west covers an open area that connects the stalls and a corral at the rear. The building has a gable roof, covered with sheet metal, and vertical board and some board-and-batten siding. It measures 24 by 26 feet, including the 12-foot-wide covered area open at the ends and fenced with boards on the west. This building is a contributor to the historical Wood/Tooby Ranch Complex.

Hay Barn

This large building measures 60 by 72 feet. From its ridge, the roof sweeps down to approximately 12 feet from the ground. At the two peaks, hay hoods cover loft doors and the pulley mechanism for loading hay into the loft. Covered with sheet metal and extending beyond exposed rafter ends, the roof dominates the building. On the east wall is a large, hinged loft door that opens downward, several smaller doors into the loft, and a gated drive-through that runs the length of the barn and exits through another gate on the west wall. Two small cutout windows and gate access to the drive-through are located on the south wall. The west wall has another large loft door beneath the hay hood, sliding doors, and the gated drive-through. The barn has a cement floor and enclosures provide space for a feed room and a tack room. Outside the barn on the west are corrals and chutes used for working cattle.

The hay barn is of modern construction; however, it is a vital component in the ranch complex and central to its operation, along with the corral and chute system. It is, therefore, a contributing element to the historical Wood/Tooby Ranch Complex.

Scale Shed

Connected to the corral and chute system at the rear of the barn is a 17- by 19-foot building that houses scales. It has a gabled roof, vertical board siding, and gated openings at both ends. The chute-like scales occupy nearly all the interior space. Since recorded in 2001 by Van Kirk et al., the sheet metal roof covering has been removed as well as some of the vertical board siding. As such, this building's integrity has diminished somewhat since last recorded 13 years ago. For purposes of this analysis, however, the scale shed is considered a contributing element to the historical Wood/Tooby Ranch Complex.

Slaughter House

This building is in poor condition and is generally in a state of disrepair, with much of the siding and roof covering gone. It measures 14 by 20 feet, and has a cement floor and lower wall, and an overhead mechanism for hanging and moving the carcasses. There is a large door on the north end. Although the building's integrity of materials and workmanship are compromised, for purposes of this project, the slaughter house is considered a contributing element to the historical Wood/Tooby Ranch Complex.

Fencing

Van Kirk et al. (2001) and Verwayen and Whiteman (2008) note a section of old fencing along the southern edge of the flat where the trees begin in Area 4. This picket and wire fence is reminiscent of rural fencing in Humboldt County's early days. The 1897 lease from James Henderson to Harry Hurlbutt specified that the lessee could expend money for the construction of fence, which was to be "constructed of large and strong posts set not to exceed a distance of 10 feet apart. Pickets at least 4 feet in height shall then be fastened by double strands of wire at top and bottom and a barbed wire shall then be stretched over all."

This fencing on the project site is a contributing element of the historical Wood/Tooby Ranch Complex and may be one of the few extant structures associated with the 19th-century Wood family ownership of the ranch.

Archaeological Resources and Paleontological Resources

Three archaeological sites are recorded on the project site and are described below.

To identify paleontological resources (fossils) in the project site, a search of the University of California Museum of Paleontology (UCMP) online fossil locality database was conducted. The purpose of the search was to assess the potential for the geological units underlying the project site to contain fossils.

Fossils have been identified in Humboldt County in Pleistocene sediments (UCMP, 2014). Pleistocene-age fossils in Humboldt County typically represent marine organisms, including a variety of bivalves, gastropods, and foraminifera. A Columbian mammoth, however, has also been identified in Pleistocene deposits in Humboldt County (UCMP, 2014). Holocene and Pleistocene deposits underlie the project site north of slopes bordering the southern third of the Community Park. Holocene deposits are too recent to contain significant fossils, although Pleistocene (~2.6 million to 10,000 years before present) deposits have the potential to contain fossils.

CA-HUM-316

CA-HUM-316 is a prehistoric archaeological site measuring approximately 21 meters long by 20 meters wide. This site was originally recorded in 1976 during an archaeological survey conducted for the Moody Bridge replacement project. Flynn's (1976) report indicates midden soil and artifacts, including a "Gunther Barbed" projectile point and a chert chopper. In 1977, an archaeological excavation was conducted at CA-HUM-316 that identified "a firepit feature and a fitted-stone pavement" (Flynn, 1977). Based on Flynn's findings, she recommended that the site be nominated to the National Register of Historic Places.

Archaeologists with Roscoe and Associates visited CA-HUM-316 in 2001 and observed five chert flakes, a flake tool, and fire-affected rock on the surface of this site. Currently there are no community park trails or other recreational facilities at this location, and brambles and poison oak make the site relatively inaccessible.

CA-HUM-1257/H

CA-HUM-1257/H is a prehistoric archaeological site, with possible historic-period components, measuring approximately 750 meters long by 100 meters wide. The site was recorded during the cultural studies completed for Community Park (Van Kirk et al., 2001; Verwayen and Whiteman, 2008). The site includes a scatter of chert flakes, projectile points, a chert scraper, a pestle, a mortar fragment, rock cairns, and a possible stone-lined hearth. It is speculated that the cairns may represent human burial cairns (Van Kirk et al., 2001; Verwayen and Whiteman, 2008), although it is possible these also represent rock concentrations created during field or trail clearance to allow for agricultural uses of the property. .

Currently, recreational trails for hiking and biking, and modern structures are present at this site.

CA-HUM-1267/H

CA-HUM-1267/H is a historic-period archaeological site measuring approximately 28 meters long by 43 meters wide. The site was recorded during the cultural studies completed for the Community Park (Van Kirk et al., 2001; Verwayen and Whiteman, 2008). The site consists of the circa 1867 rock cairn and grave of Nellie Woods, a Wailaki who was married to James Wood; two ceramic fragments; timber piles; and an engineered flat with railroad ties, possibly representing the foundation of a former structure.

When recorded in 2001, Ms. Woods' gravesite was marked with a wood sign that read, "In Memory of Nellie Woods, a Wailaki Indian" (Van Kirk et al., 2001). Currently, there is no authorized trail or recreational uses at this location, and the sign reported in 2001 is no longer present.

REGULATORY FRAMEWORK

FEDERAL REGULATIONS

No federal regulations relative to cultural resources would be applicable to the proposed project.

STATE REGULATIONS

California Environmental Quality Act

CEQA applies to all discretionary projects undertaken or subject to approval by the state's public agencies (California Code of Regulations [CCR] Title 14(3) Section 15002(i)). Under the provisions of CEQA, "A project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment" (CCR Title 14(3) Section 15064.5(b)).

CEQA Guidelines Section 15064.5(a) defines a "historical resource" as a resource that meets one or more of the following criteria:

- Listed in, or eligible for listing in, the California Register of Historical Resources;

- Listed in a local register of historical resources (as defined at Public Resources Code (PRC) Section 5020.1(k));
- Identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code; or
- Determined to be a historical resource by a project's lead agency (CCR Title 14(3) Section 15064.5(a)).

A historical resource consists of "Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California...Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing in the California Register of Historical Resources" (CCR Title 14(3) Section 15064.5(a)(3)).

If an impact on a historical or archaeological resource is significant, CEQA requires feasible measures to minimize the impact (CCR Title 14(3) Section 15126.4 (a)(1)). Mitigation of significant impacts must lessen or eliminate the physical impact that the project would have on the resource. Generally, the use of drawings, photographs, and/or displays does not mitigate the physical impact on the environment caused by demolition or destruction of a historical resource. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate impacts to less-than-significant levels (California Office of Historic Preservation, 2001:9; see also CCR Title 14(3) Section 15126.4(a)(1)).

California Register of Historical Resources

Section 5024.1 of the PRC established the California Register of Historical Resources (CRHR). Generally, a resource is considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (CCR Title 14(3) Section 15064.5(a)(3)). For a cultural resource to qualify for listing in the CRHR, it must be significant under one or more of the following criteria:

Criterion 1: Associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

Criterion 2: Associated with the lives of persons important in our past;

Criterion 3: Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

Criterion 4: Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to being significant under one or more of these criteria, a resource must retain enough of its historic character and appearance to be recognizable as a historical resource and be able to convey the reasons for its significance (CCR Title 14 Section 4852(c)). Generally, a cultural resource must be 50 years or older to be eligible for the California Register of Historical Resources.

In addition to meeting one or more of the significance criteria, a cultural resource must retain its historical integrity to be considered eligible for listing in the California Register of Historical Resources. Historical integrity is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance” (California Office of Historic Preservation, 2006). The evaluation of integrity must be grounded in an understanding of a resource’s physical features and its environment, and how these relate to its significance. There are seven aspects of integrity to consider when evaluating a cultural resource—location, design, setting, materials, workmanship, feeling, and association (National Park Service, 1997:44-45)—which are described as follows:

- *Location* is the place where the historic property was constructed or the place where the historic event occurred. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons.
- *Design* is the combination of elements that create the form, plan, space, structure, and style of a property. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.
- *Setting* is the physical environment of a historic property. Setting refers to the character of the place in which the property played its historical role. Physical features that constitute the setting of a historic property can be either natural or manmade, including topographic features, vegetation, paths or fences, or relationships between buildings and other features or open space.
- *Materials* are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- *Workmanship* is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of the artisan’s labor and skill in constructing or altering a building, structure, object, or site.
- *Feeling* is a property’s expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property’s historic character.
- *Association* is the direct link between an important historic event or person and a historic property.

California Public Resources Code Section 5097.5

California Public Resources Code Section 5097.5 prohibits excavation or removal of any “vertebrate paleontological site...or any other archaeological, paleontological or historical feature, situated on public lands, except with express permission of the public agency having jurisdiction over such lands.” Public lands are defined to include lands owned by or under the jurisdiction of the state or any city, county, district, authority or public corporation, or any agency thereof. Section 5097.5 states that any unauthorized disturbance or removal of archaeological, historical, or paleontological materials or sites located on public lands is a misdemeanor.

California Health and Safety Code Section 7050.5

Section 7050.5 of the California Health and Safety Code states that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the remains are discovered has determined whether or not the remains are subject to the coroner's authority. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Native American Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods.

LOCAL REGULATIONS

Humboldt County General Plan

The Humboldt County General Plan is a long-range statement of public policy for the use of public and private lands within the unincorporated areas of Humboldt County, including the project site. These public policies establish a generalized pattern of land use for a 20-year period, which is the foundation of more detailed implementation. According to the goal stated in Section 3530, the General Plan policies regarding cultural resources are established "To provide for the protection and enhancement of cultural resources for the historic, scientific, educational, and social contributions they render to the present generation and to generations that follow." These policies are stated in Section 3531 and consist of the following:

1. *Cultural resources (including but not limited to archaeological, paleontological and architectural sites, grave sites and cemeteries) shall be identified where feasible, assessed as to significance, and if found to be significant, protected from loss or destruction.*
2. *Concerned citizens, historical organizations and applicable agencies shall be consulted during project review for the identification and protection of cultural resources.*
3. *Projects located in areas found to have cultural resources shall be conditioned and designed to avoid loss or degradation of these resources.*
4. *Expert opinions and field reconnaissance at the applicant's expense may be required during environmental assessment to determine the presence, extent, and condition of cultural resources and the likely impact upon such resources.*
5. *Archaeological and paleontological resources shall not be knowingly destroyed or lost through a discretionary action unless (1) the site or resource has been found to be of insignificant value by relevant experts and representatives of the cultural resources community, or (2) there is an overriding public benefit from the project, an compensating mitigation to offset the loss is made part of the project.*
6. *Mitigation measures shall be required where new development would adversely impact archaeological or paleontological resources.*

Community Plan

The Garberville/Redway/Alderpoint/Benbow Community Plan acknowledges the archaeological sensitivity of this area, stating that “Archaeological sites have been identified...along the lower river terraces of the planning area” (County of Humboldt, 1987). Consistent with the Humboldt County General Plan, Section 3500 of the Community Plan includes a policy that impacts on archaeological sites be avoided or a significance determination and—as appropriate—mitigation carried out.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section describes cultural resource impacts that could result from implementation of the proposed project. This section begins with the criteria of significance, which establish the thresholds for determining whether an impact is significant. The latter part of this section presents the less-than-significant and potentially significant impacts that could result from project implementation. Mitigation measures are identified to avoid, minimize, or mitigate such impacts, where warranted.

SIGNIFICANCE CRITERIA

The proposed project would have a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geological feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

LESS-THAN-SIGNIFICANT IMPACTS

No paleontological resources (fossils) or unique geological features would be affected by the project. Holocene and Pleistocene terrace deposits are mapped north of slopes bordering the southern third of the project site (McLaughlin et al, 2000). Although fossils have been identified in Pleistocene deposits in Humboldt County, these resources—if present—would likely underlie soil and Holocene sediment at a considerable depth. The project includes proposed construction that would result in earth-moving activities, including new bathroom facilities; entrance and driveway upgrades; new fencing for livestock security, public safety, and protection of riparian areas; and new trails. The proposed construction, however, does not involve deep, extensive excavations that have the potential to unearth significant fossils that may be associated with Pleistocene deposits. The project therefore would not directly or indirectly destroy a unique paleontological resource or geological feature.

POTENTIALLY SIGNIFICANT IMPACTS

This section addresses the potentially significant impacts on historical resources, archaeological resources, and human remains and recommends mitigation measures.

Impact CULTURAL-1: The project could cause a substantial adverse change in the significance of the Wood/Tooby Ranch Complex, a historical resource as defined in CEQA Guidelines Section 15064.5. Remodeling contributing properties to the Wood/Tooby Ranch Complex could cause a substantial adverse change in the significance of this resource. (PS)

Portions of the ranch house, cabin, and garage may be remodeled to accommodate new uses in addition to residential uses. Use conversion may include physical alterations to these buildings to accommodate offices, meeting spaces, a community kitchen, restrooms, and reconfigured residential uses. These three buildings are contributors to the Wood/Tooby Ranch Complex, a resource that appears eligible for listing under CRHR criteria 1 and 3 for its association with early 20th-century local ranching operations and as a good example of vernacular, utilitarian architecture. Pursuant to CEQA Guidelines Section 15064.5(a)(3), "Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources." Remodeling and reconfiguring buildings associated with the Wood/Tooby Ranch Complex have the potential to materially alter in an adverse manner those physical characteristics that justify its inclusion in the CRHR.

Mitigation Measure CULTURAL-1: Any remodel, reconfiguration, or rehabilitation of the ranch house, cabin, garage, or other contributing buildings to the historical Wood/Tooby Ranch Complex by the project shall be conducted in accordance with the Secretary of the Interior's Standards for Rehabilitation (Standards) and undertaken with the assistance of an individual meeting the Secretary of the Interior's Professional Qualifications Standards for historic architecture (qualified architect). The qualified architect shall review the applicant's plans for work on the Wood/Tooby Ranch Complex buildings and provide written recommendations to the applicant and County to ensure that modifications to historical buildings are done in compliance with the appropriate standards. The qualified architect shall oversee remodeling, reconfiguration, or rehabilitation of the historical buildings to ensure that work is done in compliance with the standards. The County shall ensure that the recommendations of the qualified architect are followed as a condition of project approval. (LTS)

Impact CULTURAL-2: The project could cause a substantial adverse change in the significance of archaeological resources, resulting from construction-related ground disturbance. Also, increased use of and visitation to the property from public and private events as well as recreational uses have the potential to result in incidences of vandalism of resources, unauthorized collection of archaeological materials, and trampling of archaeological deposits. (PS)

Three archaeological sites are recorded at the project site. Although no project ground disturbance is proposed at or within the boundary of these three sites, intensified use of the community park may occur and could result in indirect impacts on archaeological resources. Such indirect impacts could occur from an increase in general agricultural use, including grazing; mid-size to festival-size events accommodating between 800 and 5,000 persons; and recreational trail and track

construction. Collectively, these activities could result in increased exposure of archaeological deposits to trampling, surface collection, and vandalism.

Furthermore, project ground disturbance would occur from grading or trenching for proposed infrastructure upgrades and recreational facilities, which could unearth previously unidentified archaeological deposits or human remains. Trenching for proposed potable and irrigation lines, for example, would occur near archaeological sites CA-HUM-1257/H and CA-HUM-1267/H. To avoid direct impacts on these known archaeological resources, the project would construct the water lines outside of the recorded boundaries of these resources. Also, trenching for the proposed water lines would mostly occur within existing roads, which have a reduced potential for intact archaeological deposits due to previous disturbance. Despite these avoidance measures, however, the potential to unearth subsurface archaeological deposits during project trenching cannot be ruled out. Prehistoric materials that could be encountered include obsidian and chert flakes or chipped stone tools, grinding implements (e.g., pestles, handstones, mortars, slabs), bedrock outcrops and boulders with mortar cups, locally darkened midden, deposits of shell, dietary bone, and human burials. Historical materials that could be encountered include ceramics/pottery, glass, metal, can and bottle dumps, cut bone, barbed wire fences, building pads, structures, and trails/roads. Implementation of Mitigation Measures CULTURAL-2a and CULTURAL-2b would reduce the potential impact on archaeological resources to a less-than-significant level.

Mitigation Measure CULTURAL-2a: The Site Monitoring and Protection Protocols described in the Community Park Cultural Resources Management Plan (Verwayen and Whiteman, 2008) shall be implemented for the project. These monitoring and protection protocols include the following:

1. **Placement of Protective and/or Interpretive Signs:** Signs shall be placed at strategic locations in the community park—such as near restrooms, at kiosks, and at trailheads—prohibiting surface collection of artifacts or digging in archaeological sites.
2. **Site Patrols:** Community park staff shall routinely patrol archaeological resources, particularly during mid-size and festival-size events, to ensure that visitors remain on designated trails and away from archaeological deposits. Community park staff shall maintain a record of archaeological site inspections, including the date of inspection, observed damage or sources of potential damage (e.g., volunteer trails or cattle grazing) to archaeological resources. At its discretion, the County may request a copy of the inspection record(s) from the applicant. If damage or sources of potential damage to archaeological resources is observed, community park staff shall implement site-specific measures to mitigate or prevent further damage. Such measures may include fencing to prevent incursion on archaeological deposits, signs requesting that visitors stay on designated trails, and planting of dense vegetation near archaeological resources to reduce the potential for site incursion.
3. **Fencing:** A fence or section of fence shall be used to direct foot traffic away from archaeological resources on the project site. Temporary chain-link fencing or construction fencing could be used to keep people off archaeological sites during mid-size and festival-size events.
4. **Archaeological Survey:** Prior to project ground disturbance within 100 feet of a recorded archaeological resource, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards shall conduct a survey to ensure that archaeo-

logical deposits would not be affected by the project. If an archaeological deposit is identified during the survey, project activities shall be redirected to avoid the deposit. If project activities cannot be redirected, the archaeological deposit shall be evaluated and mitigation carried out, as appropriate. Such mitigation may include a controlled excavation to recover archaeologically and historically significant information as well as public outreach and interpretation.

Mitigation Measure CULTURAL-2b: Prior to project approval, the County shall ensure that the following compulsory specification be included in the project construction contract plans:

If cultural resources greater than 50 years old, such as chipped or ground stone, historical debris, building foundations, or bone are discovered during project ground disturbance, work shall be stopped within 20 meters (66 feet) of the discovery. Work near the archaeological finds shall not resume until a professional archaeologist has evaluated the materials and offered recommendations for further action.

The combination of the two measures above would reduce this impact to a less-than-significant level. (LTS)

Impact CULTURAL-3: The project could disturb human remains interred outside of formal cemeteries. The project site includes one historical grave (CA-HUM-1267/H) and a prehistoric site with possible Native American human remains (CA-HUM-1257/H). Furthermore, previously unrecorded human remains, either in isolation or in association with archaeological deposits, may be unearthed during project ground disturbance. (PS)

The project site includes the circa 1867 grave site of Nellie Woods (CA-HUM-1267/H), and possible grave sites have been observed at CA-HUM-1257/H during an archaeological survey of the property (Van Kirk et al., 2001). Although no project ground disturbance is proposed at or near known or potential grave sites, intensified use of the community park may occur from project implementation and could result in indirect impacts on archaeological resources containing human remains. Implementation of Mitigation Measures CULTURAL-2a and CULTURAL-2b, and compliance with Section 7050.5 of the California Health and Safety Code, would reduce this potential impact to a less-than-significant level.

Mitigation Measure CULTURAL-3: Refer to Mitigation Measures CULTURAL-2a and CULTURAL-2b. Implementation of Mitigation Measures CULTURAL-2a and CULTURAL-2b would reduce this potential impact to human remains by (1) establishing controls and protocols that would decrease the likelihood of public intrusion or destruction of archaeological resources containing human remains, i.e., through the use of signs, site patrols, and temporary fencing; and (2) establishing notification procedures for construction personnel in the event that archaeological resources and/or human remains are identified during project implementation. (LTS)

CUMULATIVE IMPACTS

The proposed project would have a significant effect on the environment if it—in combination with other past, current, or reasonably feasibly foreseeable projects under review by the County—would

contribute to a significant cumulative impact on cultural resources. A significant cumulative impact would occur, for example, if other closely related projects would affect buildings or historical roads associated with the Wood/Tooby Ranch Complex or other similar historical ranch complexes within southern Humboldt County.

Aside from the current project, there are no current or reasonably foreseeable projects planned in the vicinity that would affect the Wood/Tooby Ranch Complex or associated features. A cabin and outhouse possibly associated with the Wood family were identified east of the community park during a survey for the Garberville Sanitary District Water Systems Project (Burns, 2008). This cabin and outhouse may be eligible for listing in the CRHR due to their association with the Wood family. Based on information provided by the County, however, it is not anticipated that current or reasonably foreseeable projects in the vicinity, including the Garberville Sanitary District Water Improvement Project, would affect significant elements of the Wood/Tooby Ranch or other similar historical resources. Therefore, the current project, which would have less-than-significant impacts on historical resources after mitigation, would not contribute to a cumulative effect on historical resources. No mitigation for cumulative impacts to historical resources is required.

The potential disturbance of subsurface cultural resources that may underlie the project site, including archaeological resources and human remains, could make a considerable contribution to a significant cumulative impact in the context of other past, present, or reasonably foreseeable local projects identified by the County. As described above, implementation of appropriate mitigation measures would reduce impacts on these resources through the use of protective signs, regular site patrols, fencing, focused archaeological surveys, and, in the case of human remains, compliance with Section 7050.5 of the Health and Safety Code. The current project would not contribute to a cumulative effect on archaeological resources or human remains, and no mitigation for cumulative impacts on such resources is required.

When development proposals are received by the County in the future, these will undergo environmental review pursuant to CEQA and, when necessary, mitigation measures will be adopted as appropriate. In most cases, this environmental review and compliance with project conditions of approval will ensure that significant impacts on archaeological resources and human remains will be avoided or otherwise mitigated to less-than-significant levels with the recovery and analysis of important information through controlled excavation and reburial of human remains.

REFERENCES

- Baumhoff, Martin A., 1958. California Athabascan Groups. *University of California Anthropological Records* 16(5). Berkeley.
- Burns, Jennifer, 2008. *A Cultural Resources Investigation of the Garberville Sanitary District Water Systems Project Located in Humboldt County, California*. Bayside, CA: Roscoe & Associates.
- County of Humboldt, 1987. *Garberville, Redway, Alderpoint, Benbow Community Plan*. Website <http://www.humboldt.gov/DocumentCenter/Home/View/285>, accessed August 2014.

- Flynn, Katherine, 1976. *Moody Bridge Reconstruction Project, Garberville, California*. Novato, CA: Archaeological Resource Service.
- Flynn, Katherine, 1977. *Archaeological Test Procedures at 4-HUM-316, Tooby Ranch, Garberville—Moody Bridge Project*. Novato, CA: Archaeological Resource Service.
- Fredrickson, David A., 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges, *Journal of California Anthropology* 1:41-54.
- Shibley, William F., 1978. Native Languages of California. In *California*, edited by Robert F. Heizer, pp. 80-90. Handbook of North American Indians, Volume 8, William C. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution.
- Kroeber, Alfred L., 1955. Nature of the Land-Holding Group. *Ethnohistory* 2:303-314.
- Kyle, Douglas E., 2002. *Historic Spots in California*, revised edition, Palo Alto, CA: Stanford University Press.
- McLaughlin, R.J., et al., 2000. *Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern Part of the Hayfork 30 x 60 Quadrangles and Adjacent Offshore Area, Northern California*. Washington, D.C.: U.S. Geological Survey.
- National Park Service, 1997. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*. Washington, D.C.: U.S. Department of the Interior.
- Roscoe, James, William Rich, and Donald Verwayen, 2008. *A Cultural Resources Investigation of the Kimtu Meadows Waterline Project Located near Garberville, Humboldt County, California*. Bayside, CA: Roscoe & Associates.
- Salisbury, Melinda, and James Roscoe, 2012. *A Cultural Resources Investigation of the California Department of Fish and Game Greater Eel River Arundo Eradication Phase II Project (R157), Humboldt County, California*. Arcata, CA: Roscoe & Associates.
- University of California Museum of Paleontology, 2014. UCMP Specimen Search Online Database. Website <http://ucmpdb.berkeley.edu/>, accessed July 2014.
- Van Kirk, Susie, James Roscoe, Bill Rich, and Donald Verwayen, 2001. *A Cultural Resources Investigation of the Proposed Community Park at Tooby Flat, Garberville, Humboldt County, California*, Eureka, CA: Roscoe & Associates.
- Verwayen, Donald, and Erik Whiteman, 2008. *A Cultural Resources Management Plan for the Southern Humboldt Community Park*, Arcata, CA: Roscoe & Associates.

4.6 GEOLOGY AND SOILS

INTRODUCTION

This section describes existing geologic conditions, including geologic and seismic hazards, for the project site; summarizes the applicable regulatory framework; identifies potentially significant geology, soils, and seismicity impacts of the project; and recommends mitigation measures to reduce these impacts to less-than-significant levels.

ENVIRONMENTAL SETTING

The geology, topography, and soils of the project site are described below, along with potential seismic and geologic hazards. Information for this section is drawn from a technical report prepared for the Humboldt County General Plan Update (Humboldt County, 2002), regional geologic reports and maps from the United States Geological Survey (USGS), the California Geological Survey (CGS), the Natural Resources Conservation Service (NRCS), and other public sources.

GEOLOGY

The project site is located within the Coast Range geomorphic province, which is characterized by the folded, faulted, sheared, and altered sedimentary, igneous, and metamorphic rock of the Franciscan Complex. The South Fork Eel watershed, which includes the project site, also contains some Tertiary-Cretaceous Coastal Belt rocks and Cenozoic Sedimentary Rocks (Humboldt County, 2002).

TOPOGRAPHY

The topography of the project site varies from north to south. The northern two thirds of the project site (representing Areas 1-3 and 5-6) is relatively level, with elevations ranging from 350 to 380 feet above mean sea level (amsl) (Huber C&D, 2014). East of this part of the project site, the terrain slopes up to US Highway 101, which is located at an elevation of around 600 to 720 feet amsl. The southern third of the project site (Areas 4 and 7) is characterized by steep slopes, with the elevation ranging from about 400 feet amsl to 854 feet amsl in the southeast corner (Huber C&D, 2014).

SOILS

Soil is generally defined as the unconsolidated mixture of mineral grains and organic material that mantles the land surfaces of the earth. Soils can develop on unconsolidated sediments, such as alluvium, and weathered bedrock. The characteristics of soil reflect the five major influences on their development: topography, climate, biological activity, parent (source) material, and time.

NRCS soil data identify ten different classes of soil at the project site (**Table 4.6-1**). Based on the NRCS data, 36.0 percent of the soils at the site are on slopes of 0 to 9 percent, 13.6 percent of the soils are on slopes of 10 to 30 percent, and 38.6 percent of the soils are on slopes over 30 percent (NRCS, 2014).¹ In general, soils on level parts of the site (Areas 1-3 and 5-6, having less than 10 percent slope) consist of 5 to 6 feet of sandy and silty clay loams, while soils overlying steeper slopes (Areas 4 and 7) consist of 1 to 2 inches of decomposed plant material over several feet of very gravelly loam (NRCS, 2014).

SEISMIC CONDITIONS

The project site is located in the seismically active North Coast area. The main feature generating the seismic activity in the region is the tectonic plate boundaries between the North American, Gorda, and Pacific plates. Three major faults, including the San Andreas, the Mendocino fracture zone, and the southern end of the Cascade subduction zone meet just off shore of the Humboldt County coast (Humboldt County, 2002). Of these faults, the San Andreas is closest to the project site, located approximately 14 miles to the west (CGS, 2010).

Several minor and presumed inactive faults are located closer to the project site. The nearest is a highly-segmented fault referred to as the Garberville, one segment of which is located near the northeast corner of the project site (CGS, 2010). Based on available data, this fault has not shown evidence of surface displacement in over 700,000 years (CGS, 2010). As no significant movement has occurred along this fault in recent history, it would be considered unlikely to be the source of a significant earthquake during the expected life of the project.

SEISMIC AND GEOLOGIC HAZARDS

This section describes the hazards associated with the seismic and geologic conditions and the potential for seismic events on the project site.

Fault Rupture Damage

Surface rupture occurs when the ground surface is broken due to fault movement during an earthquake. As noted above, the nearest active fault to the project site is the San Andreas Fault, located approximately 14 miles to the west. No known active faults or fault rupture hazard zones are present at or immediately adjacent to the project site, and the fault rupture hazard is therefore considered to be very low.

Seismic Shaking

Seismic shaking (or ground shaking) is a general term referring to all aspects of motion of the earth's surface resulting from an earthquake, and is normally the major cause of damage in seismic events. The extent of ground shaking is controlled by the magnitude and intensity of the earthquake, distance from the epicenter, and local geologic conditions. Magnitude is a measure of the energy released by an earthquake; it is assessed by seismographs that measure the amplitude

¹ The numbers do not add up to 100% because 9.8% of the project site area mapped as water (the South Fork Eel River) is excluded.

TABLE 4.6-1 SOIL TYPES AND SLOPES AT THE PROJECT SITE

Soil Type	Approximate	
	Percentage of Area	Slopes
Water and Fluvents	9.8%	0 – 2 %
Garberville-Parkland Complex	5.1%	0 – 2 %
Garberville-Parkland Complex (steeper slopes)	9.5%	2 – 9%
Conklin	5.4%	0 – 2%
Granycreek-Parkland Complex	10.2%	2 – 5%
Pepperwood-Shivelyflat Complex	7.8%	0 – 2 %
Burgsblock-Coolyork-Tanin Complex	9.5%	15 – 30%
Burgsblock-Coolyork-Tanin Complex (steeper slopes)	26.5%	30 – 50%
Tanin-Burgsblock-Rocklyglen Complex	0.4%	50 – 75%
Sproulish-Canoecreek-Redwohl Complex	0.3%	30 - 50%
Canoecreek-Spoulish-Redwohly Complex	12.7%	50 - 75%
Yorknorth-Witherell Complex	4.1%	15 – 30%

Source: NRCS, 2014.

of seismic waves. Intensity is a subjective measure of the perceptible effects of seismic energy at a given point and varies with distance from the epicenter and local geologic conditions. The Modified Mercalli Intensity Scale (MMI) is the most commonly used scale for measurement of the subjective effects of earthquake intensity and is further described in **Table 4.6-2**. Intensity can also be quantitatively measured using accelerometers (strong motion seismographs) that record ground acceleration at a specific location, a measure of force applied to a structure under seismic shaking. Acceleration is measured as a fraction or percentage of the acceleration under gravity (g).

A probabilistic seismic hazard assessment determined that there was a 10 percent chance over the next 50 years of an earthquake in the project vicinity generating a peak acceleration of 0.569g at the project site and a 2 percent chance for an earthquake with a peak acceleration of 1.037g (CGS, 2008). This would correspond to severe to violent perceived shaking (Mercalli Category VIII to IX) which could create severe damage even to well-designed buildings (Table 4.6-2).

Liquefaction

Liquefaction is the rapid transformation of saturated, loose, fine-grained sediment to a fluid-like state because of earthquake ground shaking. In the process, the soil undergoes transient loss of

TABLE 4.6-2 MODIFIED MERCALLI SCALE

M^a	Category	Peak Ground Acceleration (g)	Definition
	I	<0.0017	Not felt except by a very few under especially favorable circumstances.
3	II-III	0.0017-0.014	Felt quite noticeably indoors, especially on upper floors of buildings, but many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibration like passing of truck. Duration estimated.
4	IV	0.014-0.0-0.01439	During the day felt indoors by many, outdoors by few. At night some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
	V	0.039-0.092	Felt by nearly everyone, many awaken. Some dishes, windows, etc., broken; a few instances of cracked plaster; unstable objects overturned. Disturbances of trees, poles, and other tall objects sometimes noticed. Pendulum clocks may stop.
5	VI	0.092-0.18	Felt by all, many frightened and run outdoors. Some heavy furniture moved; a few instances of fallen plaster or damaged chimneys. Damage slight.
6	VII	0.18-0.34	Everybody runs outdoors. Damage negligible in building of good design and construction; slight to moderate in well-built ordinary structures; considerable in poorly built or badly designed structures; some chimneys broken. Noticed by persons driving motor cars.
	VIII	0.34-0.65	Damage slight in specially designed structures; considerable in ordinary substantial buildings, with partial collapse; great in poorly built structures. Panel walls thrown out of frame structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned. Sand and mud ejected in small amounts. Changes in well water. Persons driving motor cars disturbed.
7	IX	0.65-1.24	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb; great in substantial buildings, with partial collapse. Buildings shifted off foundations. Ground cracked conspicuously. Underground pipes broken.
8	X	>1.24	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations; ground badly cracked. Rails bent. Landslides considerable from river banks and steep slopes. Shifted sand and mud. Water splashed (slopped) over banks.
	XI		Few, if any, (masonry) structures remain standing. Bridges destroyed. Broad fissures in ground. Underground pipelines completely out of service. Earth slumps and land slips in soft ground. Rails bent greatly.
	XII		Damage total. Practically all works of construction are damaged greatly or destroyed. Waves seen on ground surface. Lines of sight and level are distorted.

^a Richter magnitude correlation.
Source: CGS, 2002.

strength, which commonly causes ground displacement or ground failure to occur. Areas favorable for liquefaction are generally those with younger soils (less than 15,000 years), where previous liquefaction has occurred during earthquakes and where saturated uncompacted fills are present (Humboldt County, 2002). Within Humboldt County, only areas near Humboldt Bay, underlain by bay muds and sands, have been identified as specific areas of high liquefaction potential (Humboldt County, 2002).

Landsliding

The strong ground motions that occur during earthquakes are capable of inducing landslides, generally where unstable slope conditions already exist. In addition, heavy precipitation events can induce mudflows or debris flows in areas where soils on a hillslope or in a stream channel become saturated and unstable.

Humboldt County's GIS map of historic landslides does not show any landslides on the project site, but does show historic landslides near the northeast corner of the project site, between the project site and US Highway 101 (Humboldt County, 2014). The Garberville Redway Alterpoint Benbow Community Plan has mapped the relatively level portions of the project site (Areas 1-3 and 5-6) as having Low relative slope stability, and the steeper portions of the project site (Areas 4 and 7) as having Moderate relative slope stability (Humboldt County, 1987).

Expansive Soils

Expansion and contraction of volume can occur when expansive soils undergo alternating cycles of wetting (swelling) and drying (shrinking). During these cycles, the volume of the soil changes markedly. As a consequence of such volume changes, structural damage to buildings and infrastructure may occur if the potentially expansive soils were not considered in building design and during construction. As described above, much of the project site is underlain by clayey loams which have the potential for expansion.

Subsidence

Subsidence is the lowering of the land-surface elevation. The mechanism for subsidence is generally related to groundwater pumping and subsequent consolidation of loose aquifer sediments. The primary hazards associated with subsidence are increased flooding hazards and damage to underground utilities. Other effects of subsidence include changes in the gradients of stormwater and sanitary sewer drainage systems in which the flow is gravity-driven. As described in the Hydrology and Water Quality and Utilities sections of this Draft EIR, most of the water for the project is anticipated to be taken from the South Fork Eel River with relatively small volumes of groundwater from existing wells and a spring continuing to be used for existing facilities.

Settlement and Differential Settlement

Differential settlement or subsidence could occur if buildings or other improvements were built on low-strength foundation materials or if improvements straddle the boundary between different types of subsurface materials (e.g., a boundary between native material and fill). Although differential settlement generally occurs slowly enough that its effects are not dangerous to inhabitants, it can cause significant building damage over time. No geotechnical information regarding the potential for differential settlement is available for the project site.

REGULATORY FRAMEWORK

This section describes the applicable federal, state, and local regulations that pertain to the project.

FEDERAL REGULATIONS

The National Earthquake Hazards Reduction Program (NEHRP) was established by the U.S. Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law (PL) 95–124. In establishing NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early-warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic NEHRP goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods, and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology (NIST) of the Department of Commerce
- National Science Foundation (NSF)
- United States Geological Survey (USGS) of the Department of the Interior
- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

STATE REGULATIONS

State regulations described below include the California Building Code, Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazards Mapping Act.

California Building Code

The 2012 International Building Code (IBC) is published by the International Conference of Building Officials (ICBO) and is the widely adopted model building code in the United States. The 2013 California Building Code (CBC) is another name for the body of regulations known as the California Code of Regulations (CCR), Title 24, Part 2, which is a portion of the California Building Standards Code (CBSC). The CBC incorporates by reference the IBC requirements with necessary California amendments. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The Town of Corte Madera has adopted the 2013 CBC by reference (Municipal Code, Title 15, Chapter 15.01).

Compliance with the 2013 CBC requires that (with very limited exceptions) structures for human occupancy be designed and constructed to resist the effects of earthquake motions. The Seismic

Design Category for a structure is determined in accordance with either: CBC Section 1613 – Earthquake Loads; or American Society of Civil Engineers (ASCE) Standard No. 7-05, Minimum Design Loads for Buildings and Other Structures. In brief, based on the engineering properties and soil-type of soils at a proposed site, the site is assigned a Site Class ranging from A to F. The Site Class is then combined with Spectral Response (ground acceleration induced by earthquake) information for the location to arrive at a Seismic Design Category ranging from A to D, with D being the most severe conditions. The classification of a specific site and related calculations must be determined by a qualified person and are site-specific.

Alquist-Priolo Earthquake Fault Zoning Act

Surface rupture is the most easily avoided seismic hazard. The Alquist-Priolo Earthquake Fault Zoning Act (A-PEFZA) was passed in December 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The project site is not located within an A-PEFZA designated fault zone and would therefore not be subject to provisions in the A-PEFZA.

Seismic Hazards Mapping Act

In 1990, following the 1989 Loma Prieta earthquake, the California Legislature enacted the Seismic Hazards Mapping Act (SHMA) to protect the public from the effects of strong ground shaking, liquefaction, landslides, and other seismic hazards. The SHMA established a state-wide mapping program to identify areas subject to violent shaking and ground failure; the program is intended to assist cities and counties in protecting public health and safety. The SHMA requires the State Geologist to delineate various seismic hazard zones and requires cities, counties, and other local permitting agencies to regulate certain development projects within these zones. As a result, the CGS is mapping SHMA Zones and has completed seismic hazard mapping for the portions of California most susceptible to liquefaction, ground shaking, and landslides—primarily the San Francisco Bay Area and Los Angeles basin. The project site and vicinity do not yet have SHMA mapping (CGS, 2014).

LOCAL REGULATIONS

Humboldt County Code

Section 331-11(a) of the Humboldt County Code officially adopts the California Building Code. Section 331-14 contains detailed rules and regulations regarding Grading, Excavation, Erosion, and Sedimentation Control. The County establishes requirements for a grading permit for any activity disturbing greater than 50 cubic yards of material. Larger projects involving the grading of more than 5,000 cubic yards of material must be conducted in accordance with an approved grading plan prepared by a civil engineer. The grading plan must be accompanied by a soils engineering report and engineering geology report prepared by a licensed professional. Sites involving the grading of more than one acre must include a site specific erosion and sediment control plan incorporating Best Management Practices (BMPs) (illustrated in Attachment 1 of Section 331-14), designed to prevent sedimentation or damage to on-site and off-site properties. Additional requirements apply to grading in areas with slopes steeper than 33 degrees.

Humboldt County General Plan

The following policies in Section 3291, Hazards, of the 1984 General Plan would apply to the proposed project:

1. *General*
 - A. *Regulate land use to ensure that development in potentially hazardous areas will not preclude preserving and promoting public safety. Potentially hazardous areas include, but are not limited to, steep slopes, unstable soils areas, on active earthquake fault lines, in extreme wildland fire areas, in airport flight path zones, and in flood plains and tsunami runup areas.*
2. *Geologic*
 - A. *Provide for the identification and evaluation of existing structural hazards.*
 - B. *Provide for more detailed scientific analysis of natural hazards in the County.*
 - C. *Provide for implementation and periodic review of the Seismic Safety and Public Safety Element.*

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would have a significant geology and soils impact if it would:

- Expose people or structures to substantial risk of loss, injury, or death involving:
 - Rupture of a known active or potentially active earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; and
 - Landslides.
- Result in substantial soil erosion or loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in Section 1803.5 of the 2010 California Building Code, creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

LESS-THAN-SIGNIFICANT IMPACTS

Fault Rupture

Based on information discussed under “Environmental Setting” above, geologic mapping indicates the nearest active fault is approximately 14 miles from the project site, and therefore the potential for on-site fault rupture is negligible.

Soil Erosion

Development of the project could result in soil erosion and/or loss of topsoil. Proper implementation of existing regulatory programs would ensure that this impact would be less than significant, however, and no mitigation would be required.

The project would involve grading of more than 1 acre and 5,000 cubic yards of material, triggering the most stringent requirements of the County Code, requiring a soil engineering report, an engineering geology report, a grading plan, erosion control plan, and a qualified soils inspector present during all construction activities. In addition, as the construction site is greater than 1 acre in area, the construction site would be subject to the requirements of the Construction General Stormwater Permit, described in more detail under Section 4.9, Hydrology and Water Quality. This would include implementation of a Storm Water Pollution Prevention Plan (SWPPP), which would include further BMPs designed to prevent soils from becoming entrained in stormwater during project construction. Following construction, the areas subject to grading would be covered by buildings, roadways, parking lots, and landscaping and would not be subject to ongoing erosion hazards.

POTENTIALLY SIGNIFICANT IMPACTS

Impact GEO-1: Development of the project could expose future site workers and patrons to significant seismic hazards, including ground shaking and seismic related ground failure. (PS)

The San Andreas and other faults located in the project site vicinity are capable of producing very strong to violent ground shaking, and a major seismic event is likely during the operational lifetime of the project. Violent seismic shaking could cause serious structural damage to buildings and other park improvements not engineered and constructed to comply with the current CBC, and could cause extensive non-structural damage even to properly constructed buildings. A site-specific geotechnical investigation would include recommendations for site preparation and construction details, including seismic design parameters, to ensure that the CBC was complied with in site construction. A soils engineering report and engineering geology report would be required for the project in accordance with County grading permit requirements. Mitigation Measure GEO-1 provides performance standards for those reports to ensure that the recommendations are incorporated in final project design for project improvements.

Mitigation Measure GEO-1: As a condition of approval for any grading or construction permits for the project, a design-level geotechnical investigation shall be prepared by a licensed

professional and submitted to the Humboldt County Building Department for review and approval. The geotechnical review shall verify that the project plans incorporate the recommendations for design contained in the preliminary geotechnical report, the current California Building Code (CBC), and other applicable design standards. All design measures, recommendations, design criteria, and specifications set forth in the design-level geotechnical review shall be implemented as a condition of project approval. (LTS)

Impact GEO-2: Development of the project could expose future site workers and patrons to significant geologic hazards, including hazards related to lateral spreading, slope instability, liquefaction, subsidence, and differential and total settlement. (PS)

No site-specific geotechnical data regarding lateral spreading, slope instability, liquefaction, subsidence, and differential and total settlement are available for the project site. A number of potential geotechnical concerns are present at the project site. For example, development of the environmental campground, wedding grove, and community event facilities and installation of the 500-gallon potable water tank and 2,500 feet of potable waterlines in Area 4 would take place in areas mapped as having moderate relative slope instability. Improvements proposed in Area 5, including a skate park, playground, concession stand, and approximately 1,200 feet of potable and irrigation waterlines, could potentially be affected by differential settlement and expansive soils.

A site-specific geotechnical investigation would evaluate these potential hazards and include recommendations for site preparation and construction details. Implementation of Mitigation Measure GEO-1 would address geotechnical as well as seismic hazards and therefore reduce this potential impact to a less-than-significant level.

Mitigation Measure GEO-2: Implementation of Mitigation Measure GEO-1, requiring a design-level geotechnical review as a condition of approval for grading and construction permits, would reduce potential geologic impacts to less-than-significant levels. No additional mitigation is required. (LTS)

Impact GEO-3: Soils at the project site may be incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater. (PS)

The project site is located outside the service area of the Garberville Sanitary District; thus, wastewater disposal would require septic tanks or other appropriate alternative wastewater disposal system. Portable toilet facilities would be used during large events.

NRCS soils data rank soils for their capability to support the proper operation of septic systems using criteria such as depth to saturation zone and water percolation rates. Soils at the project site were rated as somewhat limited to very limited due to the high water table and slow water movement (NRCS, 2014). NRCS guidance indicates that these limitations must be addressed by special soil reclamation, design, or installation procedures and can reduce the performance and raise the costs for installation and maintenance of the systems (NRCS, 2014).

As detailed in Section 4.9, Hydrology and Water Quality, septic systems are regulated through state, North Coast Regional Water Quality Control Board, and county requirements. Adherence to

those requirements, as modified by Mitigation Measure HYDRO-2, would reduce the potential impact from inadequate soils to a less-than-significant level.

Mitigation Measure GEO-3: Implementation of Mitigation Measure HYDRO-2, requiring demonstration of adequate capacity and operation of septic and wastewater systems, would reduce this potential impact to a less-than-significant level. No additional mitigation is required. (LTS)

CUMULATIVE IMPACTS

Impacts related to geologic hazards are generally site-specific, rather than cumulative in nature, because each project area has unique geologic considerations that would be subject to uniform site development and construction standards. Therefore, the potential for cumulative impacts is limited. Impacts associated with potential geologic hazards related to soil or other conditions occur at individual building sites. These effects are site-specific, and impacts would not be compounded by additional development. Mitigation measures described above would reduce impacts from geologic hazards to less-than-significant levels. Therefore, implementation of the project would not result in a cumulatively considerable contribution to geologic hazards, and the cumulative impact would be less than significant.

REFERENCES

- California Geologic Survey (CGS), 2010. 2010 Fault Activity Map of California, Geologic Data Map No. 6. Website <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>, accessed July 28, 2014.
- California Geologic Survey (CGS), 2008. Ground Motion Interpolator. Website http://www.quake.ca.gov/gmaps/PSHA/psha_interpolator.html, accessed July 28, 2014.
- California Geologic Survey (CGS), 2002. How Earthquakes and Their Effects are Measured. Website http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_32/Documents/note_32.pdf, accessed June 2, 2014.
- Huber C&D, 2014. Proposed Project Topographical Map, Southern Humboldt Community Park, April 27.
- Humboldt County, 2014. GIS Hazard Mapping, Historic Landslides. Website <http://gis.co.humboldt.ca.us/Freeance/Client/PublicAccess1/index.html?appconfig=hazards>, accessed July 28, 2014.
- Humboldt County, 2002. Natural Resources and Hazards Report (Section 10), November.
- Humboldt County, 1987. Garberville Redway Alterpoint Benbow Community Plan, adopted by the Board of Supervisors June 30.
- Natural Resources Conservation Service (NRCS), 2014. Web Soil Survey. Website <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed July 30, 2014.

4.7 GREENHOUSE GAS EMISSIONS

INTRODUCTION

This section describes current greenhouse gas (GHG) emissions in the region and evaluates the potential GHG emissions impacts of the proposed project. The analysis considers both operational and construction effects of the project. The primary focus of the GHG emissions analysis was to evaluate future project-related emissions.

ENVIRONMENTAL SETTING

Gases that trap heat in the atmosphere, GHGs, regulate the earth's temperature. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate. The most common GHGs are carbon dioxide (CO₂) and water vapor but there are also several others, most importantly methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). These are released into the earth's atmosphere through a variety of natural processes and human activities.

Sources of GHGs are generally as follows:

- CO₂ and N₂O are byproducts of fossil fuel combustion.
- N₂O is associated with agricultural operations such as fertilization of crops.
- CH₄ is commonly created by off-gassing from agricultural practices (e.g., keeping livestock) and landfill operations.
- Chlorofluorocarbons (CFCs) were widely used as refrigerants, propellants, and cleaning solvents but their production has been stopped by international treaty.
- HFCs are now used as a substitute for CFCs in refrigeration and cooling.
- PFCs and sulfur hexafluoride emissions are commonly created by industries such as aluminum production and semi-conductor manufacturing.

Each GHG has its own potency and effect upon the earth's energy balance. This is expressed in terms of a global warming potential (GWP), with CO₂ being assigned a value of 1 and sulfur hexafluoride being several orders of magnitude stronger with a GWP of 23,900. In GHG emission inventories, the weight of each gas is multiplied by its GWP and is measured in units of CO₂ equivalents (CO₂e).

An expanding body of scientific research supports the theory that global warming is currently affecting changes in weather patterns, average sea level, ocean acidification, chemical reaction rates, and precipitation rates, and that it will increasingly do so in the future. The climate and several naturally occurring resources within California could be adversely affected by the global warming trend. Increased precipitation and sea level rise could increase coastal flooding, saltwater intrusion, and degradation of wetlands. Mass migration and/or loss of plant and animal species could also occur. Potential effects of global climate change that could adversely affect human health include more extreme heat waves and heat-related stress; an increase in climate-sensitive

diseases; more frequent and intense natural disasters such as flooding, hurricanes, and drought; and increased levels of air pollution.

UNITED STATES EMISSIONS

In 2010, the U.S. emitted about 1,633.2 million metric tons (MMT) of CO₂ equivalent (CO₂e), with each individual at home releasing approximately 4 metric tons per year. Of the four major sectors nationwide – residential, commercial, industrial, and transportation – transportation accounts for the highest amount of GHG emissions (approximately 35 to 40 percent); these emissions are entirely generated from direct fossil fuel combustion. Between 1990 and 2009, total U.S. GHG emissions rose by 7.3 percent, but emissions decreased from 2008 to 2009 by 6.1 percent. This decrease was primarily due to 1) a decrease in economic output resulting in a decrease in energy consumption across all sectors, and 2) a decrease in the carbon intensity of fuels used to generate electricity due to fuel switching as the price of coal increased and the price of natural gas decreased significantly. Since 1990, U.S. emissions have increased at an average annual rate of 0.4 percent (EPA, 2011).

CALIFORNIA EMISSIONS

According to the California Air Resources Board (CARB) emission inventory estimates, California's gross GHG emissions decreased 6 percent, from 478.4 MMT of CO₂e emissions in 2001 to 448.1 MMT in 2011, with a maximum of 489.2 MMT in 2004 (CARB, 2013). California has the fourth lowest per-capita CO₂ emission rate from fossil fuel combustion in the country, due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the state's GHG emissions rate of growth by more than half of what it would have been otherwise (CEC, 2007).

CARB is responsible for developing the California Greenhouse Gas Emission Inventory. This inventory estimates the amount of GHG emitted to and removed from the atmosphere by human activities within California and supports the Assembly Bill 32 Climate Change Program (see "Regulatory Framework" below). The emission inventory estimates are based on the actual amount of all fuels combusted in the State of California, which accounts for over 85 percent of the GHG emissions within California.

HUMBOLDT COUNTY EMISSIONS

In January of 2012, Humboldt County published the Draft Climate Action Plan (Humboldt, 2012). According to the Climate Action Plan, community-wide, Humboldt County emitted 1.3 MMT of CO₂e in 2006. Under the CARB scoping plan, the Climate Action Plan states that Humboldt County's reduction target is 3,746 MT of CO₂e based on its proportion of the statewide population and scoping plan goals.

REGULATORY FRAMEWORK

This section summarizes key federal, and state regulations, and policies that would apply to the project. There are no regional or local regulations that would apply to the project. Global climate change resulting from GHG emissions is an ongoing environmental concern being discussed at the

international, national, and statewide level. At each level, agencies are considering strategies to control emissions of gases that contribute to global climate change.

FEDERAL REGULATIONS

The United States participates in the United Nations Framework Convention on Climate Change (UNFCCC). While the United States signed the Kyoto Protocol, which would have required reductions in GHGs, Congress never ratified the protocol. The federal government chose voluntary and incentive-based programs to reduce emissions and has established programs to promote climate technology and science.

In 2007, the U.S. Supreme Court held that GHGs fit within the federal Clean Air Act's definition of a pollutant and the U.S. Environmental Protection Agency (EPA) had the authority to regulate GHGs. (*Massachusetts, et al. v. U.S. Env'tl. Prot. Agency, et al.* (2007) 549 U.S. 497.) On December 7, 2009, the EPA Administrator executed two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act: 1) the current and projected concentrations of the six key well-mixed GHGs – CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ – in the atmosphere threaten the public health and welfare of current and future generations; and 2) the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

STATE REGULATIONS

The State of California is concerned about GHG emissions and their effect on global climate change. The State of California recognizes that “there appears to be a close relationship between the concentration of GHGs in the atmosphere and global temperatures” and that “the “evidence for climate change is overwhelming.” (CARB, 2003). The effects of climate change on California, in terms of how it would affect the ecosystem and economy, remain uncertain. The State of California has many areas of concern regarding climate change with respect to global warming. According to the 2006 Climate Action Team Report, the following climate change effects and conditions can be expected in California over the course of the next century:

- A diminishing Sierra snowpack declining by 70 percent to 90 percent, affecting the state's water supply.
- Increasing temperatures from 8 to 10.4 degrees Fahrenheit (°F) under the higher emission scenarios, leading to a 25- to 35-percent increase in the number of days ozone pollution standards are exceeded in most urban areas.
- Coastal erosion along the length of California and seawater intrusion into the Sacramento River Delta from a 4- to 33-inch rise in sea level. This would exacerbate flooding in already vulnerable regions.
- Increased vulnerability of forests due to pest infestation and increased temperatures.
- Increased challenges for the state's important agricultural industry from water shortages, increasing temperatures, and saltwater intrusion into the Delta.
- Increased electricity demand, particularly in the hot summer months.

Key state regulations involving GHGs and climate change are summarized below.

Assembly Bill 1575 (1975)

In 1975, the Legislature created the California Energy Commission (CEC). The CEC regulates electricity production that is one of the major sources of GHGs.

Title 24, Part 6 of the California Code of Regulations (1978)

The Energy Efficiency Standards for Residential and Nonresidential Buildings were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods.

Assembly Bill 1493 (2002)

Assembly Bill (AB) 1493 required the California Air Resources Board (CARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks.

State of California Executive Order S-3-05 (2005)

The Governor's Executive Order established aggressive emissions reductions goals: by 2010, GHG emissions must be reduced to 2000 levels; by 2020, GHG emissions must be reduced to 1990 levels; and by 2050, GHG emissions must be reduced to 80 percent below 1990 levels.

In June 2005, the Governor of California signed Executive Order S-3-05, which identified the California Environmental Protection Agency (Cal/EPA) as the lead coordinating state agency for establishing climate change emission reduction targets in California. A "Climate Action Team," a multi-agency group of state agencies, was set up to implement Executive Order S-3-05. Under this order, the State of California plans to reduce GHG emissions to 80 percent below 1990 levels by 2050. GHG emission reduction strategies and measures to reduce global warming were identified by the California Climate Action Team in 2006.

Assembly Bill 32, California Global Warming Solutions Act (2006)

AB 32, the Global Warming Solutions Act of 2006, codifies the State of California's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, CARB, CEC, the California Public Utilities Commission (CPUC), and the Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the State of California's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual (BAU) is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. It required CARB and other state agencies to develop and adopt regulations and other initiatives reducing GHGs by 2012.

As directed by AB 32, CARB has also approved a statewide GHG emissions limit. On December 6, 2007, CARB staff resolved an amount of 427 MMT of CO₂e as the total statewide GHG 1990 emissions level and 2020 emissions limit. The limit is a cumulative statewide limit, not a sector- or facility-specific limit. CARB updated the future 2020 BAU annual emissions forecast, in light of the economic downturn, to 545 MMT of CO₂e. Two GHG emissions reduction measures currently enacted that were not previously included in the 2008 Scoping Plan baseline inventory were included, further reducing the baseline inventory to 507 MMT of CO₂e. Thus, an estimated reduction of 80 MMT of CO₂e is necessary to reduce statewide emissions to meet the AB 32 target by 2020.

Senate Bill 375, California's Regional Transportation and Land Use Planning Efforts (2008)

The State of California enacted legislation (Senate Bill [SB] 375) to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 would develop emissions-reduction goals that regions can apply to planning activities. SB 375 provides incentives for local governments and developers to implement new conscientiously planned growth patterns. These include incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows developers to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035.

HUMBOLDT COUNTY GENERAL PLAN

The adopted Humboldt County General Plan does not include policies addressing GHG emissions or air quality emissions (Humboldt County, 1984).

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Section 15064.4 of the CEQA Guidelines specifically addresses the significance of GHG emissions. This section calls for a "good-faith effort" by the lead agency "to describe, calculate or estimate the amount of GHG emissions resulting from a project."

SIGNIFICANCE CRITERIA

In accordance with Appendix G of the CEQA Guidelines, GHG emissions are considered significant if implementation of the proposed project would:

- Generate GHG emissions either directly or indirectly that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

There are no established thresholds of significance for GHG emissions from land use development projects in the North Coast Air Basin (NCAB).

LESS-THAN-SIGNIFICANT IMPACTS

Conflict with Applicable Plans, Policies, or Regulations

The adopted AB 32 Scoping Plan includes proposed GHG reductions from direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as cap-and-trade systems. The project would be subject to all applicable permit and planning requirements in place or adopted by the State of California or locally. Therefore, the proposed project would not conflict with plans or policies related to the reduction of GHG emissions.

POTENTIALLY SIGNIFICANT IMPACTS

Impact GHG-1: The project could generate an increase in direct and indirect greenhouse gas (GHG) emissions. (PS)

Generation of Greenhouse Gas Emissions

The California Emissions Estimator Model Version 2013.2.2 (CalEEMod) was used to predict GHG emissions from operation of the project. The model predicts emissions of GHGs in the form of CO₂e. The project land use type and size, trip generation rates, and other project-specific information were input to the model. Unless otherwise noted below, the CalEEMod model defaults for Humboldt County were used. CalEEMod provides emissions for transportation, areas sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, and solid waste land filling and transport. CalEEMod output data are included in **Appendix C**.

The model uses mobile emission factors from CARB's EMFAC2011 model. This model is sensitive to the year selected since vehicle emissions have been and continue to be reduced due to fuel efficiency standards and low carbon fuels. Adjustments to the modeling are described below.

Construction Emissions

Construction of the proposed project would, for the most part, involve minimal heavy-duty equipment, such as hand tools, trucks and trailers, dump trucks, and small tractors. During construction of Area 5 (Sports Area), graders, backhoes, loaders, and dump truckers would be needed. Though temporary, construction of the proposed project would emit GHGs in the form of exhaust emissions. However, neither the North Coast Unified Air Quality Management District (NCUAQMD) nor Humboldt County have established a significance threshold for construction GHG emissions. While the project would not be required to comply with guidance from other air districts, the Bay Area Air Quality Management District (BAAQMD) recommends that all construction projects implement the following best management practices, where feasible: use alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment for at least 15 percent of the fleet, use at least 10 percent local building materials, and recycle or reuse at least 50 percent of construction waste or demolition materials. The project would be encouraged to incorporate all reasonable and feasible measures to reduce construction GHG emissions.

Operational Emissions

Land Use Descriptions

The proposed project land use was input into CalEEMod as 405.7 acres entered as "City Park."

Trip Generation Rates

Trip generation rates were input to CalEEMod using the daily trip numbers provided in the project traffic report by W-Trans.

Model Year

The model uses mobile emission factors from the California Air Resources Board's EMFAC2011 model. This model is sensitive to the year selected, since vehicle emissions have and continue to be reduced due to fuel efficiency standards and low carbon fuels. The year 2016 was analyzed since it is the first full year that the project site could conceivably be occupied, assuming construction were to occur in 2015.

Other Inputs

Default model assumptions for emissions associated with area sources, solid waste generation, and water/wastewater use were applied to the project.

Energy Usage

Default rates for energy consumption were assumed in the model. Emissions rates associated with electricity consumption were adjusted to account for Pacific Gas & Electric (PG&E) projected future CO₂ intensity rates. These rates are based, in part, on the requirement of a renewable energy portfolio standard of 33 percent by the year 2020. CalEEMod uses a default rate of 641 pounds of CO₂ per megawatt of electricity produced that is based on PG&E's 2008 certified rate. The derived 2016 rate for PG&E was estimated at 370 pounds of CO₂ per megawatt of electricity delivered and is based on the California Public Utilities Commission (CPUC) GHG Calculator (CPUC, 2010).

Calculation of Project Operational Emissions

Project emissions are calculated to be 1,317 MT of CO₂e per year. Though there is no established threshold of significance for GHGs in Humboldt County, for comparison, a stationary source which emits less than or equal to 5,000 tons per year of CO₂e would be exempt from recordkeeping and reporting under Rule 111 (NCUAQMD, 2011). Overall, outdoor recreation is a low impact activity in terms of GHG emissions. However, proposed sports fields, restrooms, and concessions should incorporate energy-efficiency features to reduce GHG emissions to the degree feasible and reasonable; otherwise, GHG emissions from these operations would represent a potentially significant impact. Implementation of Mitigation Measure GHG-1 would reduce this impact to a level of less than significant.

Mitigation Measure GHG-1: The project applicant shall implement the following measures to reduce greenhouse gas (GHG) emissions:

1. *Design buildings to be energy-efficient.*
2. *Site buildings to take advantage of shade, prevailing winds, and landscaping to reduce energy use. The project shall make use of strategically-placed shade trees.*
3. *Limit the hours of operational outdoor lighting.*
4. *Install renewable systems, including solar and tank-less hot water heaters, where feasible.*
5. *Create water-efficient landscapes. All landscaped areas shall be designed to reduce their water requirements. Landscaping shall make extensive use of drought-tolerant species.*
6. *Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.*
7. *Control irrigation by using systems designed to ensure water efficiency. (LTS)*

CUMULATIVE IMPACTS

Pursuant to CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project would comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of GHGs) that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area in which the project is located. There are no established thresholds or guidelines for assessing a project's impact with regards to GHG emissions in Humboldt County. However, Mitigation Measure GHG-1 would require that the project implement all feasible and reasonable measures to reduce project GHGs. No additional cumulative impacts have been identified and no mitigation measures would be required.

REFERENCES

- California Air Resources Board (CARB), 2003. *The Greenhouse Effect and California*. Website <http://www.arb.ca.gov/cc/ccms/factsheets/ccbackground.pdf>, accessed July 2014.
- California Air Resources Board (CARB), 2008. *Climate Change Scoping Plan: A Framework for Change*, December.
- California Air Resources Board (CARB), 2013. *Trends in California GHG Emissions for 2000 to 2011- Trends of Emissions and Other Indicators*, October. Website http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_trends_00-11_2013-10-02.pdf, accessed November 2013.
- California Energy Commission (CEC), 2007. *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 – Final Staff Report, publication # CEC-600-2006-013-SF*, Sacramento, CA. December 22, 2006, and January 23, 2007, update to that report.
- California Public Utilities Commission (CPUC), 2010. *GHG Calculator version 3c*, October 7, 2010. Website http://ethree.com/public_projects/cpuc2.php, accessed October 2013.

Humboldt County, 1984 (with updates through 1994), *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 2522, 2523, 2724, 2725, 2752, 4420, and 4430. Website <http://humboldt.gov/DocumentCenter/View/4363>.

Humboldt County, 2012. *Draft Climate Action Plan: A Strategy for Greenhouse Gas Reduction and Adaptation to Global Climate Change*, January.

Intergovernmental Panel on Climate Change, 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC*, Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.), Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

North Coast Unified Air Quality Management District (NCUAQMD), 2011. *Rule 111 – Federal Permitting Requirements for Sources of Greenhouse Gases*, January 20.

U.S. Environmental Protection Agency (EPA), 2011. *The U.S. Greenhouse Gas Emissions and Sinks: Fast Facts*. Website epa.gov/climatechange/Downloads/ghgemissions/fastfacts.pdf, accessed November 2013.

4.8 HAZARDS AND HAZARDOUS MATERIALS

INTRODUCTION

This chapter describes public health and safety and hazardous materials¹ issues related to development of the proposed project that could potentially pose a significant threat to human health or the environment. The setting section describes existing conditions at the project site and vicinity, as well as the pertinent federal, State, and local regulatory framework related to hazardous materials. The impacts and mitigation measures section defines the criteria of significance and identifies potentially significant impacts and mitigation measures related to hazards and hazardous materials.

ENVIRONMENTAL SETTING

HAZARDOUS MATERIALS SETTING

The potential for hazardous materials to be present at the project site is evaluated through an analysis of historical land uses, a review of regulatory records regarding known hazardous materials releases, and a discussion of potential hazardous materials concerns in the project vicinity.

Historical Land Uses

The project site is largely undeveloped. A review of available historical aerial photographs from 1948 to 2012 (EDR, 2014a) indicates that land uses at the project site have been consistent since 1948. The northern portion of the project site (Areas 1-3 and 5) has been used for pastureland and ranching since at least 1948. Several small buildings were apparent in Area 2, consistent with a rural residence and outbuildings. The southern portion of the site (Areas 4 and 7) was undeveloped forestland. Gravel extraction was apparent north of South Fork Eel River (at and north of Area 6) from 1948. Between 1974 and 1983, Tooby Memorial Park was developed in Area 1. Cultivated crops were introduced to former pastureland between 1993 and 2005 in the northern portion of Area 3, immediately south of Area 1.

The only historical land uses associated with hazardous materials use at the project site are agricultural. Agricultural chemicals such as pesticides and herbicides can leave residues in soils that can harm people and the environment. Chemicals used today are less-persistent, organic compounds compared to agricultural chemicals used prior to the 1970s which often included highly

¹ The California Health and Safety Code defines a hazardous material as "... any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety, or to the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, radioactive materials, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment." (Health and Safety Code, Section 25501).

persistent compounds such as DDT. In addition, inorganic compounds containing heavy metals such as arsenic, lead, and mercury were commonly used prior to the 1950s and could persist for many decades. If present in elevated concentrations, these residues can pose a potential health risk to future construction workers, residents, and other persons who may come in direct contact with surface soils.

Pesticides are regulated under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) by the U.S. Environmental Protection Agency (EPA). This includes labeling and registration of pesticides as to how they may be used. The EPA delegates pesticide enforcement activities in California to the California Department of Pesticide Regulation (DPR), under Title 3 of the California Code of Regulations and the California Food and Agriculture Code. The DPR registers pesticides for use in California, and licenses pesticide applicators and pilots, advisors, dealers, brokers, and businesses. In turn, the Humboldt County Agricultural Commissioner (HCAC) acts as the local enforcement for DPR. The HCAC registers licensed pest control businesses, and agricultural pest control advisors; requires permits and advanced notification for buying or using California restricted-use pesticides; and requires the completion of pesticide use reports for pesticides applied in Humboldt County, including the project site. In addition, the HCAC investigates pesticide-related injury and illnesses, and oversees enforcement of worker training in pesticide management.

In general, pastureland is a low intensity agricultural use which does not require use of agricultural chemicals. Cultivated crops were not apparent on aerial photographs until after 1993 and their use would have been regulated by the HCAC. All current farm and ranch operations are organic and the use of herbicides and pesticides is not permitted. Therefore, it would not be expected that significant concentrations of agricultural chemical residues would be present in soils at the project site.

Hazardous Materials Release Sites

A regulatory agency database record search (EDR, 2014b) was reviewed for this Draft EIR to identify sites that use, store, generate, and dispose of hazardous materials or have reported a hazardous materials release to the environment. The farm at the project site and adjacent gravel mining operation appeared on database records. The Tooby Farm, 934 Sprowel Creek Road, appears on historical lists of registered underground storage tank (UST) sites. Records indicate that one 600-gallon leaded gasoline UST was installed at the site in 1950 and was active in 1992, the date of the latest available records. The farm UST was not listed as one of the 13 active USTs located in unincorporated Humboldt County in 2002 (Humboldt County, 2002). Randall Sand and Gravel, at 214 W. River Lane is listed on the California HAZNET database of hazardous waste generators as the generator of record of hydrocarbon solvents, organic solid waste, oil-containing wastes, and other hazardous wastes during 2002 and 2012. No hazardous materials release sites were identified within ½-mile of the project site.²

² A release at a site in Alderpoint, CA was mistakenly listed in the database report as being within one-half mile of the project site. State Geotracker online database files also place this site approximately ½-mile north of the project site (SWRCB, 2014). The listings are clearly in error as the Alderpoint site is many miles from the project site.

Hazardous Building Materials

Hazardous materials are commonly found in buildings built before 1980, such as those at the project site. Construction materials such as thermal system insulation, surfacing materials, and asphalt and vinyl flooring materials installed in buildings prior to 1981 may contain asbestos. Asbestos is a known human carcinogen. Prior to 1978, lead compounds were commonly used in interior and exterior paints. As the buildings at the project site date to at least 1948, it is likely that lead and asbestos are present in building materials at the project site. In addition, other common items present in buildings, such as electrical transformers, fluorescent lighting, electrical switches, heating/cooling equipment, and thermostats could contain hazardous materials. These materials do not pose a health risk in use, but if the buildings are demolished or renovated, they could be released to the air and pose a health risk to construction workers and nearby members of the general public.

Federal and state regulations govern the removal of asbestos-containing materials (ACMs) from structures prior to demolition. These requirements are promulgated by the EPA, the Occupational Safety and Health Administration (OSHA), the California Department of Toxic Substances Control (DTSC), that California Division of Occupational Safety and Health (DOSH), and the North Coast United Air Quality Management District (NCUAQMD). Federal and state regulations also govern the renovation or demolition of structures where lead or material containing lead is present. Regulations pertaining to renovation or demolition of structures with lead-based paint are promulgated by the EPA, the U.S. Department of Housing and Urban Development (HUD), DOSH, and DTSC. Fluorescent lighting tubes and ballasts, mercury thermometers, and several other common items containing hazardous materials are regulated as “universal wastes” by the State of California.

Sensitive Receptors

Some populations, such as children, the elderly, and the infirm, are more susceptible to health effects of hazardous materials than the general population. Hazardous materials use near schools, day care centers, senior housing, and hospitals must consider potential health effects to these populations, often referred to as “sensitive receptors.” In addition, commercial and industrial facilities in proximity to sensitive receptors may have hazardous emissions or handle hazardous or acutely hazardous materials that could pose a health risk to these sensitive receptors. Although no schools, residences, hospitals, or other facilities are located near the project site, current and future park patrons include children and other members of the general public that may be classified as sensitive receptors.

OTHER POTENTIAL HEALTH AND SAFETY CONCERNS

Aviation Hazards

The Garberville Airport is located about $\frac{3}{4}$ -mile north of the project site, separated from the project area by the South Fork Eel River. The project site is not located within the primary, approach, or transitional surfaces mapped in the Airport Master Plan (Humboldt County, 2007), though it is located within a 9,000-foot radius of the airport runway and therefore has restrictions on building elevations to prevent interference with airport operations.

The Garberville Airport sits on a bluff above the project site with surrounding mountains in close proximity. The Garberville Airport is at an elevation of 551 feet above mean sea level (amsl), compared to the northern edge of the project site at about 350 feet amsl. Most of the project site is located within Compatibility Zone C designated by the Humboldt County Airport Land Use Compatibility Plan (ALUCP). Due to the site's location within this zone, the property owner may be required to dedicate an overflight easement to the County of Humboldt for the benefit of the Garberville Airport. The ALUCP also would prohibit any building at the project site with a horizontal surface of greater than 701 feet amsl (150 feet above the airport elevation) (Humboldt County, 2007).

Wildland Fire Hazards

In accordance with California Public Resource Code Section 4201-4204 and Government Code Section 51175-51189, the California Department of Forestry and Fire Protection (CAL FIRE) has mapped areas of significant fire hazards based on fuels, terrain, weather, and other relevant factors. These zones, referred to as Fire Hazard Severity Zones (FHSZ), represent the risks associated with wildland fires. CAL FIRE has rated the sloped, wooded portions of the project site (Areas 4 and 7) as Very High Fire Hazard Severity, with the remainder of the site rated as High Fire Hazard Severity (CAL FIRE, 2007).

In California, responsibility for wildfire prevention and suppression is shared by federal, state, and local agencies. Federal agencies are responsible for federal lands in Federal Responsibility Areas (FRA). The State of California has determined that non-federal lands in unincorporated areas with watershed value are of Statewide interest and have classified those lands as State Responsibility Areas (SRA), which are managed by CAL FIRE. All incorporated areas and other unincorporated lands are classified as Local Responsibility Areas (LRA). The project site is located in a SRA, and therefore CAL FIRE is responsible for wildfire prevention and suppression.

Under State regulations, areas within very high fire hazard risk zones must comply with specific building and vegetation management requirements intended to reduce property damage and loss of life within these areas. Section 701A.3.2 of the California Building Code was amended in 2005 to add additional protections for buildings in wildfire hazard zones. All buildings in mapped SRA Fire Hazard Severity Zones must use ignition resistant materials and design to resist the intrusion of flame or burning embers projected by a vegetation fire.

Humboldt County SRA Fire regulations are located in Section 3111 of the Humboldt County Municipal Code and establish minimum standards for emergency access, signing and building numbering, private water supply reserves for emergency fire use, and vegetation modification.

Emergency Response Plans

Humboldt County Ordinance 2203 established the Humboldt Operational Area (OA) and identified the Sheriff as Director of Emergency Services for the County. The Humboldt OA is composed of the County of Humboldt, serving as the lead agency, and all political subdivisions (cities and special districts). The Office of Emergency Services (OES) assists the Sheriff in controlling and directing the effort of the emergency organization of the County and is part of the Special Operations Division within the Sheriff's Department.

The OES has developed an Emergency Operations Plan with procedures for addressing earthquakes, hazardous materials releases, floods, wildland fires, landslides, extreme weather, tsunamis, dam failures, transportation emergencies, civil disturbances, and terrorism (Humboldt County OES, 2002). It includes the emergency response organizational framework and procedures for initial response operations, extended response operations, and recovery operations.

REGULATORY FRAMEWORK

Beginning in the 1970s, governments at the federal, State, and local levels became increasingly concerned about the effects of hazardous materials on human health and the environment. Numerous laws and regulations were developed to investigate and mitigate these effects. As a result, the storage, use, generation, transport, and disposal of hazardous materials are highly regulated by federal, state, and local laws and regulations. These agencies and information about the laws, regulations, and programs they administer are summarized below.

FEDERAL

EPA is the lead agency responsible for enforcing federal laws and regulations governing hazardous materials that affect public health or the environment. The major federal laws and regulations enforced by the EPA include: the Resource Conservation and Recovery Act (RCRA); the Toxic Substances Control Act (TSCA); the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA); and the Superfund Amendments and Reauthorization Act (SARA).

In 1976, RCRA was enacted to provide a general framework for the EPA to regulate hazardous waste from the time it is generated until its ultimate disposal. In accordance with RCRA, facilities that generate, treat, store, or dispose of hazardous waste are required to ensure that the wastes are properly managed from “cradle to grave.”

In 1976, TSCA was enacted to provide the EPA authority to regulate the production, importation, use, and disposal of chemicals that pose a risk of adversely impacting public health and the environment, such as polychlorinated biphenyls (PCBs), asbestos-containing materials (ACM), and lead-based paint. TSCA also gives the EPA authority to regulate the cleanup of sites contaminated with specific chemicals, such as PCBs.

In 1980, CERCLA, commonly known as the Superfund, was enacted to ensure that a source of funds was available for the EPA to remediate uncontrolled or abandoned hazardous materials release sites that pose a risk of adversely impacting public health and the environment. Prohibitions and requirements regarding closed or abandoned hazardous waste sites and liability standards for responsible parties were also established by CERCLA. In 1986, SARA amended CERCLA to increase the Superfund budget, modify contaminated site cleanup criteria and schedules, and revise settlement procedures.

While the EPA regulates overall use and cleanup of hazardous materials, the U.S. Department of Transportation (DOT) is the federal administering agency responsible for hazardous materials transportation regulations. The DOT Office of Hazardous Materials Safety oversees a national safety program to minimize the risks related to commercial transportation of hazardous materials,

including pipelines. The federal hazardous materials transportation law is the basic statute regulating hazardous materials transportation in the United States. Federal hazardous materials transportation regulations are contained in Title 49 CFR Parts 171-180. In California, the California Department of Transportation (Caltrans) is the implementing agency for DOT laws and regulations.

Worker health and safety is protected by federal and state laws and regulations. OSHA is the federal agency responsible for enforcement and implementation of federal laws and regulations pertaining to worker health and safety. Under OSHA jurisdiction, the Hazardous Waste Operations and Emergency Response (HAZWOPER) regulations require training and medical supervision for workers at hazardous waste sites. Additional regulations have been developed for construction workers regarding exposure to lead and asbestos during construction activities, described above under Hazardous Building Materials.

STATE

In California, the EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency (Cal/EPA). The mission of Cal/EPA is to restore, protect, and enhance the environment to ensure public health, environmental quality, and economic vitality. Under the authority of Cal/EPA, DTSC, and the North Coast Regional Water Quality Control Board (Regional Water Board) are responsible for overseeing the cleanup of contaminated soil and groundwater sites in the project vicinity. RWQCB regulations applicable to hazardous materials are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in CCR Title 22. CCR Title 26 is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Most routine uses of hazardous materials by businesses in California are regulated under the Unified Program. The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following hazardous materials programs: Hazardous Materials Business Plan (HMBP) Program, California Accidental Release Prevention (CalARP) Program, Underground Storage Tank (UST) Program, Aboveground Storage Tank (AST) Program, Hazardous Waste Generator Program, and Hazardous Waste Tiered-Permitting Program.

DOSH enforces state worker health and safety regulations related to construction activities. Regulations include exposure limits, protective clothing, and training requirements to prevent exposure to hazardous materials. DOSH also enforces occupational health and safety regulations specific to lead and asbestos investigations and abatement, which equal or exceed their federal counterparts.

LOCAL

Unified Program

The routine management of hazardous materials in California is administered under the Unified Program. The Cal/EPA has granted responsibilities to the Hazardous Materials Program of the Humboldt County Division of Environmental Health (HCDEH) for implementation and enforcement

of hazardous material regulations under the Unified Program as a Certified Unified Program Agency (CUPA). CUPA responsibilities and requirements are codified in California Health and Safety Code Chapter 6.11.

Humboldt County General Plan

The following policies in the 1984 General Plan (Humboldt County, 1984) would apply to the proposed project:

Section 3291, Hazards

1. General

- A. *Regulate land use to ensure that development in potentially hazardous areas will not preclude preserving and promoting public safety. Potentially hazardous areas include, but are not limited to, steep slopes, unstable soils areas, on active earthquake fault lines, in extreme wildland fire areas, in airport flight path zones, and in flood plains and tsunami runup areas.*
- C. *Encourage the education of the community regarding the nature and extent of hazards.*
- D. *Continue to provide for the maintenance and upgrading of disaster response plans.*

4. Fire

- A. *Humboldt County should encourage the use of prescribed burning as a management tool for timber management purposes, livestock production, and enhancement of wildlife habitat.*
- B. *Use the appropriate sections of the California Department of Forestry "Fire Safe Guides" as guidelines for review of residential development in rural areas, to be applied consistent with other plan policies.*
- C. *Actively support and pursue the implementation recommendations of the Humboldt County Fire Chief's Association (see Fire Hazards Implementation, Section 5-2300.3).*

6. Airport Safety

- A. *The County should establish the maintenance of obstruction-free approach surfaces at all airports as a high-priority project, annually monitoring the status of potential obstructions identified on the Approach and Clear Zone Plans.*
- B. *The County's current Airport Approach Zone Building Height Regulations (County Code Section 333) should be revised to bring the standard into conformance with Part 77 of the Federal Aviation Regulations. (A recommended ordinance has been prepared by the Consultant and submitted to the County as a separate task in the Master Plan Study).*
- C. *Regulate and plan land use around airports according to the Airport Land Use Compatibility criteria matrix.*
- D. *Specific land use zoning, appropriate for the areas around the County's airports, should be adopted as soon as practical.*

Section 4234 Public Services and Facilities, Airports

1. *Humboldt County should regularly update and maintain the Airport Master Plan as the primary County policy document for airport development.*
2. *Humboldt County shall establish land use controls around airports as recommended by the Airports Master Plan through the Airport Land Use Commission.*

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

For the purposes of this Draft EIR, implementation of the proposed project would have a significant effect related to hazards if it would exceed any of the following standards of significance, based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼-mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

LESS-THAN-SIGNIFICANT IMPACTS

Routine Hazardous Materials Transport, Use, or Disposal

The project would involve the routine management of hazardous materials that could potentially pose a significant threat to human health or the environment if not properly managed or if

accidentally released. During construction, this routine management would include the use of fuels, lubricants, and other hazardous materials associated with heavy construction equipment. During project operation, it would be expected that cleaning, maintenance, and landscaping products would be used and stored at the project site.

Use of hazardous materials during construction would be temporary and limited to the period when grading, construction, and trenching for waterlines takes place at the project site. The use would be subject to the County Grading, Excavation, Erosion, and Sedimentation Control Ordinance, described under Section 4.6, Geology and Soils, and a Storm Water Pollution Prevention Plan, described under Section 4.9, Hydrology and Water Quality. These programs require handling, use, and storage of hazardous materials in a safe manner during construction activities.

The routine storage, use, handling, generation, transport, and disposal of hazardous materials during site operation are addressed by federal, state, and local laws, regulations, and programs, described under "Regulatory Framework" above. At the project site, HCDEH implements regulatory programs for sites that routinely manage hazardous materials to ensure the safe storage, management, and disposal of hazardous materials in accordance with the Unified Program. The existing regulatory framework would reduce potential impacts from routine hazardous materials transport, use, or disposal to a less-than-significant level.

Hazardous Materials Emissions Near Schools

No schools are located within ¼-mile of the project site and no impact would occur.

Hazardous Materials Sites

No sites within ½-mile of the project site are located on regulatory agency lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (EDR, 2014b) and no impact would occur.

Aviation Hazards

No airstrips are located in the project vicinity. Although the project site is located near Garberville Airport, there are no project elements proposed that could potentially obstruct or interfere with airport operations or conflict with the airport land use plan. No significant impact would occur.

Emergency Response and Evacuation Plans

The project would not result in significant changes in the road network or change patterns of vehicular or pedestrian traffic that would interfere with emergency response. The project would not impair implementation of or physically interfere with the County Emergency Operations Plan or any other adopted emergency response plan or emergency evacuation plan. Therefore, no significant impacts related to emergency response and evacuation would be anticipated.

Wildland Fires

Existing State and county vegetation management requirements and building codes would apply to new facilities constructed at the project site. Vegetation would be required to be cleared at least 30 feet from all structures, and structures must be constructed out of ignition-resistant material. Campfires and other sources of ignition, with the exception of park-provided portable kitchen facilities, would not be permitted in the Environmental Camp or other areas of the project site. The addition of four 500-gallon water storage tanks and the extension of waterlines through Areas 4 and 5 would extend water supply to these portions of the project site, which could aid in firefighting activities. Although these measures would not prevent wildfires from starting off-site and affecting wildlands at and near the project site, the measures are intended to provide for defensible spaces around areas where park patrons and workers would be present and therefore minimize the potential impacts on persons and structures. Existing regulations would reduce wildland fire hazards to a less-than-significant level.

POTENTIALLY SIGNIFICANT IMPACTS

Impact HAZ-1: The project could expose the public or the environment to risks from reasonably foreseeable releases of hazardous materials during building renovation and demolition of buildings in Area 2. (PS)

The project applicant proposes to renovate the existing 2,241-square-foot main ranch house, the 300-square-foot cabin, and the 432-square-foot garage in Area 2 to accommodate new uses. Other buildings in Area 2 are in poor condition and may be demolished as part of project development. Based on aerial photographs, many buildings in Area 2 were constructed prior to 1948 and likely contain lead, asbestos, and other hazardous materials. Though these materials do not pose a health risk during current use, if not abated prior to building demolition, lead dust, asbestos fibers, and other hazardous materials could be released to the air. This has the potential to pose a potential health threat to construction workers and the nearby public.

Mitigation Measure HAZ-1: As a condition of approval for project construction and demolition permits, a hazardous building materials survey shall be conducted by a qualified and licensed professional for all structures proposed for demolition or renovation as part of the project. All loose and peeling lead-based paint and asbestos-containing materials shall be abated by a certified contractor in accordance with local, state, and federal requirements. All other hazardous materials shall be removed from buildings prior to demolition in accordance with California Division of Occupational Safety and Health (DOSH) and California Department of Toxic Substances Control (DTSC) regulations. The completion of the abatement activities shall be documented by a qualified environmental professional and submitted to the County with applications for issuance of construction and demolition permits. (LTS)

CUMULATIVE IMPACTS

Hazards and hazardous materials impacts are generally site-specific and/or have limited mobility, and would not be expected to have cumulatively considerable effects beyond the project site. Development of properties near the project site could increase the potential exposure of persons to hazardous materials, including hazardous buildings materials; however, the use, storage, and

disposal of hazardous materials are regulated by federal, state, and local laws and regulations. The handling of hazardous materials at the project site would be subject to these laws and regulations, and as a result the cumulative hazardous materials risks would not be significant. Therefore, implementation of the proposed project would not result in any significant cumulative hazards or hazardous materials impacts.

REFERENCES

CAL FIRE, 2007. Fire Hazard Severity Zones in State Responsibility Areas, Humboldt County, adopted November 7.

Environmental Data Resources (EDR), 2014a. Aerial Photograph Decade Package, S. Humboldt Community Park, 934 Sprowel Creek Road, Garberville, CA, July 30.

Environmental Data Resources (EDR), 2014b. Radius Map with Geocode, S. Humboldt Community Park, 934 Sprowel Creek Road, Garberville, CA, July 29.

Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 2522, 2523, 2724, 2725, 2752, 4420, and 4430. Website <http://humboldt.gov/DocumentCenter/View/4363>.

Humboldt County, 2007. Garberville Airport Master Plan Report, January 2007 Draft Report Revised May 2007.

Humboldt County, 2002. Natural Resources and Hazards Report (Chapter 12), November.

Humboldt County OES, 2002. Emergency Operations Plan, Humboldt Operational Area, June.

State Water Resources Control Board (SWRCB), 2014. Geotracker database for Alice Jewett Elementary School site, Alderpoint Road, Alderpoint, CA. Website http://geotracker.waterboards.ca.gov/map/?global_id=T0602300363#, accessed July 29, 2014.

4.9 HYDROLOGY AND WATER QUALITY

INTRODUCTION

This section provides a discussion of existing conditions related to climate, water resources, hydrology, and water quality within the vicinity of the project site, including the extent and quality of surface water and groundwater, runoff and drainage patterns, and flood conditions. Following the existing conditions discussion is a summary of the regulatory framework related to water resources. The significance criteria, which are used to determine whether the project would result in significant impacts to water resources, are listed. Finally, potential impacts on water resources and hydrology that could result from the project are described.

ENVIRONMENTAL SETTING

Existing conditions related to water resources, hydrology, and water quality are described below, based on available public resources, including the Water Quality Control Plan (Basin Plan) prepared by the North Coast Regional Water Board (NCRWQCB, 2011) and a water resources technical report prepared for Humboldt County as part of the County General Plan Update Process (Winzler & Kelly, 2007).

CLIMATE

The project site is located in forested uplands near the northern California coast, where the climate is characterized by cool summers and mild, rainy winters. The vast majority of precipitation occurs between October and May. Based on historical weather data from stations near the project site, the mean annual precipitation ranges from 57 to 68 inches (WRCC, 2014a; WRCC, 2014b). Of the precipitation, snowfall represents on average less than an inch per year. The mean daily high temperature is around 67 degrees Fahrenheit (°F) with the mean daily low temperature around 44 °F (WRCC, 2014b).

GROUNDWATER RESOURCES

In the project site vicinity, groundwater is hydraulically connected to the South Fork Eel River, making the division between groundwater and surface water less distinct. The river is the primary water source in the project vicinity (Winzler & Kelly, 2007). Small amounts of groundwater storage are present in the Garberville Town Area Groundwater Basin, which covers an area of approximately 3 square miles (DWR, 2014). Groundwater from this basin provides approximately 5 percent of the water supply in the Garberville area. Two wells at the project site, one in Area 1 and one in Area 4, provide part of the water supply for the project site (GHD, 2014). In the Basin Plan, groundwater in general is listed as having existing beneficial uses for municipal, agricultural, and industrial supply and Native American culture, and potential beneficial uses for industrial process supply and aquaculture (NCRWQCB, 2011).

SURFACE WATER RESOURCES

The project site is located within the South Fork Eel River watershed, which drains approximately 441,000 acres in southern Humboldt County and northern Mendocino County (Humboldt County, 2013). The South Fork Eel River traverses the northern boundary of the project site. The South Fork Eel River flows for approximately 100 miles, joining the Eel River near Weott, and ultimately discharging to the Pacific Ocean 40 miles south of Humboldt Bay (EPA, 1999).

A permitted infiltration gallery on the river provides non-potable water that is used on-site for irrigation and agricultural use. A spring located in Area 2 of the project site provides potable water for the ranch house and other buildings in that portion of the project site.

The Basin Plan lists existing beneficial uses for South Fork Eel River as municipal, agricultural, and industrial supply; groundwater recharge; navigation; contact and non-contact recreation; commercial and sport fishing; and habitat for a variety of species, including rare, threatened, or endangered species, migratory species, and spawning species. The Basin Plan lists industrial process supply, hydropower generation, and aquaculture as potential beneficial uses of the South Fork Eel River (NCRWQCB, 2011).

FLOOD ZONES

A 100-year flood hazard zone has been mapped along the South Fork Eel River by the Federal Emergency Management Agency (FEMA) (FEMA, 1982). The flood hazard zone extends from the river to areas approximately 50 to 500 feet to the north and south. Nearly all of Area 1 (Tooby Memorial Park), Area 6 (Riverfront), and the northernmost part of Area 3 (Main Agricultural Area), are located within this flood hazard zone. Based on a Letter of Map Amendment issued for 1653 Kimtu Drive, near the river to the west of the project site, the 100-year base flood elevation is 350.5 feet above mean sea level (amsl) (FEMA, 2005). This suggests that there is a one percent chance each year for flood waters to reach or exceed an elevation of 350.5 feet amsl near the river at this location. No permanent structures are located within the mapped flood hazard zones, though portable toilets and a 192-square-foot trailer used as a caretaker residence are located within the flood hazard zone in Area 1.

STORMWATER DRAINAGE AND WASTEWATER DISPOSAL

The project site is not served by municipal stormwater or wastewater infrastructure. The project site is located outside the service area of the Garberville Sanitary District, the nearest municipal water and wastewater utility district. Wastewater at the project site from permanent structures within Area 2 is currently disposed of via septic systems. Portable toilets are used in Area 1.

COASTAL FLOODING HAZARDS

Based on its elevation and location, the project site would not be subject to coastal flooding hazards, such as a tsunami, seiche, or extreme high tides. A tsunami is a large ocean wave generated by an earthquake in or near the ocean. A seiche is an earthquake-generated wave within a large, enclosed body of water, such as a reservoir or lake.

DAM INUNDATION AREAS

The project site is not located in a mapped dam inundation area (Humboldt County, 2013).

WATER QUALITY

Data regarding groundwater quality within the Garberville Town Area Groundwater Basin is limited, but in general, wells that rely on stored groundwater, as opposed to river water, tend to have very high levels of iron and manganese and have reduced production capacity in late summer and fall months (Winzler & Kelly, 2007).

The South Fork Eel River is on the Clean Water Act Section 303(d) list of impaired waters due to diazinon and is subject to the Total Maximum Daily Load (TMDL) for sediment and temperature. The TMDL was established to protect native cold water fish, such as coho and chinook salmon, and steelhead (EPA, 1999). A sediment source analysis determined that natural sources of sediment represented slightly more than half of the sediment discharged to the Eel River, with roads being the most significant anthropogenic source (EPA, 1999). Temperature has been determined to be affected by the reduction in vegetation near the river, by reducing effective shade (EPA, 1999).

REGULATORY FRAMEWORK

FEDERAL AND STATE

Overview of Federal Clean Water Act

The Federal Clean Water Act (CWA) is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. In general, the CWA prohibits discharges to surface waters unless specifically authorized by a permit. These permits are administered by federal and state agencies, including the U.S. Army Corps of Engineers (USACE) and the Regional Water Quality Control Board (RWQCB). Specific sections of the CWA that apply to the project are discussed in more detail below.

Section 402 – Stormwater Program Requirements

Pursuant to Section 402 of the CWA and the California Porter-Cologne Water Quality Control Act, municipal stormwater discharges at the project site are regulated under the statewide National Pollutant Discharge Elimination System (NPDES) General Permit for the Discharge of Storm Water from Small Municipal Separate Storm Sewer Systems (Small MS4 Permit), issued in February 2013 by Order 2013-0001-DWQ. Locally, the NPDES program is overseen by the RWQCB and implemented by the Humboldt County Public Works Department.

The creation of significant areas of new impervious surfaces at the project site would be subject to compliance with requirements of the MS4 permit. Although there is no stormwater infrastructure at

the project site, such as catch basins, outfalls, or piping, conveyance of stormwater through ditches or sheet flow over a graded surface are considered stormwater point sources.

Section E.12 of the 2013 Phase MS4 Permit addresses requirements for retention and treatment of stormwater generated by development projects. If the project creates or replaces more than 2,500 square feet of impervious surfaces, the proposed project would be subject to these requirements. Section E.12 requires preparation of a Stormwater Control Plan (SCP). The SCP must include measures to capture and treat runoff from impervious surfaces. The SCP must incorporate site design measures to reduce project site runoff, such as porous pavement, green roofs, or vegetated swales.

Additional stormwater requirements apply to construction sites. The SWRCB adopted an NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAR000002) on September 2, 2009, as amended by Orders No. 2010-0014-DWQ and 2012-0006-DWQ. To obtain coverage under the Construction General Permit, a discharger must submit to the SWRCB, a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the Construction General Permit.

Construction activities subject to the Construction General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation, that result in soil disturbances of at least 1 acre of total land area (or smaller sites that are part of a common plan of development or sale that disturbs more than one acre of land surface). A SWPPP must be prepared by a Qualified SWPPP Practitioner (QSP) that meets the certification requirements in the Construction General Permit. The purpose of the SWPPP is 1) to help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and 2) to describe and ensure the implementation of best management practices (BMPs) to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. The Construction General Permit mandates certain requirements based on the risk level of the project (Level 1, Level 2, or Level 3), which is based on the risk of sediment discharge and the receiving water risk.

The SWPPP must also include a Construction Site Monitoring Program. The monitoring program includes, depending on the project risk level, visual observations of site discharges, water quality monitoring of site discharges (pH, turbidity, and non-visible pollutants, if applicable), and receiving water monitoring (pH, turbidity, suspended sediment concentration, and bioassessment).

LOCAL

Humboldt County Code

Section 335 of the Humboldt County Code contains flood damage prevention provisions. Section 611 contains wastewater and sewage disposal regulations. As noted in Section 4.6, Geology and Soils, Section 331-14 contains detailed rules and regulations regarding grading, excavation, erosion, and sedimentation Control, including requirements for preparation of erosion and sedimentation plans during grading operations.

Humboldt County General Plan

The following policies in the 1984 General Plan would apply to the proposed project:

Section 3291, Hazards

1. General

A. Regulate land use to ensure that development in potentially hazardous areas will not preclude preserving and promoting public safety. Potentially hazardous areas include, but are not limited to, steep slopes, unstable soils areas, on active earthquake fault lines, in extreme wildland fire areas, in airport flight path zones, and in flood plains and tsunami runup areas.

3. Flood

A. The County shall participate in the Federal Flood Insurance Program to regulate land uses in flood hazard areas in order to minimize loss of life and property, and in order to minimize public flood-related expense.

B. Agricultural lands which are in flood plain areas shall be retained for use in agriculture.

Section 3361, Water Resources

1. Ensure that land use decisions are consistent with the long term value of water resources in Humboldt County.

2. Regulate development that would pollute watershed areas.

8. Continue participation in all state, regional or local water resource planning efforts effecting surface run-off or groundwater supplies.

Section 4235 Public Services and Facilities, Drainage

1. Drainage needs of each community shall be studied as part of each community plan.

2. Natural drainage ways shall be utilized where possible to convey drainage flows consistent with streamside management policies in the General Plan.

Section 4531, Wastewater Facilities

4. Areas planned for additional development which are dependent on individual septic tank leach field disposal systems shall have minimum lot sizes based on the following factors:

A. soil suitability,

B. slope,

C. water source (on site-well or serviced),

D. proximity to sensitive habitats.

5. Septic systems shall not be permitted where the slope exceeds 30% or within 50 feet of an unstable land form.

6. Sewage disposal systems placed on an existing lot must meet all of the requirements of the Humboldt-Del Norte Department of Public Health and the North Coast Regional Water Quality Control Board.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would have a significant effect on hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding of as a result of the failure of a levee or dam; or
- Expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

LESS-THAN-SIGNIFICANT IMPACTS

Groundwater Impacts

Changes in impervious surface as part of proposed project would be minor compared to the area of the project site, and no significant changes in groundwater recharge would be expected as a result

of development associated with the project. Project impacts on water supply, including use of groundwater, are discussed in Section 4.17, Utilities and Service Systems, of this EIR.

Erosion and Siltation Due to Alteration in Drainage Patterns

The proposed project would not alter the course of a stream or a river. In general, the project would not include large areas of grading or impervious surfaces that would alter drainage patterns, except in Area 5 with the construction of a concession/bathroom building and a skate park. Required erosion control plans and other provisions of Humboldt County grading permit requirements, discussed in Section 4.6, Geology and Soils, would prevent potential impacts from erosion and siltation during construction. Potential impacts from erosion would be further reduced through compliance with construction- and operation-phase stormwater requirements (Mitigation Measures HYDRO-1a and HYDRO-1b, below).

Exceedance of Existing or Planned Stormwater Drainage System Capacity

No existing or planned stormwater drainage systems are present at the project site; thus, no capacity exceedances would occur as part of the project. The volume and drainage patterns of stormwater generated by the project would be generally the same as under current conditions. In Area 5, stormwater during storm events would be reduced somewhat through compliance with required stormwater management provisions (Mitigation Measure HYDRO-1b, below).

Other Water Quality Concerns

Operation of the proposed project would not result in any substantial changes to on-site water quality, with the exception of potential impacts associated with stormwater runoff and septic systems. Adherence to regulatory requirements, as described in Mitigation Measures HYDRO-1a, HYDRO-1b, and HYDRO-2 described below, would reduce these potential impacts on water quality to a less-than-significant level. No other impacts related to water quality would occur as a result of the project.

Flooding Hazards

No new housing is proposed for the project site, and therefore the project would not place housing in a 100-year flood hazard area. No permanent structures are proposed to be constructed within the 100-year flood zone located near the river, and any earthmoving activities in those portions of the project site would be minor and would not redirect or impair flood flows.

Other Flooding Hazards, Including Levees and Dams

The project site is not located within a mapped dam failure inundation area and is not protected from flooding by levees. The project would have no impact in relation to this significance criterion.

Seiches, Tsunamis, and Mudflows

Based on the elevation of the project site and distance from the ocean and large enclosed bodies of water, there would be no potential impacts due to seiches or tsunamis. Please refer to Section 4.6, Geology and Soils, for further information regarding mudflows, a type of landslide. The project's impact would be less than significant in relation to this significance criterion.

POTENTIALLY SIGNIFICANT IMPACTS

Impact HYDRO-1: Proposed development at Area 5 could result in polluted runoff adversely affecting the water quality of South Fork Eel River. (PS)

In general, the proposed project would not result in a significant change in the location or area of impervious surfaces at the project site. New roads, trails, and parking lots would be unpaved and infrastructure such as stages, restrooms, and vendor booths for events and camping areas would be temporary. The four proposed water storage tanks would be constructed on 16-square-foot platforms filled with sand to allow for stormwater drainage. Most areas would require only minimal grading, less than the 1-acre threshold in the Construction General Permit. Excavation required for the proposed new water supply infrastructure would also not be expected to result in a significant area of soil disturbance. The total of 4,300 linear feet of waterlines would require ½-foot-wide trenches for a total of 2,150 square feet of soil disturbance, considerably less than the 1-acre Construction General Permit threshold.

However, a significant increase in impervious surfaces would take place in Area 5, which would include the construction of a 1,000-square-foot concession stand/bathroom building and a 10,000-square-foot concrete and wood skate park. Area 5 would require 9 acres of grading, along with trenching for approximately 1,200 linear feet of waterline, and the project would add 10 acres of irrigated ballfields to this location. The location of these facilities, next to the South Fork Eel River, could potentially contribute sediment and pollutants to the South Fork Eel River both during construction and operation of the project. As the Eel River is classified as impaired due to sediment loads, this is a potentially significant impact.

Mitigation Measure HYDRO-1a: Consistent with the requirements of the statewide Construction General Permit, the project applicant shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce impacts on surface water quality through the project construction period.

The SWPPP shall be prepared by a qualified stormwater professional (QSP). The SWPPP shall include the minimum best management practices (BMPs) required in Attachment C for Risk Level 1 dischargers, Attachment D for Risk Level 2 dischargers, or Attachment E for Risk Level 3 dischargers (as applicable, based on final determination of the proposed project's Risk Level status [to be determined as part of the Notice of Intent for coverage under the Construction General Permit]). BMP implementation shall be consistent with the BMP requirements in the most recent version of the California Stormwater Quality Association Stormwater Best Management Handbook-Construction or similar guidance. BMPs shall include all measures necessary to prevent sediment from the project site from being discharged during drainage.

The SWPPP shall include a construction site monitoring program that identifies requirements for dry weather visual observations of pollutants at all discharge locations and, as appropriate, depending on the proposed project Risk Level, sampling of the site effluent and receiving waters. (Receiving water monitoring is only required for some Risk Level 3 dischargers.) If the proposed project is Risk Level 2 or 3, the project applicant shall also include requirements for Rain Event Action Plans as part of the SWPPP; a Rain Event Action Plan is a written document that must be prepared within 48 hours of any likely precipitation event, describing actions that will be implemented to protect all exposed portions of the site from the predicted precipitation. BMPs shall include measures for dust control, erosion prevention, sediment control, construction vehicle traffic controls and tire washes, and material storage, spill prevention, and housekeeping protocols.

Mitigation Measure HYDRO-1b: As a condition of approval for all grading and construction permits for the project site, the applicant shall prepare and implement a Stormwater Control Plan (SCP) for the project site consistent with all requirements of the MS4 National Pollutant Discharge Elimination System (NPDES) Permit as implemented by the Humboldt County Public Works Department. The SCP shall include, but not be limited to, BMPs designed into project features and operations to reduce potential impacts on surface water quality and to manage changes in the timing and quantity of runoff associated with development of the project site. The BMPs shall include Low Impact Development (LID) measures, such as minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining, evapotranspiring, and/or biotreating stormwater runoff close to its source, to the maximum extent practicable. The potential for irrigation water runoff containing sediment or other contaminants will be addressed in the SCP, and any BMPs and LID measures to address irrigation water runoff will be included. Increased stormwater runoff may not be channeled or directed to flow across the traveled section of a County roadway, and drainage must be contained at the edge of the County road surface. Funding for the maintenance of all BMPs for the life of the proposed project shall be specified.

The combination of the two measures above would reduce this impact to a less-than-significant level. (LTS)

Impact HYDRO-2: Inadequate septic systems could potentially adversely affect groundwater and surface water quality. (PS)

The project includes new 400-square-foot bathrooms in Areas 1 and 2 and a new 1,000-square-foot concession/restroom building in Area 5. Although festivals, camping, and other special events would rely on portable restrooms, the three additional bathrooms would require new septic systems and wastewater disposal. Sewage and wastewater generated during operation of the project may contain fecal coliform and other contaminants that could potentially affect groundwater and surface water quality.

Carefully designed and installed septic systems that are properly maintained are very effective in preventing contaminants in wastewater from reaching groundwater or surface water (Winzler & Kelly, 2007). The state and county have several regulations designed to prevent septic systems from causing pollution or presenting a public health hazard. The State Health and Safety Code requires appropriate sewage disposal be provided for all homes and businesses. Older methods of sewage disposal, such as pit latrines, have been prohibited. The NCRWQCB has established

minimum standards for wastewater treatment and disposal in the Basin Plan (NCRWQCB, 2011), which are implemented by Humboldt County. These include groundwater separation, surface water and well setbacks, slope limitations, sizing requirements, and allowance for use of alternative technologies. County regulations incorporating these requirements include the Sewage Disposal Ordinance and Sewage Disposal Requirements in Section 611 et seq of the Humboldt County Code.

The specific septic system for the proposed project has not yet been designed. Although the septic tank/leachfield system is often the easiest and most cost-effective system to implement, approved alternative technologies include mounds, sand filters, recirculation textile and other media filters as well as constructed wetlands (Winzler & Kelly, 2007). Additional discussion of potential constraints to wastewater systems due to native soils is discussed under Impact GEO-3 in Section 4.6, Geology and Soils.

Mitigation Measure HYDRO-2: As a condition of approval for building, grading, and construction permits at the project site, the applicant shall provide detailed plans for septic and wastewater disposal systems. The plans shall be prepared by a qualified professional and shall implement best available technology in the selection and installation of septic systems in compliance with state and county requirements. As a condition of approval for certificate of occupancy of the project site, the applicant shall provide evidence that the septic system is operating efficiently, that adequate capacity exists to address proposed site uses, and that a maintenance plan has been prepared and implemented for the system. (LTS)

CUMULATIVE IMPACTS

Stormwater and irrigation runoff discharged from past and existing projects has contained pollutants that have contributed to impairment of the water quality of receiving waters in the project vicinity. Sediment is the pollutant of particular concern for the South Fork Eel River and has been identified as causing impacts on designated beneficial uses. Therefore, a cumulative water quality impact related to sediment in the river is occurring. However, implementation of Mitigation Measures HYDRO-1a and HYDRO-1b would prevent the project from contributing considerably to this cumulative impact.

As nearly all of the development projects considered in the cumulative analysis (Table 6-1) are located within a municipal sewer district, they would not require septic tanks or alternative wastewater disposal systems. Therefore the less-than-significant impacts from new wastewater disposal systems (after mitigation) at the project site would not be expected to contribute considerably to a cumulative water quality impact.

REFERENCES

California Department of Water Resources (DWR), 2014. California's Groundwater: Garberville Town Groundwater Basin, San Mateo Subbasin, Bulletin 118, February 27.

Federal Emergency Management Agency (FEMA), 1982. Flood Insurance Rate Map, Humboldt County, California and Incorporated Areas, Map Number 0600601835B, revised July 19.

FEMA, 2005. Letter of Map Amendment Determination Document (Removal), Case No. 05-09-0296A, February 1.

GHD, Inc., 2014. Water Supply and Demand Analysis Memorandum, July 16.

Humboldt County, 1984. Humboldt County General Plan, Volume I, Framework Plan, as amended by resolutions through 1998.

North Coast Regional Water Quality Control Board (NCRWQCB), 2011. Water Quality Control Plan for the North Coast Region, May.

United States Environmental Protection Agency (EPA), 1999. South Fork Eel River Total Maximum Daily Loads for Sediment and Temperature. December 16.

Western Regional Climate Center (WRCC), 2014a. Monthly Climate Summary, Garberville California. Website: <http://www.wrcc.dri.edu/cgi-bin/cliRECTM.pl?ca3320>, accessed July 28.

Western Regional Climate Center (WRCC), 2014b. Monthly Climate Summary, Richardson Grove State Park, California. Website <http://www.wrcc.dri.edu/cgi-bin/cliRECTM.pl?ca7404>, accessed July 28.

Winzler & Kelly, 2007. Draft Water Resources Technical Report for Humboldt County Community Development Division, November.

4.10 LAND USE AND PLANNING

INTRODUCTION

This section reviews existing land uses on the project site and in the vicinity and evaluates the project's potential effects on these conditions. The project's consistency with relevant Humboldt County General Plan policies and zoning is also evaluated.

ENVIRONMENTAL SETTING

EXISTING LAND USES ON PROJECT SITE

As shown in **Figure 4.10-1**, the primary land uses on the 405.7-acre project site include agricultural, conservation-related, and recreational uses. The site also contains an area used to stockpile gravel (a resource production use) and facilities for small-scale community activities. Four residential units are located on the site.

As shown in Figure 4.10-1 and discussed in detail in Chapter 3, Project Description, of this EIR, the project site contains the following seven distinct areas:

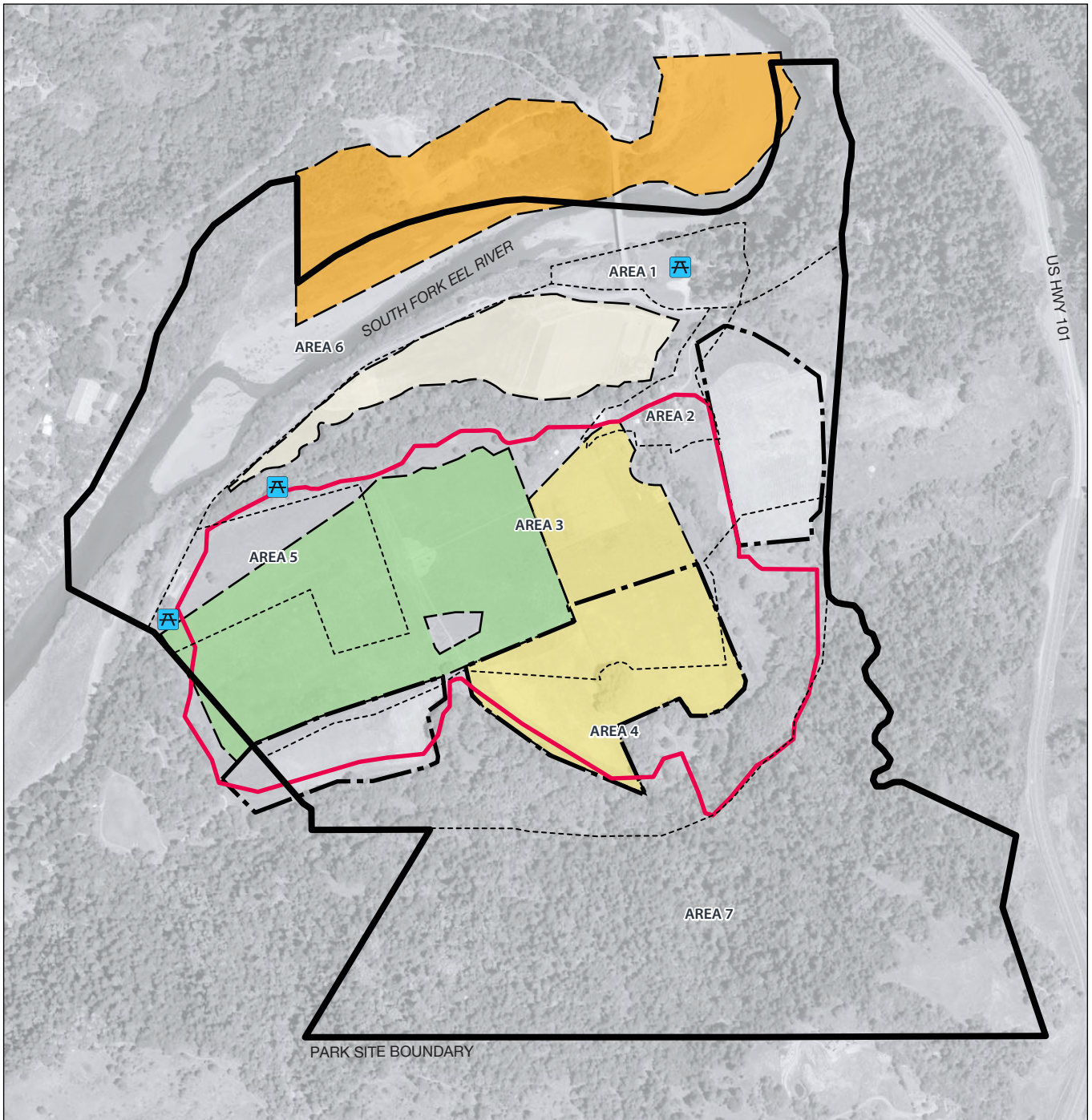
- Area 1 – Tooby Memorial Park (8.2 acres)
- Area 2 – Park Headquarters (6.0 acres)
- Area 3 – Main Agricultural Area (127.1 acres)
- Area 4 – Community Commons (56.4 acres)
- Area 5 – Community Facilities/Sports Area (16.0 acres)
- Area 6 – Riverfront (77.0 acres)
- Area 7 – Forestland (115.0 acres)

Each of these areas contains a range of land uses as described in the narrative that follows.

Agricultural and Conservation Use

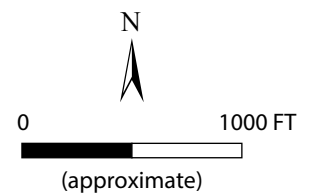
A majority of the site is currently and has historically been in agricultural and conservation use.

Existing agricultural uses include the production, processing, and storage of agricultural products. The six-acre Park Headquarters (Area 2) contains a large two-story barn used for agricultural processing, a small two-story barn, a chicken coop, a horse stable with tack room and covered storage area, and a scale house and slaughterhouse. There is a refrigeration unit next to the main barn. Existing community activities take place in the barnyard and include weddings, memorials, nature study, agricultural study, and workshops and classes. A small existing tool shed in the Park Headquarters is used as a farm stand. The 127.1-acre Main Agricultural Area (Area 3) has greenhouses and storage sheds. Please refer to Section 4.2, Agriculture and Forestry Resources, of this EIR for a detailed description of the agricultural resources on the site.



LEGEND

- | | | | |
|---|------------------------|---|-------------------|
|  | Certified organic farm |  | Picnic area |
|  | Upper farm field |  | Park loop trail |
|  | Grassland conservation |  | Gravel extraction |
|  | Organic hay |  | Area boundary |



SOURCE: Southern Humboldt Community Park, 2010

Figure 4.10-1
EXISTING LAND USE

Close to half of the project site includes large areas (77 acres in Area 6-Riverfront and 115 acres in Area 7-Forestland) of aquatic and riverine habitats bordered by riparian vegetation as well as mixed deciduous and conifer forest, native redwoods, California Bay forest, non-native grasses, freshwater emergent wetlands, seasonal creeks, and prime farmland. The South Fork Eel River flows across the northern portion of the site. Please refer to Section 4.4, Biological Resources, of this EIR for a detailed description of these habitats.

Recreational and Community Facilities Uses

The 8.2-acre Tooby Memorial Park (Area 1) contains playground equipment, a picnic area, barbeque pits, and benches dating to the 1960s. The park is used for recreational activities including, swimming, boating, sports, community gatherings and events. Additional picnic areas are located in the 127.1-acre Main Agricultural Area (Area 3) and the 16-acre Community Facilities/Sports Area (Area 5). There are approximately 3.5 miles of existing unpaved trails, dating to 2002, throughout the park. Other recreational and community activities include hiking, biking, horseback riding, disc golf course, dog walking, nature study, forest, habitat and streamside restoration, agricultural study, workshops, classes, weddings, and memorials. The project site also contains two kiosk/shade structures (one in Area 2-Park Headquarters and one in Area 5-Community Facilities/Sports Area) and portable toilet facilities.

The park is well-used; in 2008, there were an estimated 42,000 visitor days per year. By 2012, community park use had increased to an estimated 46,000 visitor days per year.

Please refer to Section 4.15, Recreation, of this EIR for a detailed description of existing recreational facilities.

Transportation and Parking Uses

The project site contains a network of existing service roads used by park staff, hikers and bicyclists, and agricultural machinery and vehicles. There are also several unpaved parking areas. Please refer to Section 4.16, Transportation/Traffic of this EIR for a detailed description of roads and parking facilities.

Residential Use

The four residential units on the project site include the following: a large caretaker house, a one-bedroom cabin, a two-bedroom bunk house in the Park Headquarters (Area 2), and a small mobile home/caretaker's unit in Tooby Memorial Park (Area 1).

Gravel and Shale Mining

Area 6 (Riverfront) contains an approximately 12-acre area currently permitted and leased to Randall's Sand and Gravel for a gravel and shale mining operation. A small portion of the operation also extends into Area 1 (Tooby Memorial Park); part of Area 1 on the west side of the Sprowel Creek Bridge is currently used as a stock pile for gravel. The gravel operation also occupies offsite areas north of the project site (see "Existing Land Uses Surrounding Project Site" below).

EXISTING LAND USES SURROUNDING PROJECT SITE

North of Project Site

Existing land uses adjacent to the project site on the north side of the South Fork Eel River include a cluster of low-density, rural residential, single-family-zoned properties; a single-family horse ranch; and an active surface mining, gravel and shale extraction, storage, and processing facility operated by Randall's Sand and Gravel. A portion of this facility also extends onto Areas 1 and 6 of the project site, as described above.

The offsite portion of the gravel mining facility is located on a 36-acre parcel that is owned by the Southern Humboldt Community Park (the project applicant) but is not part of the project. Most of the mining operation is located outside the project site boundaries. The Eel River separates most of the mining operation from the project site, and the active operations are a quarter of a mile away from the closest project site areas used by the public (i.e., the Tooby Memorial Park playground). The mining operation uses Sprowel Creek Road to transport gravel and other products. The operation is about ½-mile by road from the main entrance to the park. Tree cover provides additional buffering between the park and mining uses (Lobato, 2014). In addition, the Garberville Airport is located about ¾ mile north of the project site, separated from the project area by the South Fork Eel River. (See further discussion in Section 4.8, Hazards and Hazardous Materials; Section 4.12, Noise; and Section 4.16, Transportation/Traffic, of this EIR.)

South of Project Site

Benbow Lake State Recreation Area is located south of the site; approximately 2 miles south of Garberville (see Figure 3-1). The recreation area offers nearby compatible recreational land use and public access opportunities.

East of Project Site

To the east, the project site borders Highway 101 and a privately owned, 80-acre parcel with a single-family residence that is also the proposed location of the Garberville Sanitary District (GSD) potable water treatment facilities expansion.

West of Project Site

A privately owned, 70-acre undeveloped and unoccupied property is located west of the project site.

EXISTING LAND USES IN SOUTHERN HUMBOLDT COUNTY

The project site is located in southern Humboldt County, an area characterized by mountainous topography and considerable distances between urbanized areas. Much of the flat land near population centers is in agricultural, commercial, and residential use.

The project site is within the approximately 310-square-mile (200,000-acre) South Fork Eel River Watershed. Grazing and timber production cover about half of the watershed; 27 percent contains parks and open space; 20 percent is in residential use; and the remaining 3 percent is in commercial, industrial, and other uses. Richardson Grove and Humboldt Redwoods State Parks and the Avenue of the Giants are in the watershed.

REGULATORY FRAMEWORK

For the project site and vicinity, the Humboldt County General Plan consists of two documents: (1) the Humboldt County General Plan, Volume 1, Framework Plan (1984, with updates through 1994); and (2) the Garberville/Redway/Benbow Alderpoint Community Plan (1987). The Framework Plan addresses countywide issues, while the Community Plan addresses issues within the Garberville/Redway/Benbow Alderpoint planning area, which includes the project site.

The following discussion reviews relevant provisions of both plans, along with existing Humboldt County zoning. Other sections of this EIR refer to the Framework Plan as the “Humboldt County General Plan.”

Other sections of this EIR address project consistency with other relevant plans and regulations, along with related land use issues. For example, the project’s consistency with the Humboldt County Airport Land Use Plan (ALUCP) and land use compatibility with the Garberville Airport are addressed in Section 4.8, Hazards and Hazardous Materials; Section 4.12, Noise; and Section 4.16, Transportation/Traffic.

HUMBOLDT COUNTY GENERAL PLAN, VOLUME 1, FRAMEWORK PLAN

Land Use Designations

As shown in Figure 3-2 in Chapter 3, Project Description, of this EIR, the existing Humboldt County General Plan land use designations for the project site are as follows (Humboldt County, 1984):

- **IR (Industrial, Resource Related).** This designation applies to the northernmost portion (approximately 12.1 acres) of the project site. The designation is used in rural areas for uses that are compatible with and dependent on close proximity to resources, including timber, agriculture, and minerals. Primary and compatible uses within this designation are agriculture and timber products processing plants, mineral extraction operations, aquaculture facilities, and electrical generating and distribution facilities.
- **AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres).** This designation applies to approximately 239.9 acres in the north-central portion of the project site. The AR(5-20) designation is used for areas outside of urban/rural community centers, where few public services are required. It covers large lot areas on slopes generally less than 30 percent. Primary and compatible uses are agriculture and timber harvesting under intensive management, single-family residences, cottage industries, educational and religious activities, and recreational uses.

- **AL(20) (Agricultural Lands, one dwelling unit per 20 acres).** This designation applies to approximately 153.7 acres in the southern portion of the project site. The AL(20) designation is used for remote, steep, and high natural hazards areas. It allows for marginal timber, grazing, mining, and quarrying, along with recreational areas, watershed and wildlife areas, and occasional rural residences. Primary and compatible uses are resource production allowing intensive management opportunities, recreational uses, single-family residences, and cottage industries.

Please refer to Figure 3-2 in Chapter 3, Project Description, for the locations of these designations on the project site.

Relevant Goals and Policies

This subsection reviews goals and policies related to land use on the project site. Other sections in Chapter 4 of this EIR review goals and policies relevant to the environmental topics addressed in those sections (e.g., cultural resources, hydrology, mineral resources, etc.).

Agriculture and Other Land Use

Sections 2522 and 2523 of the Framework Plan contain the following relevant goal and policies related to agriculture (Humboldt County, 1984):

- *Goal: The optimum amount of agricultural land shall be conserved for and maintained in agricultural use to promote and increase Humboldt County's agricultural production.*
- *Policy 1: Agricultural lands shall be conserved and conflicts minimized between agricultural and non-agricultural uses through the following:*
 - A. *By formulation of logical boundaries separating urban and rural areas and when necessary, buffer areas to minimize land use conflicts.*
 - B. *By focusing future conversions in areas where land use conflicts would not threaten the viability of existing agriculture.*
 - C. *By promoting in-filling to achieve a more logical urban/agricultural boundary.*
 - D. *By allowing development of uneconomical or marginally viable agricultural lands, or agricultural lands already severely limited by conflicts with urban uses to limit the market pressures for conversion of more productive lands.*
 - E. *By assuring that public service facility expansions and non-agricultural development do not inhibit agricultural viability through degraded water supplies, access systems, air quality, and other relevant considerations, such as increased assessment costs.*
 - F. *By broadening the utility of agricultural preserves and the Williamson Act Program to accommodate and encourage intensively managed farms.*
- *Policy 3: In-filling shall be encouraged for all development.*
- *Policy 4: Prime agricultural land should be retained in parcel sizes large enough to provide for an economic management base.*

- *Policy 6: Vegetation management programs (controlled burning, etc.) shall be supported where they improve the availability and quality of rangeland for livestock and wildlife, reduce the hazard of disastrous wildfires and increase water quality and quantity.*
- *Policy 9: Agricultural production requiring smaller parcels and more intensive management, including aquaculture shall be encouraged wherever feasible consistent with the Remote Rural Development Section 2550 and other policies of this section.*
- *Policy 10: The conversion of agricultural land should only be considered where continued agricultural production is not economically feasible and proposed development is consistent with Remote Rural Development Section 2550.*

In addition, Sections 2552 and 2553 of the Framework Plan contain the following relevant goal and policies related to rural lands (Humboldt County, 1984):

- *Goal: To provide for orderly development of rural lands consistent with the needs to encourage sustained resource production without land degradation; reduce public exposure to safety hazards; minimize costs of providing services; conserve energy; encourage recreational development on appropriate lands; and encourage development along existing public corridors.*
- *Policy 1: Lands adjacent to areas designated as agricultural and timberlands in the General Plan should be planned for uses compatible with agriculture and timber wherever possible.*
- *Policy 3: Lands containing sensitive habitats should be developed consistent with the maintenance requirements of the habitat. (Sections 3400- 3433)*
- *Policy 4: Lands which contain identified hazards shall be developed consistent with the objective to reduce public exposure to the hazards.*
- *Policy 5: All development should be designed to minimize erosion and sedimentation.*
- *Policy 6: Any development plan or concept should be given consideration, provided that the intent of the General Plan is carried out.*
- *Policy 7: Cumulative impacts of water withdrawal from surface and groundwater sources and sewage disposal should be assessed during the zoning of all areas designated for Rural Development.*
- *Policy 8: Community plans shall address the needs and standards for Cottage Industries within the urban development areas; in addition, standards for rural areas will be refined.*

Recreation

Sections 4420 and 4430 of the Framework Plan contain the following relevant goals and policies related to recreation (Humboldt County, 1984):

- *Goals: To provide and adequately maintain park and recreation opportunities which are highly accessible and reflective of public needs; to protect park resources from incompatible uses; and to plan park development in such a manner as to minimize environmental impacts.*
- *Policy 1: The County should continue to support efforts to acquire, develop, and maintain county parks and recreation areas that are highly accessible to the public, and serve the unstructured outdoor recreational needs of County residents and tourists.*

- *Policy 2: The County shall give priority to the County residents' outdoor recreational needs.*
- *Policy 3: Plans for the development of additional County recreational facilities and opportunities shall consider the County's long term capabilities for the maintenance of all facilities and opportunities.*
- *Policy 4: The County shall encourage the private acquisition, development, and preservation of outdoor recreational resources and opportunities and facilities, and the County will coordinate recreation plans with all appropriate agencies.*
- *Policy 5: The County shall pursue all feasible sources of funding for the maintenance, development or acquisition of recreational facilities and programs consistent with this plan.*

GARBERVILLE/REDWAY/ALDERPOINT/BENBOW COMMUNITY PLAN

Land Use Designations

The Garberville/Redway/Alderpoint/Benbow Community Plan (Humboldt County, 1987) contains the same provisions for the IR, AR(5-20), and AL(20) land use designations as described for the Framework Plan above.

Relevant Policies

Section 2500 of the Garberville/Redway/Alderpoint/Benbow Community Plan contains the following relevant provision (emphasis added) (Humboldt County, 1987):

2500 Rural Land Use

The rural land areas of the planning area are primarily a mix of timber, cattle grazing, and rural home sites. This Plan significantly expands opportunities for rural home sites.

Community Policies

6. *For the Mitchell Ranch and Tooby Flat area, home sites shall be clustered in order to: (1) maintain the maximum feasible agriculturally productive areas; (2) minimize viewshed impacts; (3) avoid archaeological resources; and (4) reduce grading and construction impacts. Subdivision design should also consider incorporation of agriculturally related recreational amenities such as horse stables and trails on [sic] order to mitigate agricultural/residential use conflicts by making agriculturally related uses a continued part of the subdivision design.*

HUMBOLDT COUNTY ZONING

As shown in Figure 3-2 in Chapter 3, Project Description, of this EIR, the following zoning classifications apply to the project site (Humboldt County, 2005):

- **MH-Q (Heavy Industrial-Qualified).** The northernmost portion of the project site (approximately 12.1 acres) is zoned MH-Q. This zoning applies to the portion of the project site that is designated IR by the General Plan. The MH zoning permits various specified

manufacturing uses, along with offices. Certain specified residential uses are also allowed with approval of a use permit. The “Q” combining zone combines with the MH principal zone to prohibit asphalt batch plants, limit mining equipment, and hours of operations.

- **AE (Agriculture Exclusive).** The remainder of the project site (approximately 393.6 acres) is zoned AE. This zoning applies to the portions of the project site that are designated either AR(5-20) or AL(20) by the General Plan. The AE zoning permits all general agricultural uses. Certain types of uses (e.g., animal feed yards, agricultural and timber products processing plants, rental and sales of irrigation equipment, animal hospitals, labor camps) are allowed with approval of a use permit.

Please refer to Figure 3-2 in Chapter 3, Project Description, which illustrates the existing zoning of the project site.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant land use impact if it would:

- Physically divide an established community;
- Conflict with applicable land use plans or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal plan, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

LESS-THAN-SIGNIFICANT IMPACTS

Division of Established Community

The project proposes improvements to the site that include sports fields, playgrounds, picnic areas, and trails. Activities would include a variety of community-based agricultural projects, including a farm stand, along with sports, educational, and camp activities. The project site would include a Park Headquarters (Area 2) that would repurpose existing buildings for park offices and community meeting spaces. Existing and additional agricultural projects would continue on the project site, and new agricultural projects would be added. Existing gravel mining uses in Areas 1 and 6 of the project site would continue. The four existing residential units on the project site would continue to be used for housing caretakers and farm workers or be rented. A detailed description of proposed improvements to the site and approvals required is provided in Chapter 3, Project Description, of this EIR.

The project would not physically divide an established community. Such an impact would involve, for example, closing an access roadway, constructing a new freeway, or implementing another type of physical barrier that would prevent members of an established community from having access to an area, thereby dividing the community. The project does not contain any features that

would act as a barrier to continued access from one portion of the area to another. In fact, the project includes features that would enhance access, such as improvements to the existing pedestrian path under Sprowel Creek Road Bridge between the riverfront area and Tooby Memorial Park which would accommodate hikers and provide river access.

“Dividing an established community” can also be interpreted more generally to mean creating incompatibilities between different land uses. The proposed project land uses would generally be compatible with surrounding land uses. While the sand and gravel mining operation located north of and partially within the northern part of the project site could theoretically be incompatible with existing and proposed recreational uses in Tooby Memorial Park, land use conflicts have been and would continue to be avoided under the proposed project for the following reasons: (1) the uses are separated by the Eel River, and the closest active part of the gravel operation is ¼-mile from the playground (the closest location in the park with public uses); (2) the main operation is located almost ½-mile from the playground; (3) existing tree cover provides additional buffering between the operation and the playground; (4) the mining operation does not operate in the evenings, or on weekends (when park use is greatest); and (5) there have been no problems or conflicts reported between the two uses in the past 14 years of operation (Lobato, 2014). (See also Section 4.11, Mineral Resources, which discusses project impacts on the mining operation.)

It is possible that certain onsite activities proposed by the project, such as larger events proposed in the Community Facilities/ Sports Area (Area 5), would create traffic, noise, and/or light- and glare-related conflicts with onsite residential uses or with the rural residential, single-family properties, single-family horse ranch, and gravel mining operation located north of the site or the single-family residence to the east. These traffic, noise, and light and glare impacts and mitigation measures to reduce such impacts are discussed in Section 4.1, Aesthetics; Section 4.12, Noise; and Section 4.15, Transportation/Traffic.

For these reasons, the project would not divide an established community or create any significant land use incompatibilities. The impact would be considered less than significant, and no mitigation measures are required.

Conflict with Applicable Habitat Conservation Plan or Natural Community Conservation Plan

There are no habitat conservation plans or natural community conservation plans that apply to the project site. The project would therefore have no impact in relation to this significance criterion.

POTENTIALLY SIGNIFICANT IMPACTS

Impact LAND-1: The project would conflict with applicable Humboldt County General Plan policies adopted for the purpose of avoiding or mitigating an environmental effect. (PS)

Conflicts with adopted General Plan policies are not necessarily significant in and of themselves because these policies are adopted for multiple purposes and may conflict. For example, a policy to protect natural resources such as agricultural land may conflict with policies to encourage new recreation or housing. In addition, it is the responsibility of the decision-makers to determine how to evaluate policy consistency. When policies are related to potential environmental impacts,

however, such policies should be evaluated in an environmental analysis, as indicated by the significance criteria addressed throughout this EIR.

The project would generally be consistent with applicable policies of the Humboldt County General Plan. These policies are listed and referred to throughout Chapter 4 of this EIR where relevant to evaluating the project's impacts on different aspects of the environment (e.g., agricultural resources, mineral resources, noise, etc.). In most cases, compliance with mitigation measures recommended in Chapter 4 of this EIR would reduce the impacts of project conflicts with General Plan policies to less-than-significant levels. As discussed in Section 4.2, Agricultural and Forestry Resources, however, the project would result in loss of farmland, conflicting with the Humboldt County General Plan policies for protecting agricultural land. Please refer to Section 4.2 for more discussion of this impact.

The project would be consistent with General Plan land use designations and zoning, and with General Plan policies specifically related to land use. The project includes a General Plan amendment and rezoning, which would ensure that the project – including existing and proposed land use on the project site – is consistent with the new General Plan land use designations and zoning of the site. (See Chapter 3, Project Description, for details.)

The project also includes banking the existing residential development rights (approximately 54 potential parcels) in the areas of the project site that are currently designated AL(20) and AR(5-20) by the General Plan, so that those rights can be transferred to specific receiving areas when the County develops a Transfer of Development Rights program in the future. (See Chapter 3 for details.) This provision would ensure that the project would not conflict with the Garberville/Redway/Alderpoint/Benbow Community Plan policy encouraging clustered residential development in the "Tooby Flat" area (i.e., the project site vicinity).

Mitigation Measure LAND-1: The project applicant shall comply with all applicable mitigation measures identified in this EIR. Compliance with these measures would generally ensure that project conflicts with applicable Humboldt County General Plan policies would be reduced to less-than-significant levels. As indicated in Impact and Mitigation Measure AGFR-1, however, the loss of agricultural land that would result from the project would be a significant, unavoidable impact. The project's conflict with Humboldt County General Plan policies for protecting agricultural land would therefore be significant and unavoidable. (SU)

CUMULATIVE IMPACTS

The cumulative analysis for land use impacts considers the immediate vicinity of the project site. As shown in Table 6-1 in Chapter 6, the main project in the immediate vicinity of the project site is the Garberville Sanitary District (GSD) water treatment plant currently under construction immediately east of the site. The project would generally allow a continuation of existing land uses of the project site and would not create any incompatibilities with the GSD water treatment plant. The General Plan land use designations and zoning proposed by the project also would not contribute to any significant cumulative changes in land use or any significant policy conflicts. Creating the new Public Facility (PF) zoning classification and inserting the new Public Recreation (PR) land use designation into the Humboldt County General Plan (Framework Plan and 1984 Garberville, Redway, Benbow, Alderpoint Community Plan) would not have a significant cumulative impact because subsequent environmental review would require assessment of cumulative

impacts before this zoning or land use designation can be applied to any other site. Thus, the project would not contribute significantly to cumulative land use impacts, and no mitigation measures would be necessary. Cumulative impacts on agricultural land are discussed in Section 4.2, Agricultural and Forestry Resources, of this EIR.

REFERENCES

Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 2522, 2523, 2724, 2725, 2752, 4420, and 4430. Website <http://humboldt.gov/DocumentCenter/View/4363>.

Humboldt County, 1987, *Garberville/Redway/Alderpoint/Benbow Community Plan*, adopted by the Board of Supervisors, June 30, 1987, Sections 2500, 2724, 2725, and 2752. Website <http://www.humboldt.gov/DocumentCenter/Home/View/285>.

Humboldt County, 2005. Humboldt County Code (Zoning Regulations), Sections 314-3.3, 314-7.1, and 314-32. Website <http://www.humboldt.gov/137/County-Code>.

Lobato, Kathryn, Executive Director, Southern Humboldt Community Park, 2014. E-mail correspondence, August 8.

Southern Humboldt Community Park, 2010. *General Plan Amendment*, page 23, July.

4.11 MINERAL RESOURCES

INTRODUCTION

This section describes existing mineral resources at the project site and vicinity, summarizes the applicable regulatory framework, and analyzes potential impacts on those resources.

ENVIRONMENTAL SETTING

The project site is located adjacent to an active aggregate mining operation, where gravel and shale are extracted, stored, and processed. The mining operation, located just north of the South Fork Eel River, is run by Randall Sand and Gravel, and the land is owned by the Southern Humboldt Community Park. The operator holds all licenses and permits and has a long-term lease with the Southern Humboldt Community Park on this parcel of land. A portion of the permitted extraction area extends into project Areas 1 and 6. A small portion of Area 1, west of the Sprowel Creek Bridge, is used for gravel storage. The Southern Humboldt Community Park receives lease fees and royalties from this mining operation.

Sand and gravel extraction constitute the major portion of Humboldt County's mining activity, both in terms of quantity of material produced and value of extracted resource. Over the past 15 years, Humboldt County has extracted an average of 572,424 cubic yards of gravel per year, of which an average of 49,578 cubic yards per year (about 8.7 percent) is extracted from the South Fork Eel River (CHERT, 2014)

Extraction from the South Fork Eel River peaked at 75,900 cubic yards in 1999 and has trended downward in recent years (CHERT, 2014). In 2013, Randall Sand and Gravel extracted 17,212 cubic yards of gravel from the South Fork Eel River and was the only operator on the South Fork Eel River in 2013. All of the gravel was extracted by the wide shoreline skim method (CHERT, 2014).

REGULATORY FRAMEWORK

STATE LAW

The Surface Mining and Reclamation Act of 1975 (SMARA), Public Resources Code Sections 2710-2796, contains a comprehensive surface mining and reclamation policy for the State of California. It includes provisions designed to ensure that adverse environmental impacts related to surface mining are minimized and that lands are reclaimed to a usable condition after mining is completed. SMARA also encourages the production, conservation and protection of the state's mineral resources.

HUMBOLDT COUNTY GENERAL PLAN

The following policies in Section 2533, Mineral and Energy Resources, of the 1984 General Plan would apply to the proposed project:

2. *Plan future development such that it will not interfere with the utilization of identified mineral deposits.*
4. *Encourage the production and conservation of minerals, while preserving to the maximum extent feasible the values relating to recreation, watershed, wildlife, range and forage, science, and aesthetic enjoyment.*
9. *Extraction of instream sand gravel is not to exceed the average annual replenishment level (annual bedload), except when the bedload left from a previous flood is greater than the average annual replenishment or if the projects emphasize fishery enhancement, flood control or bank protection.*

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would have a significant impact on mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

LESS-THAN-SIGNIFICANT IMPACTS

Existing and permitted future gravel and shale mining would continue under the proposed project. No changes for the mining operation would occur in association with the proposed project. Although a small portion of the permitted extraction area is located in project Areas 1 and 6, no proposed development or park activities would interfere with the mining. It is not anticipated that development or operation of any project-related components would negatively affect mining operations or require a facility shut-down, even temporarily.

The South Fork Eel River mining area is not mentioned specifically in the County General Plan or other land use plans. As the project would have no effect on mining, the project would not result in the loss of availability of any known mineral resources, including locally identified mineral resource recovery sites.

POTENTIALLY SIGNIFICANT IMPACTS

No potentially significant impacts related to mineral resources would be anticipated as part of the proposed project development or operation.

CUMULATIVE IMPACTS

The project would not impair or interfere with the extraction of mineral resources at or near the project site. Therefore, the project would not contribute to any cumulative impacts related to mineral resources.

REFERENCES

Humboldt County Extraction Review Team (CHERT), 2014. 2013 Post-Extraction Report, Discussion Draft, February.

Humboldt County, 1984. Humboldt County General Plan, Volume I, Framework Plan, as amended by resolutions through 1998.

4.12 NOISE

INTRODUCTION

This section presents the results of an environmental noise study conducted for the proposed use of portions of the Southern Humboldt Community Park (SHCP) in the unincorporated Garberville area of Humboldt County for sports fields and outdoor events involving music. Surrounding area uses include the Garberville general aviation airport, gravel extraction operations, rock quarrying, agricultural/open space lands with rural residential uses, and residential uses within the town of Garberville. The location of the project site and adjacent noise-sensitive (residential) use areas are shown in **Figure 4.12-1**.

This section includes a description of the project proposal, a summary of applicable noise regulations, the results of a noise monitoring survey conducted for the project, and an assessment of noise impacts and mitigation measures necessary to meet the applicable standards at adjacent noise-sensitive land uses.

ENVIRONMENTAL SETTING

FUNDAMENTALS OF ENVIRONMENTAL ACOUSTICS

Noise may be defined as unwanted sound. Noise is usually objectionable because it is disturbing or annoying. The objectionable nature of sound could be caused by its *pitch* or its loudness. *Pitch* is the height or depth of a tone or sound, depending on the relative rapidity (frequency) of the vibrations by which it is produced. Higher pitched signals sound louder to humans than sounds with a lower pitch. *Loudness* is intensity of sound waves combined with the reception characteristics of the ear. Intensity may be compared with the height of an ocean wave in that it is a measure of the amplitude of the sound wave.

In addition to the concepts of pitch and loudness, there are several noise measurement scales, which are used to describe noise in a particular location. A *decibel (dB)* is a unit of measurement, which indicates the relative amplitude of a sound. The zero on the decibel scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis. An increase of 10 decibels represents a ten-fold increase in acoustic energy, while 20 decibels is 100 times more intense, 30 decibels is 1,000 times more intense, etc. There is a relationship between the subjective noisiness or loudness of a sound and its intensity. Each 10-decibel increase in sound level is perceived as approximately a doubling of loudness over a fairly wide range of intensities. Technical terms are defined in **Table 4.12-1**.

There are several methods of characterizing sound. The most common in California is the *A-weighted sound level or dBA*. This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Representative outdoor and indoor noise levels in units of dBA are shown in **Table 4.12-2**. Because sound levels can vary markedly over a short period of



Figure 4.12-1

SOURCE: Illingworth & Rodkin, Inc., 2014

PROJECT AND SURROUNDING NOISE SENSITIVE AREAS

TABLE 4.12-1 DEFINITIONS OF ACOUSTICAL TERMS USED IN THIS REPORT

Term	Definitions
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micro Pascals (or 20 micro Newtons per square meter), where 1 Pascal is the pressure resulting from a force of 1 Newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micro Pascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and Ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A-weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average A-weighted noise level during the measurement period. The hourly L_{eq} used for this report is denoted as dBA L_{eq} .
Day-Night Level, L_{dn}	L_{dn} is the equivalent noise level for a continuous 24-hour period with a 10-decibel penalty imposed during nighttime and morning hours (10:00 PM to 7:00 AM).
Community Noise Exposure Level, CNEL	CNEL is the equivalent noise level for a continuous 24-hour period with a 5-decibel penalty imposed in the evening (7:00 PM to 10:00 PM) and a 10-decibel penalty imposed during nighttime and morning hours (10:00 PM to 7:00 AM).
L_1 , L_{10} , L_{50} , L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Intrusive	That noise which intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of a sound depends upon its amplitude, duration, frequency, and time of occurrence and tonal or informational content as well as the prevailing ambient noise level.

Source: Illingworth & Rodkin, 2014.

time, a method for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events. This energy-equivalent sound/noise descriptor is called L_{eq} . The most common averaging period is hourly, but L_{eq} can describe any series of noise events of arbitrary duration.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about plus or minus 1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends upon the distance the receptor is from the noise source. Close to the noise source, the models are accurate to within about plus or minus 1 to 2 dBA.

Since the sensitivity to noise increases during the evening and at night -- because excessive noise interferes with the ability to sleep - 24-hour descriptors have been developed that incorporate

TABLE 4.12-2 TYPICAL NOISE LEVELS IN THE ENVIRONMENT

Common Outdoor Noise Source	Noise Level	Common Indoor Noise Source
	120 dBA	
Jet fly-over at 300 meters		Rock concert
	110 dBA	
Pile driver at 20 meters	100 dBA	
		Night club with live music
	90 dBA	
Large truck pass by at 15 meters		
	80 dBA	Noisy restaurant
		Garbage disposal at 1 meter
Gas lawn mower at 30 meters	70 dBA	Vacuum cleaner at 3 meters
Commercial/Urban area daytime		Normal speech at 1 meter
Suburban expressway at 90 meters	60 dBA	
Suburban daytime		Active office environment
	50 dBA	
Urban area nighttime		Quiet office environment
	40 dBA	
Suburban nighttime		
Quiet rural areas	30 dBA	Library
		Quiet bedroom at night
Wilderness area	20 dBA	Quiet recording studio
Threshold of human hearing	10 dBA	Threshold of human hearing
	0 Dba	

Source: Illingworth & Rodkin, 2014.

artificial noise penalties added to quiet-time noise events. The *Community Noise Equivalent Level*, *CNEL*, is a measure of the cumulative noise exposure in a community, with a 5 dB penalty added to evening (7:00 PM – 10:00 PM) and a 10 dB addition to nocturnal (10:00 PM – 7:00 AM) noise levels. The *Day/Night Average Sound Level*, L_{dn} , or *DNL* is essentially the same as *CNEL*, with the exception that the evening time period is dropped and all occurrences during this three-hour period are grouped into the daytime period. When sound propagates over a distance, it changes in both level and frequency content. The manner in which noise is reduced with distance depends several important factors, such as geometric spreading, ground absorption, atmospheric effects, and shielding by natural or human-made features.

Studies have shown that under controlled conditions in an acoustics laboratory, a healthy human ear is able to discern changes in sound levels of 1 dBA. In the normal environment, the healthy human ear can sometimes detect changes of about 2 dBA; however, it is widely accepted that

changes of 3 dBA in the normal environment are considered barely detectable to most people. A change of 5 dBA is readily perceptible and a change of 10 dBA is perceived as being twice as loud.

Long-Term Measurements

The primary sources of ambient noise in the vicinity of the project site are traffic on Highway 101, gravel extraction operations, rock quarrying operations, local roadway traffic and general aviation noise. To evaluate the ambient noise environment in adjacent noise-sensitive (residential) areas in the vicinity of the project site, an ambient noise monitoring survey was conducted between October 7 and 8, 2010. During this period the weather was clear, with light winds, no precipitation and temperatures ranging from 48 to 70 degrees Fahrenheit (°F). Three long-term noise measurements were conducted over a 22-hour period between 2:00 PM on October 7 and noon on October 8, 2010, and five short-term noise measurements were conducted simultaneously with the long-term meters. **Figure 4.12-2** shows the approximate location of these measurements.

The first long-term sound level meter (LT-1) was positioned on a tree trunk along Old Briceland Road near the driveway to 1201 Old Briceland Road on a hill side overlooking the Eel River valley (see Figure 4.12-2 for approximate location). This location was acoustically shielded by intervening terrain from Highway 101 traffic noise and gravel extraction and quarry operations noise, and thus is indicative of the noise environment of distant noise-sensitive receptors in the project vicinity, which is not influenced by these noise sources. The primary source of loud intermittent noise at this location was traffic on Old Briceland Road; however, localized grassland, forest and wind related noises were the primary contributors to the average and background noise levels at this location. The hourly trends in noise levels measured at location LT-1, including the energy equivalent noise level (L_{eq}), the maximum noise level (L_{max}), the minimum noise level (L_{min}), and the noise levels exceeded 01, 10, 50 and 90 percent of the time (indicated as L_1 , L_{10} , L_{50} , and L_{90}), are shown in **Figure 4.12-3**. The L_{eq} noise level is typically considered the average noise level, while the L_1 is considered the intrusive level and the L_{90} is considered the background noise level.

A review of Figure 4.12-3 shows that the noise levels at measurement site LT-1 also follow a typical diurnal noise pattern, with the daytime and nighttime average (L_{eq}) noise levels ranged from 44 to 54 dBA and 29 to 47 dBA, respectively, with an average daytime L_{eq} of 51 dBA and an average nighttime L_{eq} of 42 dBA. Ambient (L_{90}) noise levels ranged from 28 to 47 dBA during the daytime and 27 to 41 dBA during the nighttime, with an average daytime L_{90} of 40 dBA and an average nighttime L_{90} of 35 dBA. The relatively elevated nighttime L_{90} level at this location may be due to insect or woodland noises that sometimes occur in the evening and early nighttime hours in rural environments. The Community Noise Equivalent Level (CNEL) at this location was calculated to be 52 dBA.

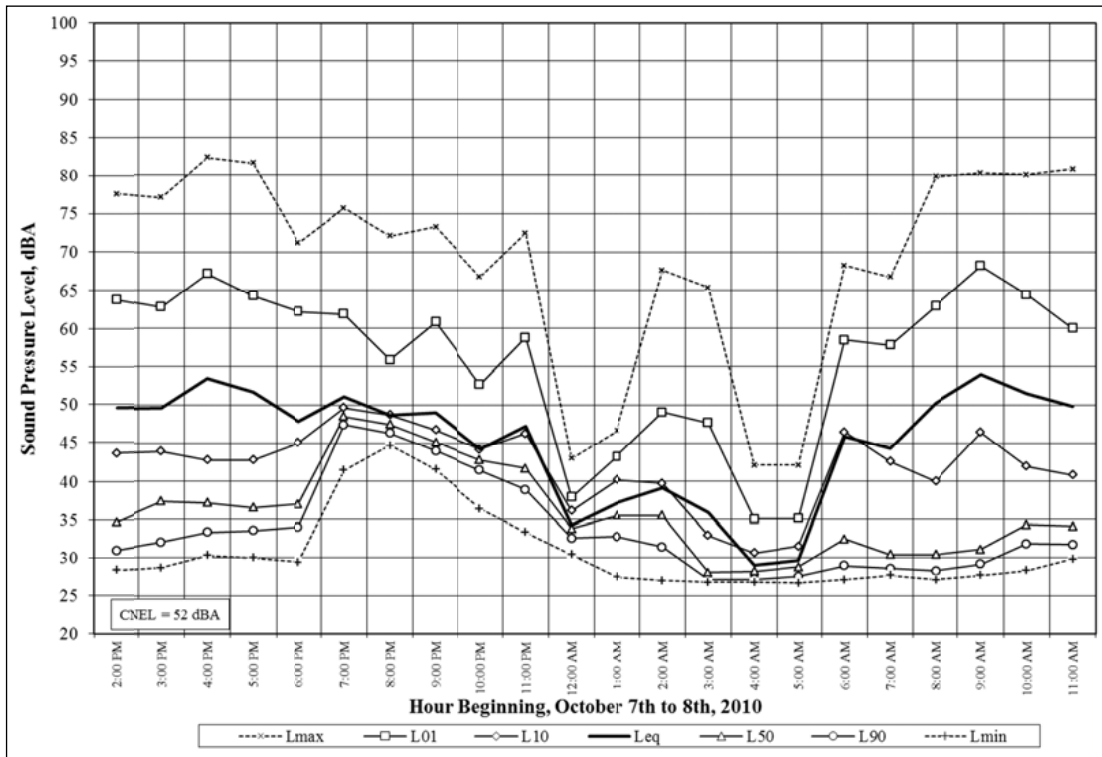
The second long-term sound level meter (LT-2) was positioned in a utility pole at approximately 50 feet from the centerline of Sprowel Creek Road in the vicinity of the residences along the western bluff of the Eel River with views of the project site (see Figure 4.12-2 for approximate location). Ambient noise measured at this location represents the noise environment in the residential area between the river bluff and the Garberville Airport. The primary source of loud intermittent noise at this location was traffic on Sprowel Creek Road; however, distant traffic on Highway 101 along with noise from gravel extraction and quarry operations were the primary contributors to average and background noise levels at this location. The hourly trends in noise levels measured at location



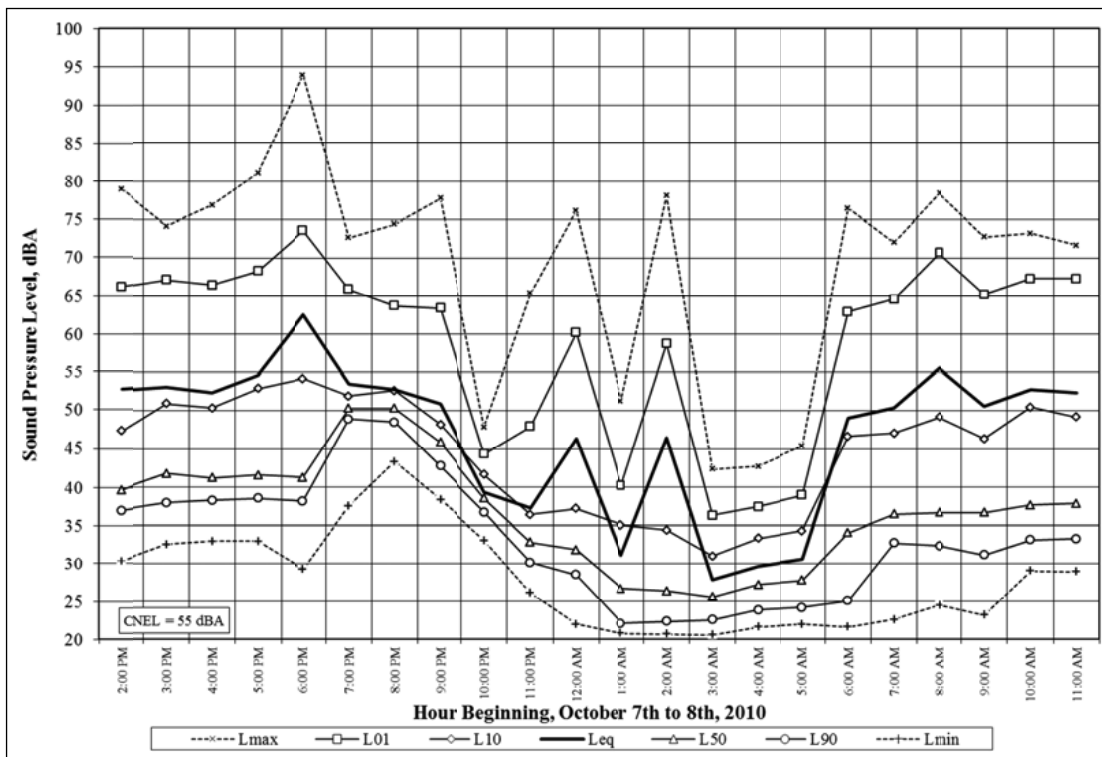
Figure 4.12-2

SOURCE: Illingworth & Rodkin, Inc., 2014

PROJECT SITE AND MEASUREMENT LOCATIONS



Measured hourly noise levels at LT-1



Measured hourly noise levels at LT-2

Figure 4.12-3

SOURCE: Illingworth & Rodkin, Inc., 2014

MEASURED HOURLY NOISE LEVELS AT LT-1 AND LT-2

LT-2, including L_{eq} , L_{max} , L_{min} , and the noise levels exceeded 01, 10, 50 and 90 percent of the time (indicated as L_1 , L_{10} , L_{50} and L_{90}), are shown in Figure 4.12-3.

A review of Figure 4.12-3 shows that the noise levels at measurement site LT-2 follow a typical diurnal pattern characteristic of traffic noise, where the daytime and nighttime average (L_{eq}) noise levels ranged from 50 to 63 dBA and 28 to 49 dBA, respectively, with an average daytime L_{eq} of 55 dBA and an average nighttime L_{eq} of 43 dBA. Ambient (L_{90}) noise levels ranged from 31 to 49 dBA during the daytime and 22 to 37 dBA during the nighttime, with an average daytime L_{90} of 42 dBA and an average nighttime L_{90} of 29 dBA. The CNEL at this location was calculated to be 55 dBA.

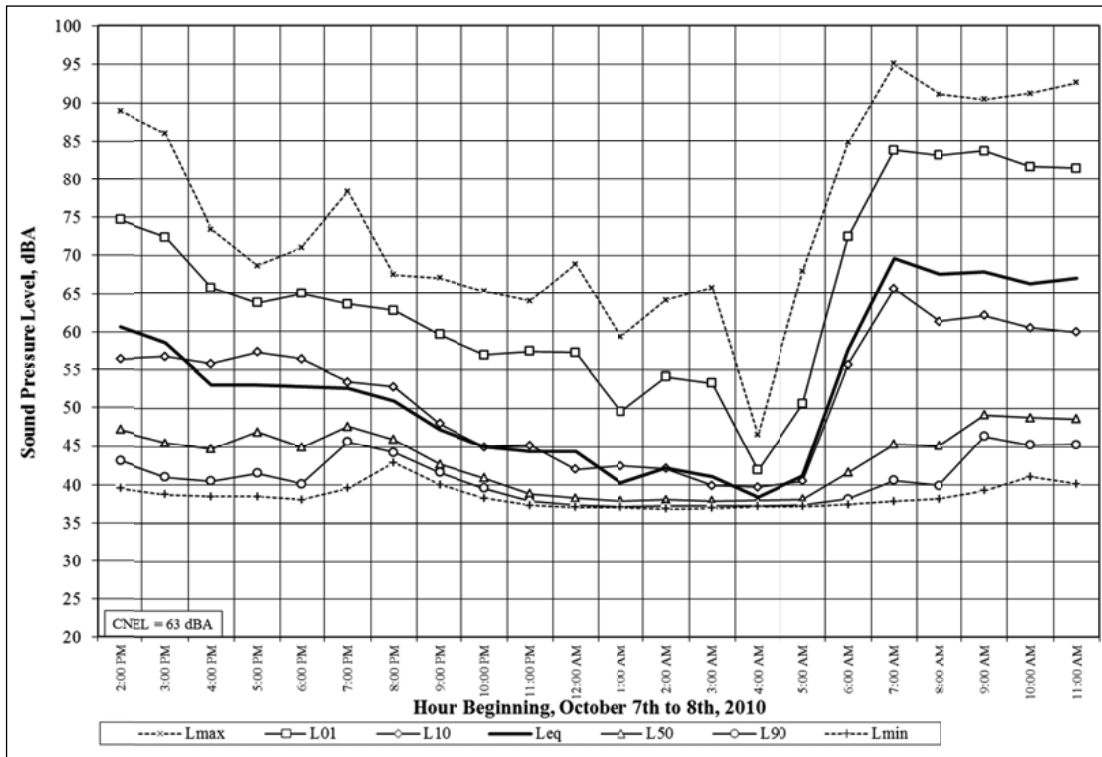
The third long-term sound level meter (LT-3) was positioned on a tree trunk at the rear fence line of the home at the corner of Rivercrest Drive and the Gravel mining access road (see Figure 4.10-2 for approximate location). The primary source of loud intermittent noise at this location was traffic on Sprowel Creek Road and trucks on the access road, however traffic on Highway 101 along with noise from gravel extraction and quarry operations were the primary contributors to average and background noise levels at this location. This measurement location represents the noise environment in the Rivercrest Drive, and other residential areas exposed to highway, gravel mining, and quarrying noise. The hourly trends in noise levels measured at location LT-3, including L_{eq} , L_{max} , L_{min} , and the noise levels exceeded 01, 10, 50 and 90 percent of the time (indicated as L_1 , L_{10} , L_{50} , and L_{90}), are shown in **Figure 4.12-4**.

A review of Figure 4.12-4 shows that the noise levels at measurement site LT-3 follow a modified diurnal pattern characteristic, with heightened daytime average and maximum noise levels and more constant background, ambient, noise levels, perhaps due to constant background traffic levels on Highway 101, and constant mechanical equipment noise at the gravel extraction facility. The daytime and nighttime average (L_{eq}) noise levels measured at this site ranged from 47 to 70 dBA and 38 to 58 dBA, respectively, with an average daytime L_{eq} of 64 dBA and an average nighttime L_{eq} of 49 dBA. Ambient (L_{90}) noise levels ranged from 40 to 46 dBA during the daytime and 37 to 40 dBA during the nighttime, with an average daytime L_{90} of 43 dBA and an average nighttime L_{90} of 38 dBA. The CNEL at this location was calculated to be 63 dBA.

Short-Term Measurements

Short-term measurements were conducted in 10-minute intervals simultaneously with those at the long-term monitoring positions at locations representative of the ambient noise environments at other area noise-sensitive (residential) uses. Figure 4.12-2 shows the approximate location of these measurements. A summary of the data measured at the short term locations including the energy equivalent noise level (L_{eq}) and the noise levels exceeded 01, 10, 50, and 90 percent of the time (indicated as L_1 , L_{10} , L_{50} and L_{90}) is shown in **Table 4.12-3** following.

Short-term measurement one (ST-1) was located in the residential area near the end of Camp Kimtu Road at about 50 feet from the centerline of Camp Kimtu Road. The primary noise source at this location was intermittent traffic, and bird chirps. The average noise level (L_{eq}) measured at this location was 44 dBA. Based on comparisons of the simultaneous noise levels measured at this and at the long-term positions, the estimated CNEL at this measurement location was 46 dBA.



Measured hourly noise levels at LT-3

Figure 4.12-4

MEASURED HOURLY NOISE LEVELS AT LT-3

SOURCE: Illingworth & Rodkin, Inc., 2014

TABLE 4.12-3 SHORT-TERM NOISE MEASUREMENT RESULTS

Site	L ₀₁ (dBA)	L ₁₀ (dBA)	L _{eq} (dBA)	L ₅₀ (dBA)	L ₉₀ (dBA)	Est. CNEL (dBA)
ST-1: Camp Kimtu	59	42	44	30	27	46
ST-2: Riverview Drive	75	63	60	41	37	58
ST-3: South Garberville	59	57	53	50	47	59
ST-4: Ridge above Hwy. 101	50	48	45	44	39	55
ST-5: Benbow Area	60	41	44	38	34	51

Source: Illingworth & Rodkin, 2014.

Short-term measurement two (ST-2) was made near the in the residential area of Garberville below Highway 101 and the Eel River at approximately 70 feet from the centerline of Sprowel Creek Road below the homes on Riverview Drive. The primary noise source at this location was traffic on Sprowel Creek Road and gravel mining operations. The average noise level (L_{eq}) measured at this location was 60 dBA. Based on comparisons of the simultaneous noise levels measured at this and at the long-term positions, the estimated CNEL at this measurement location was 58 dBA.

Short-term measurement three (ST-3) was located east of Highway 101 on Knights Lane in the southern portion of Garberville. The primary noise source at this location was traffic on Redwood Drive, with more distant highway traffic contributing to the background noise environment. The average noise level (L_{eq}) measured at this location was 52 dBA. Based on comparisons of the simultaneous noise levels measured at this and at the long-term positions, the estimated CNEL at this measurement location was 59 dBA.

Short-term measurement four (ST-4) was located on a fire road on the east side of and above Highway 101, with a clear view of highway traffic at 1300 feet. This location was judged to a similar exposure to Highway 101 traffic noise as the home on the ridge top west of the highway at the end of Mountain View Drive. The primary noise source at this location was Highway 101 traffic, with audible, but not measurable, intermittent noise from the gravel and quarry operations. The average noise level (L_{eq}) measured at this location was 45 dBA. Based on comparisons of the simultaneous noise levels measured at this and at the long-term positions, the estimated CNEL at this measurement location was 55 dBA.

Short-term measurement five (ST-5) was located in the Benbow residential area south and east of the SHCP property, near home setbacks on Blue Rock Road. The primary noise source at this location was Highway 101 traffic, intermittent traffic on Blue Rock Road, bird chirps, and miscellaneous residential noises such as distant dog barks and lawn mowing. The average noise level (L_{eq}) measured at this location was 44 dBA. Based on comparisons of the simultaneous noise levels measured at this and at the long-term positions, the estimated CNEL at this measurement location was 51 dBA.

REGULATORY FRAMEWORK

Regulatory criteria that would be applicable to the proposed project would include guidelines, goals, policies, and standards established by the State of California and Humboldt County. The State CEQA Guidelines pose questions to assist decision-makers in assessing the potential for significant impacts resulting from planned projects. The current Humboldt County General Plan and the proposed Humboldt County General Plan update contain similar Noise and Land Use standards to establish quantifiable noise levels deemed acceptable for the proposed land use (see **Figure 4.12-5**).

The Noise Element of the proposed Humboldt County General Plan update also contains goals, policies, and standards that further refine how noise issues will be judged in the future, and are considered applicable for use at the subject project. These are as follows:

Goals

N-G1. Excessive Noise. *A quiet and healthful environment with limited disagreeable noise.*

N-G2. Incompatible Land Uses. *Land uses arranged and managed to reduce annoyance and complaints and minimize the exposure of community residents to excessive noise.*

Policies

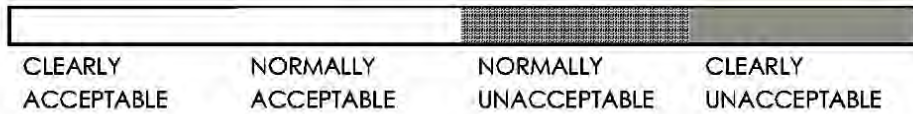
N-P1. Minimize Noise from Stationary and Mobile Sources. *Minimize stationary noise sources and noise emanating from temporary activities by applying appropriate standards for average and short-term noise levels during permit review and subsequent monitoring.*

N-P2. Guide to Land Use Planning. *Evaluate current noise levels and mitigate projected noise levels when making community planning and zoning decisions to minimize the exposure of community residents to nuisance noise levels. Minimize vehicular and aircraft noise exposure by planning land uses compatible with transportation corridors and airports, and applying noise attenuation designs and construction standards. Avoid zoning patterns that permit people to “move to the nuisance” unless mitigated through project conditions or recorded notice.*

Standards

N-S1. Land Use/Noise Compatibility Matrix. *The Land Use/Noise Compatibility Standards (See Figure 4.12-5) shall be used as a guide to ensure compatibility of land uses. Development may occur in areas identified as “normally unacceptable” if mitigation measures can reduce indoor noise levels to “Maximum Interior Noise Levels” and outdoor noise levels to the maximum “Normally Acceptable” value for the given Land Use Category.*

N-S2. Noise Impact Combining Zones. *The 20-year projected noise contours in the Map Book Appendix and the most current Airport Land Use Compatibility Plans shall be used to identify noise impact combining zone areas to indicate where special sound insulation measures may apply.*



LAND USE INTERPRETATION FOR
CNEL (or Ldn) VALUE

LAND USE CATEGORY	Maximum Interior Noise Levels*	CNEL (or Ldn) VALUE				
		50 - 60	61 - 70	71 - 80	81 - 90	91+
Residential Single Family, Duplex, Mobile Homes	45					
Residential Multiple Family, Dormitories, etc.	45					
Transient Lodging	45					
School Classrooms, Libraries, Churches	45					
Hospitals, Nursing Homes	45					
Auditoriums, Concert Halls, Music Shells	35					
Sports Arenas, Outdoor Spectator Sports						
Playgrounds, Neighborhood Parks						
Golf Courses, Riding Stables, Water Rec., Cemeteries						
Office Buildings, Personal, Business & Professional	50					
Commercial: Retail, Movie Theaters, Restaurants	50					
Commercial: Wholesale, Some Retail, Ind., Mfg., Util.						
Manufacturing, Communications(Noise Sensitive)						
Livestock Farming, Animal Breeding						
Agriculture (except Livestock), Mining, Fishing						
Public Right-of-Way						
Extensive Natural Recreation Areas						

*Due to exterior sources

(Source: Bolt, Beranek, and Newman, Inc., 1974)

CLEARLY ACCEPTABLE: The noise exposure is such that the activities associated with the land use may be carried out with essentially no interference. (Residential areas: both indoor and outdoor noise environments are pleasant.)

NORMALLY ACCEPTABLE: The noise exposure is great enough to be of some concern, but common constructions will make the indoor environment acceptable, even for sleeping quarters. (Residential areas: the outdoor environment will be reasonably pleasant for recreation and play at the quiet end and will be tolerable at the noisy end.)

NORMALLY UNACCEPTABLE: The noise exposure is significantly more severe so that unusual and costly building constructions are necessary to ensure adequate performance of activities. (Residential areas: barriers must be erected between the site and prominent noise sources to make the outdoor environment tolerable.)

CLEARLY UNACCEPTABLE: The noise exposure at the site is so severe that construction costs to make the indoor environment acceptable for performance of activities would be prohibitive. (Residential areas: the outdoor environment would be intolerable for normal residential use.)

Figure 4.12-5

SOURCE: Illingworth & Rodkin, Inc., 2014

COUNTY LAND USE/NOISE COMPATIBILITY MATRIX

- N-S3. Environmental Review Process. For noise sensitive locations where noise contours do not exist, the environmental review process required by the California Environmental Quality Act shall be utilized to generate the required analysis and determine the appropriate mitigation per Plan and state standards. Future noise levels shall be predicted for a period of at least 10 years from the time of building permit application.

- N-S4. Noise Study Requirements. When a discretionary project has the potential to generate noise levels in excess of Plan standards, a noise study together with acceptable plans to assure compliance with the standards shall be required. The noise study shall measure or model as appropriate, Community Noise Equivalent Level (CNEL) and Maximum Noise Level (L_{max}) levels at property lines and, if feasible, receptor locations. Noise studies shall be prepared by qualified individuals using calibrated equipment under currently accepted professional standards and include an analysis of the characteristics of the project in relation to noise levels, all feasible mitigations, and projected noise impacts. The Noise Guidebook published by the U.S. Department of Housing and Urban Development, or its equivalent, shall be used to guide analysis and mitigation recommendations.

- N-S5. Uniform Building Code. Use the Uniform Building Code as adopted for California (California Code of Regulations, Title 24, Appendix Chapter 12) for determining required noise separation requirements for buildings.

- N-S6. Noise Standards for Habitable Rooms. Noise reduction shall be required as necessary to achieve a maximum of 45 CNEL (Community Noise Equivalent Level) interior noise levels in all habitable rooms per California building standards.

- N-S7. Noise Reduction Requirements for Exterior Areas in Residential Zones. On new single family residential lots of 5,000 square feet or more, a usable outdoor living area at least 200 square feet in size per dwelling unit that meets the 60 CNEL (Community Noise Equivalent Level) standard shall be maintained somewhere on the property.

- N-S8. Short-term Noise Performance Standards Maximum Noise Level (L_{max}). The following noise standards (see **Table 4.12-4**), unless otherwise specifically indicated, shall apply to all property within their assigned noise zones and such standards shall constitute the maximum permissible noise level within the respective zones.

TABLE 4.12-4 HUMBOLDT COUNTY SHORT-TERM NOISE STANDARDS (L_{max})

Zoning Designation	Day	Night
	6:00 AM to 10:00 PM L_{max} , dBA	10:00 PM to 6:00 AM L_{max} , dBA
MG, MC, AE, TPZ, TC	85	75
CS, AG, CN, MB, ML, RRA, CG, CR	80	70
RM	70	60
RS, R2	65	60

Source: Humboldt County General Plan, Planning Commission Approved Draft, 2012.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

The California Environmental Quality Act (CEQA) contains guidelines to evaluate the significance of effects of environmental noise attributable to a proposed project. Under CEQA, noise impacts would be considered significant if the project would result in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, if the project would expose people residing or working in the project area to excessive noise levels;
- For a project within the vicinity of a private airstrip, if the project would expose people residing or working in the project area to excessive noise levels.

CEQA does not define what noise level increase would be considered substantial. Typically in high noise environmental (i.e., greater than 60 dBA, L_{dn}), an increase by more than 3 dBA L_{dn} due to the project would be considered a significant impact. Where the existing noise levels are lower (i.e., less than 60 dBA, L_{dn}), a greater than 5 dBA L_{dn} increase, would be considered a significant impact.

PROJECT DESCRIPTION

SHCP proposes to rezone four areas (Areas 1, 2, 4, and 5) of the project site as Public Facilities (PF) with a land use designation of Public Recreation (PR). These areas are shown in Figure 3-3 in Chapter 3. Within these rezoned areas there would be three designated outdoor performance areas with corresponding temporary stage locations and four sports fields. Detailed views of the Public Facilities-zoned areas are shown in Figures 3-4, 3-5, 3-7, and 3-8 in Chapter 3.

Festival/Large Event

The park would host an annual festival-sized event. Attendance would range from 2,500 to 5,000 persons. The event would occur once per year and be no longer than two days. The event would be a two-day family-friendly event that features a unique blending of local and regional musicians on three outdoor stages, roving entertainers, quality artisans displaying and selling wares, exhibits of fine arts displays, international cuisine, and on-site educational workshops. The attendance fluctuates over the course of the day and the total number of attendees on the site at any one time would be less than the one day total. Actual attendees would cap at 4,000, with an additional 1,000 staff, vendors, and entertainers on-site. Attendees would be encouraged to park in street side

parking spaces available in the towns of Redway and Garberville and to ride shuttle buses, a system that has been successfully utilized by the Mateel Community Center's Summer Arts and Music Festival for decades. The event would have the same (or lesser) parking needs as the Summer Arts and Music Festival. Street parking in Redway and Garberville is well-proven to be adequate for off-site parking for an event of this size. On-site parking would occur and will be limited to 500 attendee vehicles. This event would be included in the proposed Conditional Use Permit.

Medium Events (Seasonal, Up to Five per Year)

This type of event often features multiple performers and performances by well-known groups or individuals that would likely attract more attendees. These events could cover a wide-range of musical genres, theater, dance performances, and concerts. These events would take place in the Community Commons Area (Area 4). Attendance would be between 800 to 2,500 people daily in addition to staff and vendors. Not more than five of these sized events would occur per year. Parking would occur on-site.

Small Events

The following small events (attendance under 800) would occur under the project and would be considered within the number of visitors allowed at the park on a daily basis:

- **Birthday parties and informal gatherings.** With attendance typically ranging from 10 to 50 people, Tooby Memorial Park (Area 1) and the large barn in the Park Headquarters (Area 2) have been favorite gathering places for family birthday parties, BBQ's, and similar events. Tooby Memorial Park has served as a location for these types of events for more than four decades. These types of gatherings often have amplified music such as radios or portable personal music players. These events typically end at sunset. This type of activity would continue with the proposed project, with no limit on the number of these types of events annually.
- **Weddings and memorials.** Many weddings and memorial services for community members have taken place at the Park. These events would continue in Tooby Memorial Park (Area 1), the Park Headquarters (Area 2), Community Commons Area (Area 4), and the Labyrinth in the Main Agricultural Area (Area 3). Weddings could include low-key amplified music such as one musical group or a DJ utilizing a small public address amplification system at 65db or less. These events would typically end at sunset but a few each year may continue until midnight. Attendance would be 500 people or less and would be within the daily visitor allowance at the Park.
- **Small fundraisers and events.** Many local nonprofit organizations and park user groups have used the park for fundraising activities. A few examples include the Hospice Barnyard Brew, the Egg Hunt, the Walk in the Park (fundraiser for the local schools and the Park) and mountain bike races. These are well attended events that bring a wide range of community members and interests groups together at the community park. Most of these events include a variety of types of amplified music including prerecorded and live performances. Small events with amplification could also take place at Tooby Memorial Park (Area 1), the Park Headquarters (Area 2), and the Community Commons Area and the Wedding Grove (Area 4) due to their size and setting. The sound level produced during such a medium event would be

71 dBA at 500 feet from the performance areas. These events would typically end at sunset but a few each year may continue until midnight with a maximum attendance of 800 people and are within the number of daily visitors allowed at the park.

Small events would be considered an allowable public assembly use and would not require a special conditional use permit or be limited in the number of events. These types of events would be allowed to occur all year. They would occur seasonally, most often during late-spring, summer, and early fall months. The majority of these small events would occur between sunrise and sunset, with a few events each year going to midnight.

Sports Fields

Area 5 (Figure 3-8) is proposed to become the location for multiple community recreational facilities. This area would include 10 acres of fenced ball fields, including a multiuse soccer/football field (70,000 square feet), 1 soccer field (45,000 square feet), 1 standard size (high school) baseball field/multi-purpose (130,000 square feet), a multi-purpose field (80,000 square feet) for softball, baseball, and soccer. The sports fields would be used for local practices and games, for tournaments with multiple teams, and would include bleachers and benches, concession stands, and other associated structures. Area 5 would also include a 12,000-square-foot multi-purpose building, with gymnasium, administrative offices, and storage uses.

PROJECT-GENERATED NOISE LEVELS

To evaluate the effects of noise from outdoor music and sports events in the proposed public facilities area at surrounding noise-sensitive (residential) uses (shown in Figure 4.12-1), this analysis first establishes expected noise levels from these activities at typical distances, and then determines the noise levels for these activities through acoustical propagation and attenuation calculations, at the adjacent noise residential uses.

Expected Noise Levels

Outdoor Event Noise

The proposed Public Facility Areas would include three performance areas where temporary stages would be set up for music and other sound generating events. The proposed uses of the three performance areas, which may involve amplified music, are as follows:

1. The Main stage in the northern portion of Area 4A (see Figure 3-7) would typically be used for as the main stage areas during the annual festival. Large, concert style, amplified music events and associated audiences are expected at this location.
2. The Secondary stage in Area 4A (see Figure 3-7) would be used as a secondary event area during the proposed annual festival, with a smaller stage, and smaller audiences than at the northernmost stage. This area may also be used independently for medium or small events for a wide-range of musical genres, theater, dance performances, concerts and performances when a larger Area 4A venue is not needed.

3. The Southern Stage in Area 4A (see Figure 3-7), in the Wedding Grove area, would be used for weddings with amplified music and other small and medium sized events such as memorials and fundraisers where amplified music is proposed.
4. The Western stage in Area 2 near the existing Main Barn (see Figure 3-5) would also be used for weddings and small to medium sized events such as memorials and fundraisers with amplified music.

To assess the noise produced by these event music and other events at these performance areas, average (L_{eq}) and maximum (L_{max}) noise levels at a standard distance of 100 feet were assigned for different types of amplified voice and music performances, which may occur based on data measured at other outdoor amplified voice and music events (see **Table 4.12-5**).

TABLE 4.12-5 TYPICAL NOISE SOURCE LEVELS AT 100 FEET FOR PERFORMANCE AREAS EVENTS

Source Type	Noise Source Description	Average L_{eq} (dBA)	Maximum L_{max} (dBA)
1	Loud music concerts with full (rock type) amplification.	98	105
2	Moderate size concerts – medium amplification or loud acoustic bands.	85	90
3	Typical small (non-concert) venue live amplified band	78	85
4	Amplified pre-recorded dance music	72	78
5	Amplified background music for weddings, etc.	66	73
6	Amplified speech	64	69
7	Non-amplified background music for weddings, etc.	61	68

Source: Illingworth & Rodkin, 2014.

As discussed previously, the park proposes to conduct one large annual event involving amplified music, up to five medium events involving amplified music, and an undefined number of small events, which may also involve amplified music. The annual large event may include amplified music at each of the three designated performance areas, with the possibility that performances on these stages may occur simultaneously. To analyze large event noise under worst-case conditions, the following conditions were assumed:

- A Type 1 noise source (rock type concert with full amplification) at the main stage in Area 4A, and Type 2 noise sources (music with moderate amplification, or horn dominant acoustic bands) would occur at the secondary stage and southern stages in Area 4A simultaneously with the Type 1 source at the main stage in Area 4A.
- A large annual event which takes place over 14 hours in a single day (9 daytime, 3 evening, and 2 nighttime hours).
- Simultaneous Type 1 and Type 2 sources which occur for up to 3 daytime, 1 evening, and 1 nighttime hours; and
- Type 2 sources which occur independent of the Type 1 source for an additional 3 daytime and 1 evening hours.

Acoustical calculations based on this noise scenario indicate that the maximum (L_{\max}) noise level produced during such a large annual events would be 91 dBA at 500 feet from the performance area, and result in a CNEL of 87 dBA.

Medium events with amplification could take place at all stages in Area 4A (main, secondary and southern stages) or at the western stage in Area 2, with Type 2 noise sources (music with moderate amplification, or horn dominant acoustic bands), as a worst-case (conservative) noise condition for these events. To analyze medium event noise under worst-case conditions, an event which takes place over 8 hours from late afternoon to nighttime (4:00 PM to midnight) with two simultaneous Type 2 noise sources occurring for up to 3 daytime, 1 evening, and 1 nighttime hour was assumed. Acoustical calculations based on this noise scenario indicate that the maximum (L_{\max}) noise level produced during such a medium event would be 79 dBA at 500 feet from the performance area, and result in a CNEL of 67 dBA.

Small events with amplification could also take place at any of the performance areas individually, though they are most likely to occur at the southern stage in Area 4A, the Wedding Grove, or at the western stage in Area 2, the Barnyard Area, due to their size and setting. The worst-case noise condition for small events is judged to be Type 3 noise sources (small (non-concert) venue, live amplified bands). To analyze small event noise under worst-case conditions, an event that takes place over 4 hours from late afternoon to evening (6:00 PM to 10:00 PM) with a Type 3 noise source occurring for the event duration was assumed. Acoustical calculations based on this noise scenario indicate that the maximum (L_{\max}) noise level produced during such a medium event would be 71 dBA at 500 feet from the performance areas, and result in a CNEL of 60 dBA.

Sport Field Noise

Based on noise measurements conducted for field sports, such as football, baseball and soccer, during practices, normal games, and special events such as playoff games and all-star competitions, a range of noise levels can be generated, depending upon the number of participants and spectators. However, noise levels from players and spectators are typically at or below 61 dBA at 100 feet from the center of the playfield, with occasional shouts at or below 72 dBA and referee whistles at between 76 to 78 dBA. Noise measurements of Public Address (PA) systems for recreational field sports also show that a typical PA system use can produce sound levels of between 74 to 81 dBA at 100 feet from the center of the playfield, with an overall average level of 76 dBA at this distance. For a worst-case scenario with constant daytime use between 8:00 AM and 4:00 PM (8 hours) the CNEL at 100 feet from the center of the playfield would be 64 dBA.

Distances and Sound Attenuation to Adjacent Residential Areas

The final step in estimating the project noise levels is assessing the propagation of sound from the source to the sensitive receptors in the project area. To do this, it is necessary to assume some rate of sound attenuation between these two locations. Typically, the most dominant physical effect is due to the spreading out of sound waves with distance. Sound from localized sources, such as the performance areas and sports fields, spreads out as it travels away from the source with the sound level (acoustic energy) dropping off with distance according fundamental geometric relationships. This type of sound loss occurs independent of the barrier or terrain losses. Sound sources may be treated as a "point source" when the distance from the source to the receiver is large compared to the dimension of the source. For the size to distance relationships present for

this project, it can be assumed that sound from the performance areas and sports fields at the adjacent residences can be considered as a point source. With point sources sound levels are reduced with distance in accordance with the “inverse square law,” which yields a 6 dB sound level reduction for each doubling of the distance¹ from the source.

Figure 4.12-1 shows the eight residential areas that have been selected for study as representative of those affected by project generated noise. From closest to furthest from the proposed Public Facilities area, these are:

1. Homes on Rivercrest Drive opposite the Eel River from the park,
2. Homes at the end of Mountain View Drive at the top of the ridge south of the park,
3. Homes on the bluff above the Eel River near the Garberville Airport,
4. Homes at the southern edge of Garberville, east of Highway 101,
5. Homes on Riverview Lane west of Highway 101,
6. Homes in the Benbow Area south of the Park and east of Highway 101,
7. Homes off of Camp Kimtu Road west of the Park, and
8. Homes on hillsides and ridges off of Old Briceland Road west of the park.

Based on distance information obtained via Goggle Earth, these residential areas are between 1,500 and 7,200 feet from the performance areas in the proposed Public Facilities areas. Calculations considering distance attenuation alone indicate that the source levels reported above at 100 feet would attenuate by between 23 to 44 dBA at the distances that occur between project uses and the eight studied residential areas.

Other effects that modify this acoustical fall-off rate are barrier-type attenuation from intervening terrain, atmospheric attenuation of sound, and ground and forest sound absorption. Using the proposed locations of the stage areas and the sports fields and receiver locations as shown in Figure 4.12-1 and Figures 3-4, 3-5, 3-7 and 3-8, in conjunction with topographical information obtained via Goggle Earth, cross-sections have been developed to determine the direct line of sight from points 5 feet above ground level at the center of the main stage area (where large, concert style, amplified music are expected) to a point 5 feet above ground level at the closest portion of the identified receiver areas. This analysis was used to determine the path length difference between the path that sound actually travels over between the sources and the receivers (i.e., the diffracted path) and the line-of sight path from the source areas to the receivers. A graphical representation of the line of sight analysis is shown in Charts S1 through S8 in Appendix D.

From this barrier effect analysis, along with a conservative factor of a 1.5 dBA sound loss for each 100 feet of medium-dense woods through which sound would travel from source to receiver, the sound loss due to intervening terrain between the performance areas and residential areas 1 through 8 (as given above) has been calculated to range from zero where a direct line of sight to the main stage can be found, such as at the airport bluff and Riverview Lane homes to the theoretical (and practical) maximum 24 dBA for terrain losses and foliage absorption, where there is significant terrain shielding.

¹ Mathematically expressed as $L_{rec} = L_{source} - 20 \times \log(D_{rec}/D_{source})$.

Project-Generated Noise Levels at Adjacent Residences

Using the results of distance attenuation and terrain loss calculations, and considering the source levels for the proposed Public Facilities events, the expected maximum noise levels during events were calculated and the resulting CNEL was identified for days on which an event occurs at the adjacent eight identified noise-sensitive (residential) areas. **Table 4.12-6** shows the results of this analysis.

TABLE 4.12-6 CALCULATED NOISE LEVELS AT THE ADJACENT NOISE-SENSITIVE USES

Noise-Sensitive Areas	Existing CNEL (dBA)	Event Noise Conditions (dBA)							
		Large Event (main stage)		Medium Events (closest stage)		Small Events (closest stage)		Sport Fields	
		CNEL	L _{max}	CNEL	L _{max}	CNEL	L _{max}	CNEL	L _{max}
1. Rivercrest Dr. Homes	63	67 ^a	71 ^c	52	61 ^c	45	56	34	51
2. Mtn. View Dr. Home	55	49	53	29	38	22	33	>20	29
3. Airport Bluff Homes	55	69 ^{a,b}	73 ^c	51	60	44	55	33	50
4. South Garberville Homes	59	45	49	26	35	>20	30	>20	26
5. Riverview Lane Homes	58	65 ^{a,b}	69 ^c	47	56	40	51	30	47
6. Benbow Area Homes	51	41	45	21	30	>20	25	>20	21
7. Camp Kimtu Homes	46	40	44	20	29	>20	24	>20	20
8. Old Briceland Rd Homes	48	60 ^b	64 ^c	41	50	34	45	23	40

^a Event exceeds the County land use compatibility standard of 60 dBA CNEL.

^b CNEL of event is 5 dBA or more above existing CNEL level.

^c Level exceeds the County daytime and/or nighttime short-term noise standards (65 and 60 dBA, respectively).

Source: Illingworth & Rodkin, 2014.

LESS-THAN-SIGNIFICANT IMPACTS

This analysis finds that the proposed project would have no or less-than-significant impacts related to the following:

- *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.* Implementation of the project may result in the generation of high airborne sound levels due to the use of music amplification systems; however, such systems are not a significant source of groundborne vibration. Thus, the project would not expose persons to or generate excessive groundborne vibration or groundborne noise levels.
- *Exposure of people residing or working in the project area to excessive noise levels due to airport-related activities.* The Garberville Airport is less than 1 mile from the project. However due to the low use of the facility, it's orientation such that flight paths to and from the airport are not expected to cross the site, and the fact that the project does involve new residential

uses of the site, aircraft operations are not judged to result in a noise impact on the project site.

- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.* Traffic data provided by W-Trans was reviewed to calculate potential project-related traffic noise level increases along roadway serving the project site. Traffic noise level increases due to the proposed project under future conditions with the project are calculated to increase by 0 to 1 dBA Ldn above existing levels on the roadway serving the project site. Because traffic noise increases resulting from the proposed project would increase ambient noise levels by less than 3 dBA Ldn, this is considered a less-than-significant impact.

POTENTIALLY SIGNIFICANT IMPACTS

Impact NOISE-1: Concerts involving full (rock type) amplification during the large annual event, and medium-sized events with concerts involving medium amplification or loud acoustic bands in the Barnyard area, may exceed the County's short-term (L_{max}) land use and noise compatibility (CNEL) standards and increase ambient CNEL levels by 5 dBA or greater at some adjacent noise-sensitive (residential) receptors. (PS)

A review of Table 4.12-6 indicates that maximum noise levels (L_{max}) produced by a large event may exceed the daytime County short-term noise standards for residential uses (see Table 4.12-4) at the homes in the Rivercrest Drive and Airport Bluff areas and the nighttime County short-term noise standards at homes in the Riverview Lane area as well. Calculations also show that maximum noise levels (L_{max}) produced by medium events at the western stage may exceed short-term noise standards for residential uses at the homes in the Rivercrest Drive area. Additionally, CNEL noise levels for a large event may also exceed ambient CNEL levels by 5 dBA or more at homes in the Airport Bluff, Riverview Lane, and Old Briceland Road areas and exceed the County land use compatibility standard of 60 dBA CNEL at homes in the Rivercrest Drive, Airport Bluff and Riverview Lane areas. With the exception of events at the western stage, medium-sized events in all areas are not expected to exceed County standards in the surrounding residential areas. Small and sport field events are also not expected to exceed County standards in any of the surrounding residential areas.

Mitigation Measure NOISE-1a: A dispersed (satellite speaker) sound system around the stage and audience area of large amplified music events at the main stage in Area 4A and medium-sized music events at the western stage in Area 2 shall be used to lower point-source sound levels from that of a stage only speaker system. Sound levels needed to produce acceptable sound coverage of an audience with such a system are typically lower than those using stage-mounted speakers.

Mitigation Measure NOISE-1b: The following sound level limits shall be employed for all outdoor events involving speech or voice/music amplification at the park:

1. *Any outdoor speech or voice/music amplification at the main, secondary or southern stage areas in Area 4A after 10:00 PM shall be limited to a maximum noise level of 90 dBA at 100 feet from the sound source.*

2. *Any outdoor speech or voice/music amplification at the western stage in Area 2 after 10:00 PM shall be limited to a maximum noise level of 85 dBA at 100 feet from the sound source.*
3. *Daytime outdoor speech or voice/music amplification at the main, secondary or southern stage areas in Area 4A shall be limited to a maximum noise level of 95 dBA at 100 feet from the sound source; and*
4. *Daytime outdoor speech or voice/music amplification at the western stage in Area 2 shall be limited to a maximum noise level of 90 dBA at 100 feet from the sound source.*

Mitigation Measure NOISE-1c: *A Noise Management Plan, including the following provisions, shall be developed and implemented for use at the large- and medium-sized events that may generate noise levels in excess of the limits in the Humboldt County General Plan:*

1. *The Noise Management Plan shall establish a position at which maximum event noise levels may be verified noise to show compliance with Mitigation Measure NOISE-1b;*
2. *Park staff shall obtain and be trained in the use of a sound level meter so as to capable of determining compliance with noise limits;*
3. *A member of the park's Board of Directors or management staff shall be designated as a complaint response coordinator and shall be responsible for responding to any local complaints about event-related noise;*
4. *If noise complaints are received during any event, noise shall be monitored during the next (subsequent) event at the residence from which noise complaints were received, and appropriate measures identified to reduce the impact to a less-than-significant level; and*
5. *Records of noise complaints shall be filed with the Humboldt County Planning Department at least once per year and included in any required annual report reviewed by the Planning Commission.*

Mitigation Measure NOISE-1d: *The project shall be subject to the following annual reporting and review requirements:*

1. *By December 31 of each year a medium-sized or large-sized event is held, the applicant shall prepare and submit 15 copies of a post-event report discussing that year's concert. Verification of attendance levels shall be discussed.*
2. *The report shall focus on assessing the effectiveness of the plan of operation, mitigation measures, and monitoring program. The report shall also contain written correspondence from agencies participating in monitoring and/or affected by the event (i.e., Planning Department, Division of Environmental Health, Sheriff's Office, and Public Works).*
3. *Responses to all concerns and issues identified in the report shall be provided and appropriate measures to be undertaken at the following year's event identified as needed. The annual report shall include sufficient data to assess the effectiveness of all required mitigation measures in relation to the total daily attendance and noise.*

4. *The Humboldt County Planning Commission shall review the post-event report within 120 days of receiving the report. The total attendance levels for medium- and large-sized events shall be determined by the Planning Commission on an annual basis after review and approval of the annual report. The allowed attendance levels for medium-sized events shall range from a low of 800 to a maximum of 2,500 persons total. A large-sized event ranging from 2,500 to 4,000 attendees is not allowed until the Planning Commission has reviewed and approved two consecutive annual reports for medium-sized events with attendance levels of at least 1,800 persons. In consultation with the reviewing agencies, the Planning Commission may waive the annual reporting requirements for medium- and large-sized events for up to 5 years should the applicant demonstrate the use has been conducted in conformance with all the required mitigation, and no changes in attendance levels or mitigation measures are proposed.*
5. *To address area concerns that may arise, the applicant shall hold a minimum of one community meeting in the vicinity of the site within 90 days of each large-sized event. This requirement may be waived by the Humboldt County Planning Director in consultation with the reviewing agencies if no significant community issues have been reported during that year's large-sized event.*

The combination of the measures above would reduce this impact to a less-than-significant level. (LTS)

Implementation of the above mitigation measures would reduce the noise levels produced by outdoor events at the park to meet the County's short-term (L_{max}) and land use and noise compatibility (CNEL) standards at noise-sensitive (residential) areas in the park vicinity. Based on comparisons of the maximum noise levels due amplified music and ambient noise levels at the noise-sensitive receivers (which are generally quite low), noise levels during these events may be audible (though not above County standards) in many of the surrounding residential areas. The recommended mitigation measures would reduce the noise impact to a less-than-significant level, however.

Impact NOISE-2: Project construction could result in a substantial temporary increase in noise. (PS)

Noise-generating construction activities associated with the proposed project facilities are anticipated to result in noise levels that exceed 60 dBA L_{eq} and be at least 5 dBA L_{eq} above the ambient noise environment at adjacent noise-sensitive land uses on a temporary basis. Noise generated by construction activities would temporarily elevate noise levels at adjacent noise-sensitive receptors.

The project also includes water infrastructure improvements, which would include the installation of new water lines and water tanks. Waterlines would be installed along the southern side of the existing service road from Area 3 – Main Agricultural Area to Area 5 – Sports Facilities Area, and along the existing service road and trails in Community Commons – Area 4. Waterlines would be installed with a trencher. Pipe would be placed at a depth of 12 to 18 inches with a 6-inch width. All soil removed during trenching would be returned to the trench. The installation of each line is expected to take 2 days and require two truck trips to deliver and return the trenching equipment. Three small water tanks would be installed in Areas 4 and one tank would be installed in Area 5. The capacity of each tank would be 500 gallons. The installation of all four tanks is expected to

take one working day and require one pickup truck trip for materials and two vehicles for workers. Construction activities associated with the water infrastructure improvements are not anticipated to result in noise levels that exceed 60 dBA L_{eq} and be at least 5 dBA L_{eq} at adjacent noise-sensitive receptors.

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise-sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours); when the construction occurs in areas immediately adjoining noise-sensitive land uses; or when construction lasts over extended periods of time.

Construction activities generate considerable amounts of noise, especially during earth-moving activities when heavy equipment is used. The highest maximum noise levels generated by project construction would typically range from about 90 to 95 dBA L_{max} at a distance of 50 feet from the noise source. Typical hourly average construction-generated noise levels are about 81 to 88 dBA L_{eq} , measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., during use of earth-moving equipment, impact tools, etc.). Hourly average noise levels generated by the construction of hotel would range from about 65 to 88 dBA L_{eq} , measured at a distance of 50 feet, depending upon the amount of activity at the site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

Mitigation Measure NOISE-2: The following best management practices shall be incorporated into the project:

- *Restrict noise-generating activities at the construction site or in areas adjacent to the construction site to the hours of 7:00 AM to 5:00 PM, Monday through Friday, and to the hours of 10:00 AM to 5:00 PM, Saturday and Sunday.*
- *Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.*
- *Strictly prohibit unnecessary idling of internal combustion engines.*
- *Locate stationary noise-generating equipment, such as air compressors or portable power generators, as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise-generating equipment when located near adjoining sensitive land uses. Temporary noise barriers could reduce construction noise levels by 5 dBA.*
- *Use "quiet" air compressors and other stationary noise sources where technology exists.*
- *Route all construction traffic to and from the project site via designated truck routes, where possible. Prohibit construction-related heavy truck traffic in residential areas, where feasible.*
- *Designate a "disturbance coordinator," who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall*

require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

With the incorporation of these practices, the noise impact resulting from project construction would be reduced to a less-than-significant level. (LTS)

CUMULATIVE IMPACTS

Noise levels in the project area would increase as a result of cumulative growth planned in and around the project site. This cumulative growth in the project vicinity would generally be located away from the project site, with any noise produced by such growth localized to these distant sites. The only future growth in the project vicinity with potential influences on cumulative noise levels in the site vicinity appear to involve continued gravel extraction and mining operations along the on gravel bars upstream of the project site and the new Garberville Sanitary District (GSD) Drinking Water Improvement Project which would include a water intake, pipelines, and a water treatment plant at the northern and eastern sides of the project site away from identified noise-sensitive receptors. Noise resulting from the gravel the continuation of gravel mining is expected to be similar to that resulting from current operations at noise-sensitive receptors in the project vicinity, and the future operation of the GSD water treatment facilities is not expected to produce any significant noise at noise-sensitive receptors in the project vicinity. Based on these considerations, significant cumulative noise impacts are not anticipated in the project site vicinity.

REFERENCES

Humboldt County Community Development Services, 1984. *Humboldt County General Plan, Volume 1, Framework Plan*, Section 3240 Noise.

Humboldt County Community Development Services, 2012. *Humboldt County General Plan, Planning Commission Approved Draft*, March 19.

4.13 POPULATION AND HOUSING

INTRODUCTION

This section reviews existing population and housing conditions in the project site vicinity and in Humboldt County as a whole, and the potential effects of the project on these conditions.

ENVIRONMENTAL SETTING

This subsection presents the available data on population characteristics and demographics. The affected environment for population and housing reflects the existing population and housing conditions within the area of analysis.

This subsection presents demographic and housing information from the 2000 U.S. Census. While more recent data is available for many locales, the 2000 Census dataset remains the most comprehensive data available at the community level for all cities in the area of analysis. More recent data, including the 2010 U.S. Census, where available, are included in the discussion.

POPULATION TRENDS

The following discussion reviews population trends in Humboldt County as a whole and in the Garberville area.

Existing Countywide Population

The total population in Humboldt County was documented at 126,518 according to the 2000 U.S. Census. The population as of January 1, 2010 is estimated at 133,400, an increase of almost 6,900 persons over the ten-year timeframe. Humboldt County's population growth rate increased in the late 1980s and early 1990s and has since returned to a level more consistent with historic growth rates over the past 20 years. Between 1985 and 1990, the County grew by about 8,000 people (7.3 percent), representing an average annual increase of 1.4 percent.

Projected Countywide Population

The current annual growth rate is about 0.7 percent. California Department of Finance projections indicate an anticipated average annual growth of 0.58 percent over the next 20 years, which is lower than the current rate and also lower than the 0.83 percent annual growth experienced in the past 20 years.

These trends indicate that the population will increase by an average of approximately 765 people per year over the next 20 years. Assuming the current trends remain stable and the average household size remains at 2.38 persons, about 15,000 more people will live in Humboldt County in 2030 than in 2007. This increase would require about 6,300 additional housing units countywide.

The unincorporated County share of this total housing need is expected to be 54 percent, or about 3,400 units.

Population in the Garberville Area

The Department of Finance provides population projections for counties within the state of California. It does not provide projections for cities or Census Designated Places (CDPs) within the counties. Population increases in the Garberville CDP are considered at the same level of projected population increase as for the County of Humboldt. The unincorporated towns of Garberville and Redway continue to function as the economic sub-center for the Southern Humboldt region, accommodating mostly the day-to-day service needs. The Southern Humboldt area has a high percentage of rural landowners living outside of the towns but served by the towns. Census data provided in this document can be interpreted as a generalized local geographic trend rather than specific data for the town of Garberville alone.

Table 4.13-1 shows past population trends in the Southern Humboldt Region/Garberville CDP compared to the county as a whole, and Table 4.13-2 shows projected population growth for the area.

TABLE 4.13-1 POPULATION IN HUMBOLDT COUNTY AND GARBERVILLE CENSUS DESIGNATED PLACE (CDP), 1990-2010

Year	Humboldt County Population	Garberville CDP Population
1990	119,118	12,168
2000	126,518	12,194
2010	128,347	13,018

TABLE 4.13-2 PROJECTED POPULATION GROWTH IN GARBERVILLE CENSUS DESIGNATED PLACE (CDP), 2010-2030

Year	Garberville CDP Population	Percent Change
2010	13,018	+0.58
2015	13,399	+0.58
2020	13,793	+0.58
2025	14,197	+0.58
2030	14,614	+0.58

HOUSING TRENDS

Countywide Trends

According to California Department of Finance population and housing data, countywide in 1990 there were approximately 46,420 occupied housing units with an average of 2.49 persons per household and a 9.22 percent housing vacancy rate. By 2000, there were approximately 51,646 occupied housing units with an average of 2.41 persons per household and a 9.33 percent housing vacancy rate.

Trends in Southern Humboldt/Garberville CDP

According to the 2000 U.S. Census, the Southern Humboldt/Garberville CDP had a total population of 12,194 with 3,763 (inside urban clusters) and a rural population of 8,431. The land area included in the census was 851.1 square miles.

The housing inventory consisted of 6,016 homes with 4,916 occupied (3,026 owner occupied and 1,890 renter occupied). This leaves 1,100 homes unoccupied, equating to an 18.28 percent vacancy rate. This is higher than the Humboldt County vacancy rate of 8.4 percent. Slightly less than 30 percent of housing units are single-family housing units.

The 851.1-square-mile land area had a housing density of seven houses or units per square mile, which is very low compared to statewide averages.

OTHER DEMOGRAPHIC TRENDS

There is a lack of affordable housing in the Garberville area, which contributes to an elevated homelessness rate. Estimated median home value was \$296,007 in 2009 (it was \$129,500 in 2000) compared to the state median price of \$384,200. The estimated median monthly home rental cost in Garberville was \$828 in 2009.

Barriers to developing affordable housing in Garberville include permitting constraints, lack of land properly zoned for low-income housing, and development codes that discourage mixed-use development, among others.

Existing demand for housing in Humboldt County is highest among low-income people. Only 43 percent of the projected new housing needs for the period between 2001 and 2006 were met by housing construction for people with very low incomes, and 74 percent of the needs were met for people with low incomes.

Humboldt County has fallen behind on meeting affordable housing needs. Nearly 30 percent of people living in the County cannot afford to buy a house, and rental costs keep rising. Young families, seniors, and most of the county's workforce need more affordable housing options, whether they want to buy or rent a home.

Nearly 40 percent of all households in the county spend 25 percent or more of gross income on housing. Varying by region, between 15 and 60 percent of renter households spend over 50 percent of income on housing, and between 6 and 24 percent of owner-occupied households spend over 50 percent of income on housing.

Estimates of total homeless persons in Humboldt County throughout the course of 1 year range from 4,000 to 6,000. It has been estimated that, at any point in time, there are between 800 and 1,100 homeless persons in the county, and the number is generally higher during summer months than during winter months.

The data also indicate an aging population, where older persons represent an increasing percentage of the populace. The number of people over the age of 65 is expected to double from about 17,000 to 35,000 by the year 2025.

EXISTING PROJECT SITE CONDITIONS

There are currently four residential units on the project site. These existing structures consist of a large ranch/farm house serving as a caretaker's unit, a one-bedroom cabin, a two-bedroom bunk house in the Park Headquarters, and a small mobile home/caretaker's unit in Tooby Memorial Park. These residential units are used for housing caretakers and farm workers or are rented. (See Chapter 3, Project Description, of this EIR.)

REGULATORY FRAMEWORK

There are no federal, state, or local regulations that are relevant to the project's potential population and housing impacts as defined by the significance criteria in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (see "Significance Criteria" under "Environmental Impacts and Mitigation Measures" below). Please refer to Section 4.10, Land Use and Planning, of this EIR for discussion of the project's impacts on land use and land use planning policies.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant population or housing impact if it would:

- Induce substantial population growth in the area, either directly (by proposing new homes and businesses) or indirectly (through the extension of roads or other infrastructure);
- Displace substantial numbers of existing housing; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

LESS-THAN-SIGNIFICANT IMPACTS

Inducement of Population Growth

The project would not induce substantial population growth in the area, either directly (by proposing new homes and businesses) or indirectly (through the extension of roads or other infrastructure). The impact would be less than significant, and no mitigation is necessary. Reasons for this conclusion are discussed below.

Impact of Project Employees on Population Growth

The project would include an estimated four additional employees. This number of new employees would have a negligible impact on population growth. If the employees moved with their families to the area from elsewhere, they would create a very small increase in the local population. It is

possible that the employees would be people who already live in the area, however, in which case they would have no impact on population growth.

Community Facilities as Incentive for Population Growth

The project plans include improvements to community facility infrastructure. In some instances, community facilities can be an incentive to growth, as parks and healthy lifestyles attract new residents. In this case, however, the project would be unlikely to attract a substantial new population, since it includes improvements to and expansion of an already-existing community park use.

The project would not add new housing. The project would not affect the location or increase the growth rate of the local population. The project therefore would not be an incentive to growth.

Impact of Proposed General Plan Amendment and Rezoning on Population Growth

The project includes a General Plan amendment that would change the land use designation to Public Recreation on the entire project site, including two areas that currently have designations that allow housing: (1) an approximately 240-acre area designated of AR5-20 (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres); and (2) an approximately 154-acre area designated AL20 (Agricultural Lands, one dwelling unit per 20 acres). The project also includes rezoning of these areas from AE (Agriculture Exclusive) to Public Facility (PF). (See details in Chapter 3, Project Description, of this EIR.)

These changes would reduce the availability of land for housing. This aspect of the project would therefore reduce possibilities for population growth.

Impacts on Existing Housing and Population

The project would not displace any existing housing. The project would not displace any people, necessitating the construction of replacement housing elsewhere. Under the project, the four existing residential units on the project site would continue to be used for housing caretakers and farm workers or be rented. The impact would therefore be less than significant, and no mitigation is necessary.

POTENTIALLY SIGNIFICANT IMPACTS

The project would not have any potentially significant impacts on population or housing conditions.

CUMULATIVE IMPACTS

For population and housing, the geographic scope for assessing cumulative impacts is the area within unincorporated Humboldt County. As discussed in the above project-specific analysis, the project would not result in a significant impact on population or housing conditions. Therefore, the effect of the project on population and housing conditions, in combination with other past, present, and foreseeable projects, would be less than significant. The project would not result in or contribute to any significant cumulative impacts on population or housing conditions.

REFERENCES

- Humboldt County, General Plan Update EIR, Housing Element Multi-Family 6-11-11, United States Census 2000 and 2010. Website <http://factfinder.census.gov/>.
- State of California, Department of Finance, Sacramento, California, 2011. *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change, January 1, 2010 and 2011*.
- State of California, Department of Finance, California State Data Center, "2010 U.S. Census." Website http://www.dof.ca.gov/research/demographic/state_census_data_center/census_2010/view.php.
- California Selected Housing Characteristics: 2005-2009 Data Set: 2005-2009 American Community Survey 5-Year Estimates Survey: American Community Survey City-data.com.*
- Erick Eschker, *Humboldt Economic Index 12/2011*, Humboldt State University.
- Humboldt County Public Health Branch, Humboldt Partnership for Active Living, Human Impact Partners, 2008. *Humboldt County General Plan, Humboldt County Health Impact Assessment*, March.
- Waxman, Deborah T., *Creating Affordable Housing in Humboldt County* (Master's Thesis).
- 2003 Housing Element Update to Humboldt County General Plan*. Approved December 16, 2003, amended November 30, 2004.
- Smith, Michael D.; Steinberg, Steven J. Room to Grow? Website <http://humboldt-dspace.calstate.edu/xmlui/handle/2148/426>.

4.14 PUBLIC SERVICES

INTRODUCTION

This section describes potential project impacts on public services (fire protection services, police services, and schools).

Unlike utility services, public services are provided to the community as a whole, usually from a central location or from a defined set of facilities. The resource base for delivery of services, including the physical service delivery mechanism, is financed on a community-wide basis, usually from a unified or integrated financial system. The service delivery can be provided by a city, county, service district, or other special district. In this case, the Garberville Fire Protection District provides fire protection services, the Humboldt County Sheriff's Office provides police services, and the Southern Humboldt Unified School District operates public schools in the area.

Usually new development will create an incremental increase in the demand for public services. The amount of the demand will vary widely, depending on both the nature of the development (residential vs. industrial, for instance) and the type of services, as well as on the specific characteristics of the development (such as senior housing vs. family housing).

The impact of a particular project on public services and facilities is generally a fiscal impact. By increasing the demand for a type of service, a project could cause an eventual increase in the cost of providing the service (more personnel hours to patrol an area, additional fire equipment needed to service a tall building, etc.). These impacts are real but are economic and fiscal, not environmental.

CEQA does not require an analysis of fiscal impacts unless the increased demand triggers the need for a new facility (such as a new fire station or school), since the new facility would have a physical impact on the environment.

ENVIRONMENTAL SETTING

FIRE PROTECTION AND EMERGENCY MEDICAL SERVICES

Fire protection services include more than just fire suppression. Local fire departments provide a range of services, including emergency medical services (approximately 80 percent of calls for service include emergency medical interventions), auto extrication, technical rescue (rope, swift water, collapse, and confined space rescue), hazardous materials, and general public assistance responses (Humboldt County, 2012).

Fire Protection Services

The project site is located outside the boundaries of a fire protection district. The northern edge of the site (Assessor's Parcel Number 222-081-024) is adjacent to the southern boundary of the Garberville Fire Protection District (GFPD) and located within the GFPD's Sphere of Influence (SOI), as adopted by the Humboldt Local Agency Formation Commission (LAFCo) in 1986 (Resolution 86-9). LAFCo's 2008 resolution approving the Municipal Service Review/SOI for the GFPD affirmed the 1986 SOI boundary.

Background

The GFPD was established in 1940 to protect the community of Garberville. The GFPD was expanded in 1977 to accommodate a new growth area along Alderpoint Road adjacent to the core Garberville area and now comprises approximately 702 acres. The GFPD is dispatched by the California Department of Forestry and Fire Protection (CAL FIRE) through the Humboldt County Fire Dispatch Cooperative and regularly responds to calls for service within and beyond its district boundaries. The delivery of fire protection services outside of district boundaries is often referred to as "good will" service.

On average, 50 percent of such calls are medical in nature. Other calls such as vehicle accidents comprise between 15 and 20 percent of total calls and may also require emergency medical services. Fires of all types typically make up approximately 25 percent of GFPD calls for service.

Areas outside the GFPD boundaries that regularly receive "good will" service include the area to the west of the district along Alderpoint Road (up to 5.5 miles); south along Highway 101 to Benbow and the Mendocino County line; and southwest along Sprowel Creek, Old Briceland, and Camp Kimtu Roads—including the project site.

Fire Stations

The GFPD has 15 active firefighters and 10 auxiliary personnel who are non-firefighters. The GFPD is headed by one chief, two assistant chiefs, and two captains. The GFPD operates from a fire station located in Garberville at 680 Locust Street, about 1.3 miles from the Sprowel Creek Road entrance to the project site. This station houses three engines, one utility vehicle, and the Southern Humboldt Technical Rescue Team response vehicle. The GFPD is equipped with a thermal imaging camera, "jaws of life," and typical fire suppression tools and equipment.

The GFPD has identified the need for fire stations in the Benbow area and near the Garberville Airport. Both areas are outside the boundaries of the GFPD but served by the GFPD on a good will basis. These new fire stations would be constructed only after the areas are annexed to the GFPD and the GFPD has secured sufficient funding for new facilities and equipment (Humboldt County, 2012).

CAL FIRE operates a seasonal fire station in Garberville and is responsible for suppressing wildfires within the State Responsibility Area, which includes the project site. CAL FIRE will respond to medical aid and other calls if available, but CAL FIRE is not responsible for providing community fire protection service and cannot be relied upon to provide service during fire season

when the engines are responding to wildland fires or during non-fire season (typically November to May) when the station is not staffed.

Emergency Medical Services

In responding to emergencies, local fire departments work closely with law enforcement, public utilities, and ambulance service providers. Fire departments and ambulance companies are dispatched to medical calls simultaneously. In most cases, fire departments arrive on scene prior to the ambulance and are expected to gather vital signs, stabilize the patient, and prepare the patient for transport to the hospital (Humboldt County, 2012).

North Coast Emergency Medical Services Agency, which is a Joint Powers Authority governed by a board consisting of one supervisor from each of the three member counties, directs the emergency management services (EMS) system on behalf of Humboldt County. The EMS system consists of the advanced life support and transport provided by ambulance companies, first responder services provided by the fire departments and other agencies within the county and base hospitals that provide medical control and emergency department receiving facilities. Humboldt County Code Title V, Health and Safety, Division 5, Emergency Medical Services System, establishes the standards for ambulance permits and service rates, both of which are approved by the Humboldt County Board of Supervisors (Humboldt County, 2012).

Ambulance service for the project site vicinity is provided by City Ambulance of Eureka from its Garberville ambulance base located at 814 Redwood Drive. City Ambulance provides advanced life support services and typically transports patients to Jerold Phelps Community Hospital. Patients may be transported to hospitals in Fortuna or Eureka depending upon the availability of patient beds or the nature of the illness or injuries.

POLICE SERVICES

Law enforcement services for the project site vicinity are provided by the Humboldt County Sheriff's Office from its Garberville substation at 648 Locust Street, about 1.3 miles from the Sprowel Creek Road entrance to the project site. The Garberville substation has two officers for two shifts per day, plus a part-time office staff person, and is considered short-staffed (Sheriff's Office, 2014). According to the Humboldt County General Plan Update Draft EIR, the Garberville substation is expected to need 19 staff by 2027 (Humboldt County, 2012). A Sheriff's Office representative has indicated that this level of staffing is not realistically expected at this time (Sheriff's Office, 2014).

If officers are in the vicinity, response time to the project site would be within 10 minutes. This response time could be longer, however, because the officers have a large coverage area. For example, if the officers are called to Shelter Cove, which is 40 minutes from Garberville, they may not be able to respond to a call at the project site within 1 hour (Sheriff's Office, 2014).

The California Highway Patrol (CHP) is responsible for enforcing traffic laws on roadways within the unincorporated areas and on state highways throughout the county. The CHP also assists local government during emergencies when requested. The closest CHP office to the project site is located at 30 West Coast Road in Redway.

The Sheriff's Office has mutual aid agreements with cities and the California Highway Patrol. Mutual aid is an agreement between agencies where the agency of jurisdiction can request manpower or resources from allied agencies or agencies within the surrounding areas. These agencies could be local or state agencies (Humboldt County, 2012; Sheriff's Office, 2014).

SCHOOLS

The project site is located within the boundaries of the Southern Humboldt Unified School District (SHUSD) with its administrative office in Miranda. The SHUSD includes the Agnes J. Johnson School (K-5) in Weott, Casterlin Elementary School (K-8) in Blocksburg, Redway School (K-7) in Redway, South Fork High School (8-12) and the Osprey Learning Center in Miranda, and Whitethorn School (K-5) in Whitethorn (SHUSD, 2014).

Enrollment in the SHUSD declined by over 3 percent per year during the period from 1990 to 2010. Enrollment was 1,589 students in 1990, 1,277 students in 2000, and 790 students in 2010. Declining enrollment in Humboldt County has contributed to the closing of some school sites over the last 10 to 15 years. Within the Southern Humboldt Unified School District, the Osprey Learning Center in Garberville was closed and moved to the South Fork High School campus in Miranda (Humboldt County, 2012).

The California Department of Finance projects that the number of school-age children in Humboldt County may increase slightly in the near term but will likely decrease over the next 20 years (Humboldt County, 2012).

REGULATORY FRAMEWORK

HUMBOLDT COUNTY GENERAL PLAN

Fire Protection and Emergency Medical Services

Sections 4710 and 4720 of the Humboldt County General Plan contain the following relevant goals and policies related to fire protection (Humboldt County, 1984):

- *Goal 1: To assure adequate fire protection for new development.*
- *Policy 1: Proposed development shall be adequately serviced by water supplies for fire protection or shall have a letter from an appropriate fire protection agency indicating that adequate fire protection can be provided.*
- *Policy 2: Encourage clustered development to provide for more localized and effective fire protection measures.*

The Humboldt County General Plan does not contain any relevant goals or policies related to emergency medical services.

Police Services

The Humboldt County General Plan does not contain any relevant goals or policies related to police services.

Schools

The Humboldt County General Plan does not contain any relevant goals or policies related to schools.

SCHOOL IMPACT FEES

Pursuant to California Education Code Section 17620(a)(1), the governing board at any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. The standard fees are currently set at \$3.20 per square foot of residential development and \$0.51 per square foot of commercial or industrial development.

OTHER APPLICABLE FIRE REGULATIONS

As discussed under “Environmental Setting” above, the project site is within a State Responsibility Area and receives wildland fire protection from CAL FIRE. Development on the project site would be subject to Humboldt County’s Fire Safe Regulations and project review and approval by CAL FIRE.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on public services if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
 - Fire protection;
 - Police protection; [or]
 - Schools...

Also based on Appendix G, the project would have a significant impact on fire protection and police services if it would:

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

This significance criterion is evaluated in Section 4.8, Hazards and Hazardous Materials, of this EIR.

LESS-THAN-SIGNIFICANT IMPACTS

Fire Protection and Emergency Medical Services

The project may increase the demand for fire protection services, but not to the extent that new or physically altered fire stations or other facilities would be needed. The impact would be less than significant, and no mitigation is necessary. This conclusion is further explained below.

Need for New or Altered Fire Stations

As discussed in Chapter 3, Project Description, of this EIR, the proposed improvements included in the project are expected to increase the number of visitors by an estimated 800 persons per day during the peak seasons (late spring, summer, and early fall). Additional visitors would be allowed at the park for special events under a conditional use permit. Under the conditional use permit, one annual event per year with up to 5,000 attendees (4,000 guests plus up to 1,000 staff, vendors and performers) and up to five events per year with 800 to 2,500 attendees (including staff, vendors and performers) are proposed.

This increased use of the site, especially during moderate- and large-sized events, would be expected to increase calls for fire protection and emergency medical services (e.g., for medical and trauma incidents, traffic collisions, and vehicle, structure, vegetation, or other types of fires).

As discussed under “Environmental Setting” above, the GFPD is the nearest local fire protection agency, and the project site is located outside the GFPD boundaries. While the GFPD provides good will service to Sprowel Creek Road and the Kimtu area, the proposed project uses would likely place strains on GFPD service levels and could reduce the existing level of service within GFPD boundaries.

The project would not create the need for new or altered fire stations or other facilities, however. The project site would continue to be served by the existing GFPD station and the existing seasonal CAL FIRE station in Garberville.

Conclusion

Because the project would not create the need for new or physically altered fire stations or other facilities, the project’s impact on fire protection services would be considered less than significant under CEQA.

While not necessary as mitigation for public services impacts under CEQA, the project applicant may wish to consider applying for annexation to the GFPD. The GFPD has indicated an interest in annexing areas to which it provides good will service (which include the project site) but has not initiated annexation proceedings through LAFCo.

Also, while not necessary as mitigation for public services impacts under CEQA, the County may wish to require that the project applicant execute a fire protection agreement with the GFPD, subject to LAFCo approval, to ensure that fire protection services would be provided to the project until the annexation is complete.

Related Issues

Emergency access to the project is addressed in Section 4.16, Transportation/Traffic, of this EIR; wildland fire hazards are addressed in Section 4.8, Hazards and Hazardous Materials; and emergency water supply and facilities are addressed in Section 4.17, Utilities and Service Systems.

Police Services

The project would increase the demand for police services, but not to the extent that new or physically altered police stations or other facilities would be needed. The impact would be less than significant, and no mitigation is necessary. This conclusion is further explained below.

Need for New or Altered Police Stations

As discussed in Chapter 3, Project Description, of this EIR, the proposed improvements included in the project are expected to increase the number of visitors by an estimated 800 persons per day during the peak seasons (late spring, summer, and early fall). Additional visitors would be allowed at the park for special events under a conditional use permit. Under the conditional use permit, one annual event per year with up to 5,000 attendees (4,000 guests plus up to 1,000 staff, vendors and performers) and up to five events per year with 800 to 2,500 attendees (including staff, vendors and performers) are proposed.

This increased use of the site, especially during moderate- and large-sized events, would be expected to increase calls for police service. As discussed under “Environmental Setting” above, the Humboldt County Sheriff’s Office provides law enforcement services to the project site from the Garberville substation. According to the Sheriff’s Office, current activities at the project site have not resulted in significant calls for service to date; however, moderate- and large-sized events of the nature proposed by the project would be expected to cause traffic congestion, disturbance of nearby residents’ peace and quiet, and potential increases in law enforcement-related calls for service. The Sheriff’s Office expects that it would need more staff to cover calls for service caused by the increase in visitors to the site, especially during the proposed events, but an estimate of the number of new staff needed is not available (Sheriff’s Office, 2014).

The project would not create the need for new or altered police stations or other facilities, however (Sheriff’s Office, 2014). The project site would continue to be served by the existing Sheriff’s Office substation in Garberville and the existing CHP office in Redway.

Conclusion

Because the project would not create the need for new or physically altered police stations or other facilities, the project’s impact on police services would be considered less than significant under

CEQA. As part of its review of the project, however, the County may wish to consider the need for additional Sheriff's Office staffing in the area.

Related Issues

The project would include improvements to the existing Park Headquarters entrance and a Plan of Operation for small-, moderate-, and large-scale events. The Plan of Operation would address issues such as traffic management, emergency access, and security during proposed events. The Sheriff's Office and CHP would need to approve traffic management and emergency operations plans associated with the Plan of Operation for the project.

Schools

Employment associated with the project could be expected to result in an increase of approximately three students in the Southern Humboldt Unified School District. An increase of three students could be accommodated within existing school facilities, and no new or expanded facilities would be needed. Therefore, the project would have a less-than-significant impact on school facilities, and no mitigation is necessary. This conclusion is further explained below.

Buildout of the project is expected to result in approximately four additional full-time permanent employees. Assuming that the additional four employees would be new residents of the Southern Humboldt Unified School District, three additional students would be expected to enroll in the Southern Humboldt School District. This projection was calculated using the statewide average Student Yield Factors from the Enrollment Certification/Projection School Facility Program form (SAB 50-01) from the California Office of Public School Construction, which are as follows: elementary school district = 0.5 student per dwelling unit; high school district = 0.2 student per dwelling unit; and unified school district = 0.7 student per dwelling unit (Humboldt County, 2012).

It is reasonable to conclude that the three students generated by the project could be accommodated within existing school facilities, especially given that enrollment within the Southern Humboldt Unified School District has declined over the last 10 years.

POTENTIALLY SIGNIFICANT IMPACTS

The project would not have any potentially significant impacts on public services (fire protection, police, and schools). As discussed under "Less-than-Significant Impacts" above, the project may increase the demand for fire protection, police, and school services, but not to the extent that new or physically altered facilities would be needed. Therefore, the project would have no potentially significant impacts on public services under CEQA.

CUMULATIVE IMPACTS

Fire Protection and Emergency Medical Services

For fire protection and emergency medical services, the geographic scope for assessing cumulative impacts is the area served by the GFPD.

The proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in demand for fire protection services. As discussed in the above project-specific analysis, however, service demand from the proposed project would not create the need for new or expanded fire stations or other facilities. The projects would be subject to standard requirements for features such as emergency access, signage, lighting, and security. Other projects in Humboldt County would also be subject to these requirements. The GFPD has not identified any need for new or expanded facilities resulting from the project combined with other anticipated projects. As noted under “Environmental Setting” above, the GFPD has identified a long-term need for a new fire station near the Garberville Airport, but this station would only be constructed after the area is annexed to the GFPD and the GFPD has secured funding for new facilities and equipment.

Overall, the effect of the proposed project on fire protection services, in combination with other past, present, and foreseeable projects, would be less than significant. The proposed project would not result in or contribute to any significant cumulative fire protection service impacts.

Police Services

For police services, the geographic scope for assessing cumulative impacts is the service area of the Humboldt County Sheriff's Office, and specifically the Garberville substation. The proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, could result in a cumulative increase in demand for police services. As discussed in the above project-specific analysis, however, service demand from the proposed project would not create the need for new or expanded sheriff's facilities. The project would be subject to standard requirements for features such as emergency access, signage, lighting, and security. Other projects in the Sheriff's Office service area would also be subject to these requirements. The Sheriff's Office has not identified any need for new or expanded facilities resulting from the project combined with other anticipated projects.

Overall, the effect of the proposed project on police services, in combination with other past, present, and foreseeable projects, would be less than significant. The proposed project would not result in or contribute to any significant cumulative police service impacts.

Schools

For schools, the geographic scope for assessing cumulative impacts is the area within the boundaries of the Southern Humboldt Unified School District. As discussed in the above project-specific analysis, demand from the proposed project would not result in a significant impact on existing schools or create the need for new or expanded facilities. Therefore, the effect of the proposed project on schools, in combination with other past, present, and foreseeable projects, would be less than significant. The proposed project would not result in or contribute to any significant impacts on schools.

REFERENCES

- Garberville Fire Protection District (GFPD), 2014. E-mail from Kent Scown, Garberville Fire Protection District, to Kathryn Lobato, Southern Humboldt Community Park, September 2.
- Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 4710 and 4720.
- Humboldt County, 2012. *Humboldt County General Plan Update Draft EIR*, pages 3.4-1, 3.4-2, 3.4-8, 3.4-10, 3.4-11, 3.4-13, 3.4-19, and 3.4-25, April.
- Humboldt County Sheriff's Office (Sheriff's Office), 2014. Notes from meeting with Sergeant Swinthenbank by Kathryn Lobato, Southern Humboldt Community Park, August 26.
- Southern Humboldt Unified School District (SHUSD), 2014. Website http://www.humboldt.k12.ca.us/sohumb_usd/school/schools.html, accessed June 6.
- U.S. Fire Administration (USFA), 2008. *Water Supply Systems and Evaluation Methods, Volume II: Water Supply Evaluation Methods*.

4.15 RECREATION

INTRODUCTION

This section describes existing parks and recreation facilities and services in the project site vicinity, applicable state and local regulations, and potential impacts on parks resulting from the proposed project.

ENVIRONMENTAL SETTING

More than 20 percent of Humboldt County's 2.3 million acres are protected open space, forests, and recreation areas. Within the county boundaries, there are four federal parks and beaches, ten state parks (three of which are encompassed by Redwood National Park), 16 county parks, beaches, recreational areas, and reserves. These areas contribute to the quality of life in Humboldt County and provide needed recreational opportunities for residents of neighboring counties and visitors from all over the world (Humboldt County, 2012).

Several agencies manage the parks, recreation, and open space resources in Humboldt County including Native American Tribes, the Bureau of Land Management (BLM), United States Fish and Wildlife Service (USFWS), United States Forest Service (USFS), California Department of Fish and Wildlife, California State Parks Department, local city governments, Humboldt County, and special districts (Humboldt County, 2012).

PARKS IN HUMBOLDT COUNTY

Most parks in Humboldt County are regional in scope; outside the incorporated cities there are few local community or neighborhood parks. Humboldt County operates 16 parks in the unincorporated area. Several Community Services Districts (CSDs) also operate parks in the unincorporated area. Adding those parks, there are an existing 1,144 acres of parks in the unincorporated area. In comparison, the proposed project site is approximately 405 acres, almost one-third the size of all the other parks in the unincorporated areas combined. Existing park facilities in the county are summarized below in **Table 4.15-1**.

In addition, there are nearly 468,000 acres of federally managed parklands in the county, including National Forest, National Parks, and National Wildlife Areas, and 7,600 acres of Bureau of Land Management Reserve Lands. The county has about 76,000 acres of State Beach, State Parks, and State Reserve Lands. Humboldt County operates approximately 850 acres of parkland that includes ocean beaches, river access, boat ramps, and trails (Humboldt County, 2012).

Private individuals and groups also provide parks and recreation facilities. These include parks open to the public and operated by private nonprofit groups such as the Redwood Fields in Cutten and Tooby Memorial Park on the project site (see "Recreational Facilities on the Project Site" below).

TABLE 4.15-1 PARKS IN UNINCORPORATED HUMBOLDT COUNTY

Park Name	Location	Type	Size (Acres)
Humboldt County-Operated			
Arthur W. Way County Memorial Park	36594 Mattole Road, Honeydew	Regional	20
Big Lagoon County Park	505 A Street, Big Lagoon	Regional	52
Centerville Beach County Park	4000 Centerville Road, Ferndale	Regional	2
Clam Beach County Park	1100 Clam Beach Road, McKinleyville	Regional	370
Crab County Park	4000, Cannibal Road, Loleta	Regional	10.5
Fields Landing County Park	160 Railroad Avenue, Fields Landing	Regional	1.5
Freshwater County Park	Freshwater Road, Freshwater	Regional	7
Hammond Trail	McKinleyville	Regional	5
Luffenholtz Beach County Park	Scenic Drive, Westhaven	Regional	7.5
Mad River County Park	150 Mad River Road, Arcata	Regional	95.5
Margarite Lockwood Park	Maple Hills Road, Miranda	Regional	20
Moonstone Beach County Park	Moonstone Beach Road, Westhaven	Regional	8
Pedrazzini County Park	Pedrazzini Park Lane, Loleta	Regional	1
Samoa Boat Ramp	New Navy Base Road, Samoa	Regional	8
Table Bluff County Park	Table Bluff Road, Loleta	Regional	34
Van Duzen County Park	State Highway 36, Carlotta	Regional	200
Subtotal			842
Manila Community Service District-Operated			
Manila Dunes Recreation Area and Community Center	1901 Park Street, Manila	Regional	154
Manila Park	Lupin Ave. & Peninsula Dr., Manila	Community	12
Subtotal			166
McKinleyville Community Service District-Operated			
Hiller Park and Sports Complex	795 Hiller Road, McKinleyville	Community	58
Pierson Park	1608 Pickett Road, McKinleyville	Community	5
Larissa Park	Larissa Circle, McKinleyville	Neighborhood	0.3
Subtotal			63.3

TABLE 4.15-1 PARKS IN UNINCORPORATED HUMBOLDT COUNTY

Park Name	Location	Type	Size (Acres)
Resort Improvement District No. 1 (Shelter Cove)-Operated			
Shelter Cove Golf Course	1555 Upper Pacific Dr., Shelter Cove	Regional	35
Playground	9126 Shelter Cove Rd., Shelter Cove	Neighborhood	0.25
Subtotal			35.25
Willow Creek Community Service District-Operated			
Kimtu Beach and Camp Kimtu	Kimtu Road, Willow Creek	Regional	17
Veterans Park	Kimtu Road, Willow Creek	Neighborhood	16
Creek Side Park	Willow Road, Willow Creek	Neighborhood	3.6
Community Commons	38919 Highway 299, Willow Creek	Neighborhood	1.2
Subtotal			37.8
TOTAL PARKLAND IN UNINCORPORATED AREA			1,144.35

Source: Humboldt County, 2012.

RECREATIONAL FACILITIES ON PROJECT SITE

Tooby Memorial Park is a 14-acre area within the project site located on the north side of Sprowel Creek Road just past the main project site entrance. The park includes a picnic area, a fenced playground, access to a beach on the Eel River, and a 7-acre mature redwood grove. Tooby Memorial Park has been administered and maintained by Southern Humboldt Community Park (SHCP) since 2002.

REGULATORY FRAMEWORK

FEDERAL REGULATIONS

There are no applicable federal regulations related to local and regional parkland or recreational facilities.

STATE REGULATIONS

Quimby Act

The Quimby Act was established by the California legislature in 1965 to provide parks for the growing communities in California. The Act authorizes cities to adopt ordinances addressing park land and/or fees for residential subdivisions for the purpose of providing and preserving open

space and recreational facilities and improvements. The Act requires the provision of 3 acres of park area per 1,000 persons residing within a subdivision, unless the amount of existing neighborhood and community park area exceeds that limit, in which case the City may adopt a higher standard not to exceed 5 acres per 1,000 residents. The Act also specifies acceptable uses and expenditures of funds from fees.

State Public Park Preservation Act

The primary instrument for protecting and preserving parkland is the State Public Park Preservation Act. Under the Public Resources Code, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provision essentially stipulates that there shall be no net loss of parkland and facilities.

LOCAL REGULATIONS

The Garberville/Redway/Benbow/Alderpoint (GRBA) Community Plan identified public service and recreation facilities deficiencies in 1987. Response to the need for various public facilities in the area ranked as follows:

1. Centralized recreational complex and community center
2. Community recreation hall
3. Bicycle trails and foot paths
4. Relocation of junior high and high schools to Garberville/Redway area
5. Softball diamonds
6. Soccer fields
7. Equestrian trails

In the subsequent years, none of the identified deficiencies above have been remedied. A community center has been constructed in Redway that serves many civic purposes. There is still a need for a recreational complex with sports fields.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the project would have a significant impact on parks if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
 - Parks

Also based on Appendix G, the project would have a significant impact on parks and recreational facilities if it would:

- Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

LESS-THAN-SIGNIFICANT IMPACTS

Deterioration of Existing Parks and Recreational Facilities

The project itself would meet many of the recreational needs of the southern Humboldt County area. The proposed project would not substantially increase the use of existing parks or other recreation facilities such that a substantial physical deterioration of the facility would occur. The project's impact would therefore be less than significant, and no mitigation is necessary.

No adverse physical deterioration of existing neighborhood or regional parks or other recreational facilities is expected to result from the project. While the project would be located close to State park facilities, the project does not include any connections to these areas that would cause overflow of visitors from one site to another.

The project would include community park improvements and other improvements that would serve the recreational needs of the community and the region. These proposed improvements are expected to decrease the use of existing neighborhood and regional parks and other recreational facilities, which could extend the physical integrity of these other parks and recreation facilities. In this way, the proposed project could have a positive impact on the existing parks and recreation facilities in the surrounding area. By extending the life of these other facilities, the proposed project could delay any new construction of replacement recreation structures or new structures to meet the demand from future increases in population in the area.

The project site is near State park property. During the proposed large events at the project site, people attending the event may camp at State park facilities. State parks charge fees for the use of their facilities, however, and these fees are used to maintain the facilities. There is no evidence that the fee structure used by State parks is inadequate to provide for the adequate maintenance of the facilities that may be used by persons attending events at the site of the proposed project.

For discussion of impacts due to project employees, see "Need for New or Altered Facilities Due to Project" below.

Need for New or Altered Facilities Due to Project

The project would not create the need for new or altered parks or recreational facilities. The project's impact would therefore be less than significant, and no mitigation is necessary.

As noted above, the project would include community park improvements and other improvements that would serve the recreational needs of the community and the region. The main way in which

the project itself could create demand for new or altered parks or recreational facilities would be through the addition of new employees at the project site. The four additional employees expected from the project would not create any new significant demands on parks or recreational facilities, however. Most demand for parks and recreational facilities is created by a community's residents, rather than its employees. The proposed project would not contain any housing and therefore would not generate a resident population. In addition, the four additional employees expected from the project would have a negligible effect on existing parks and recreational facilities and would not create the need for new or expanded facilities. For these reasons, project employees are not expected to create a need for new or altered parks or recreational facilities or cause substantial deterioration of existing facilities.

POTENTIALLY SIGNIFICANT IMPACTS

Impact REC-1: The projects would include recreational facilities that might have an adverse physical effect on the environment. (PS)

The project would include various on-site recreational facilities. The environmental impacts of constructing these features are evaluated throughout this Draft EIR.

Mitigation Measure REC-1: The project shall comply with all applicable mitigation measures identified in this EIR. Compliance with these measures would ensure that the impact of recreational facilities included in the project would be reduced to a less-than-significant level. (LTS)

CUMULATIVE IMPACTS

For recreational facilities, the geographic scope for assessing cumulative impacts is the area within unincorporated Humboldt County, since this area contains the recreational facilities that are most likely to be used regularly by people who would also use the facilities proposed by the project.

As discussed in the above project-specific analysis, the project would not result in a significant impact on existing recreational facilities, and the environmental impacts of the project would be mitigated by measures recommended in this EIR. Therefore, the effect of the project on recreational facilities, in combination with other past, present, and foreseeable projects, would be less than significant. The project would not result in or contribute to any significant cumulative impacts on recreational facilities.

REFERENCES

Humboldt County, 2012. *Humboldt County General Plan Update Draft Environmental Impact Report*, pages 3.14-1 through 3.14-3, April 2.

4.16 TRANSPORTATION/TRAFFIC

INTRODUCTION

This section discusses existing transportation and traffic conditions in the project site vicinity, as well as potential impacts of the project on those conditions. The existing transportation system in the vicinity of the proposed project is described, beginning with a description of the study area and the street network that serves the project site vicinity.

Existing transit service, bicycle and pedestrian facilities, and parking in the vicinity of the project site are also described. Intersection and freeway levels of service are then defined and current conditions for roadways and intersections in the project site vicinity are summarized.

The traffic impact analysis presented in this section was prepared by W-Trans, Whitlock & Weinberger Transportation, Inc. of Santa Rosa. The purpose of the study was to provide County staff and policy makers with the data needed to make an informed decision regarding the potential traffic impacts of the proposed project and any associated improvements that would be required in order to mitigate these impacts to a level of less than significant as defined by the County's General Plan or other policies.

Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed uses would be expected to generate. These trips are distributed to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the project. The impact of new traffic on critical intersections or roadway segments is then analyzed. Impacts relative to safety, including for pedestrians and bicyclists, are also addressed. In addition, impacts on transit service are evaluated.

ENVIRONMENTAL SETTING

EXISTING ROADWAY NETWORK

Southern Humboldt County is a geographically isolated region that contains numerous rural communities separated by narrow two-lane county roads and/or state highways. With the exception of a small amount of air passenger service, all people use this roadway system for transportation.

Regional Roadways

U.S. Highway 101 (U.S. 101) is a primary route connecting Humboldt County to Mendocino County, Sonoma County, and the San Francisco Bay Area to the south; and to the cities of Eureka and Arcata, Del Norte County, and Oregon to the north. U.S. 101 borders the east side of the project site. At Garberville, U.S. 101 is a four-lane freeway with a series of on- and off-ramp interchanges. The Benbow interchange is 3 miles south.

The two northbound exit ramps from U.S. 101 enter the local road system at the following locations:

1. One northbound ramp exits onto Redwood Drive at the south end of Garberville.
2. One northbound ramp exits onto Redwood Drive at the north end of Garberville near Thomas Road.

The two U.S. 101 southbound exit ramps enter the local road system at the following locations:

1. A southbound exit ramp enters onto Redwood Drive at the north end of Garberville.
2. The Sprowel Creek Road Road/ U.S. 101 southbound ramp is an unsignalized intersection with a stop sign on the southbound U.S. 101 off-ramp with one shared lane in each direction. There are crosswalks on the southbound Redwood Drive approach and the eastbound Sprowel Creek Road approach.

Local Roadways

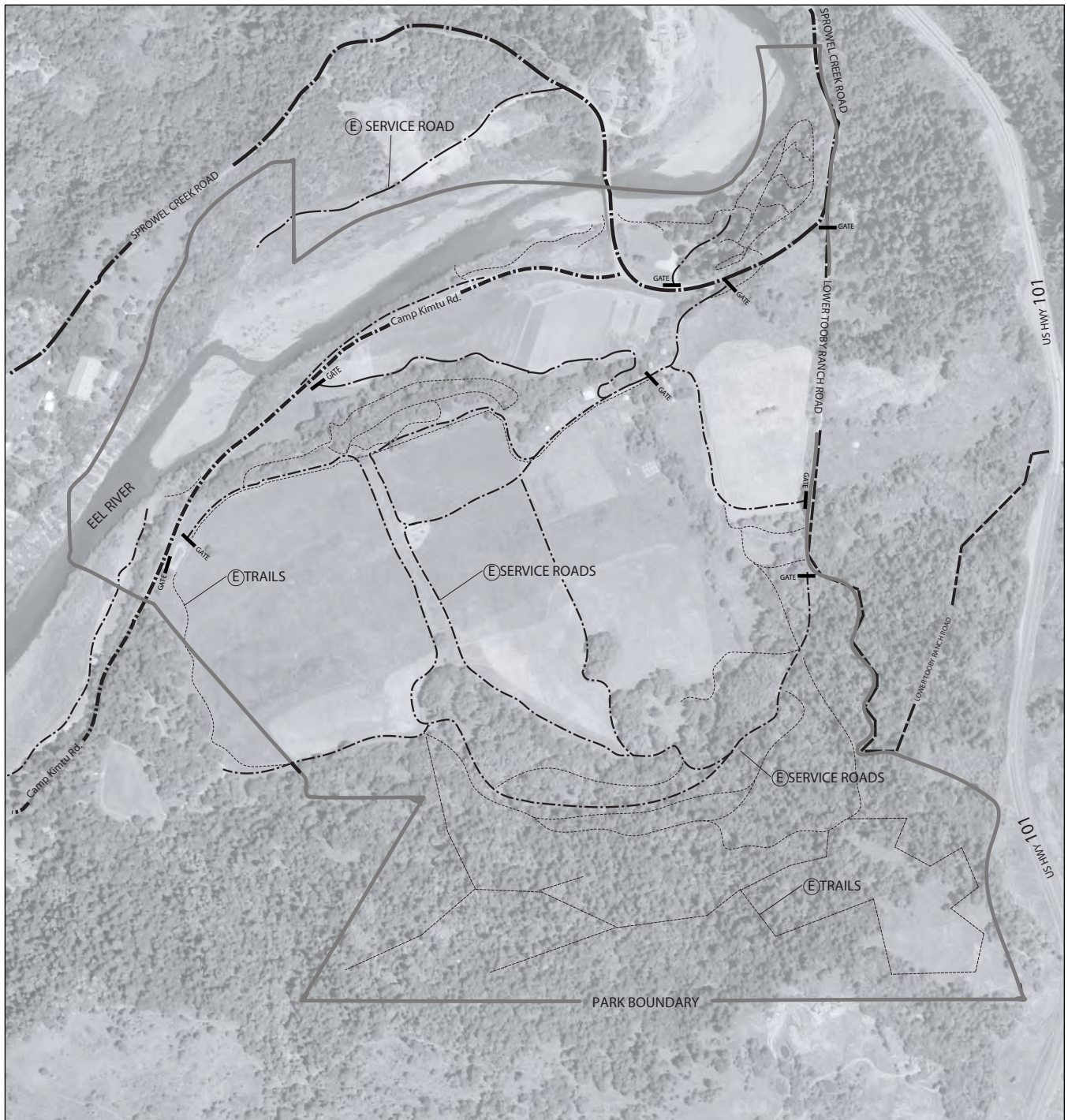
Primary access points to the project site are provided via Redwood Drive and Sprowel Creek Road. The existing system of roads and trails is indicated on **Figure 4.16-1**.

Redwood Drive is the main street and local business hub in the unincorporated town of Garberville. It is a two-lane street with diagonal parking on both sides of the street. There are no traffic signals in the town of Garberville.

The Sprowel Creek Road/Redwood Drive intersection is an all-way stop-controlled intersection with separate turn lanes on the northbound and the southbound Redwood Drive approaches. There are crosswalks on the southbound Redwood Drive approach and the eastbound Sprowel Creek Road approach.

Sprowel Creek Road is the access road to the project site and intersects the site. Sprowel Creek Road is a two-lane rural roadway that is generally about 20 to 24 feet wide, with graded shoulders adjacent to the road in some areas and drainage culverts in others. It is identified as a Rural Major Collector that is a "Regionally Significant Roadway" in the pending Humboldt County General Plan update (Humboldt County, 2012). It has a curvilinear alignment and a downward grade from the westerly side of Garberville near Riverview Lane to the easterly boundary of the project site. Based on counts performed by the County on August 21 through August 25, 2008 (Thursday through Monday), Sprowel Creek Road carries an average of about 1,400 vehicles per day near Riverview Lane and 1,100 vehicles near Tooby Memorial Playground, with hourly volumes averaging 137 and 101 vehicles at the two locations, respectively.¹ There are two entrances for visitors to the community park from Sprowel Creek Road approximately 1 mile from Garberville and approximately ¼ mile from the Camp Kimtu Road intersection. There is a third entrance to the park (Lower Tooby Ranch Road) that would be used during events and as a service road.

¹ Given limited growth in the Garberville area, these counts are still considered valid for 2014.



0 1000 Feet
 (approximate)

Figure 4.16-1

ROADS, SERVICE ROADS, AND TRAILS

SOURCE: Huber C&D, 2015

Camp Kimtu Road meets Sprowel Creek Road at a T-junction just before the Moody Bridge. It also intersects the project site. The roadway is paved to 20 feet with no shoulders, pedestrian pathways, or bicycle lanes. This park entrance is approximately 0.65-mile from the Camp Kimtu/ Sprowel Creek road junction. This entrance would serve the community facility area/sports fields proposed by the project.

Rural Roads

Old Briceland Road is a rural road that serves as a local road for rural residents. It often serves as an emergency alternate route when other major connectors are impassable. Also, it is often used as an alternate route to Garberville for rural communities including Briceland, Whitethorn, Ettersburg, and Shelter Cove. It was used as an alternative route in 2011 when the Briceland Road became impassable at Whitmore Grove.

COLLISION HISTORY

The collision history for the study area was reviewed to determine any trends or patterns that may indicate a safety issue. Collision rates were calculated based on records available from the California Highway Patrol as published in their Statewide Integrated Traffic Records System (SWITRS) reports. The 5-year period evaluated was July 1, 2006 through June 30, 2011.

For the segment of Sprowel Creek Road between Riverview Lane and Tooby Memorial Playground, there were two collisions that occurred during the 5-year study period. This translates to a collision rate of 0.60 collision per million vehicle miles (c/mvm). This is below the statewide average of 1.00 c/mvm indicated in the California Department of Transportation (Caltrans) *Collision Data on California State Highways* (Caltrans, 2009) for rural two-lane roadways in hilly terrain.

As presented in **Table 4.16-1**, the calculated collision rates for the study intersections were compared to average collision rates for similar facilities statewide. Both locations experienced below-average collision rates, and there was no clear pattern or trend as no two collisions involved the same movements or combination of approaches. Copies of the collision rate calculations are available in **Appendix F**.

TABLE 4.16-1 COLLISION RATES AT THE STUDY INTERSECTIONS

Study Intersection	Number of Collisions (2006-2011)	Calculated Collision Rate (c/mve)	Statewide Average Collision Rate (c/mve)
1. Sprowel Creek Road/US 101 SB Ramps	0	0.00	0.15
2. Sprowel Creek Road/Redwood Drive	4	0.38	0.40

Note: c/mve = collisions per million vehicles entering.
Source: Whitlock & Weinberger Transportation, Inc., 2014.

PEDESTRIAN FACILITIES

The project site is located along a rural roadway, with no sidewalks or shoulders for use by pedestrians. However, due to the distance from the town of Garberville to the project site as well as the steep grade of the roadway, there does not appear to be a demand for pedestrian access. Pedestrian counts performed indicate that there is on average less than one pedestrian per hour using the roadway during peak periods for traffic flow. None were observed during a several hour period at the site on a warm, sunny spring day.

BICYCLE PATHWAYS

The majority of the roads in the southern Humboldt County area are narrow, with little or no shoulder and few sidewalks. There are no existing bicycle facilities in the area at this time.

Caltrans *Highway Design Manual* (Caltrans, 2012) classifies bikeways into three categories:

- *Class I Multi-Use Path:* These bicycle facilities are commonly referred to as “bicycle paths.” They provide a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorists minimized.
- *Class II Bike Lane:* These bicycle facilities provide a restricted striped and signed lane for one-way travel on a street or highway for the exclusive or semi-exclusive use of bicycle traffic, with through travel by motor vehicles or pedestrians prohibited. Adjacent vehicle parking and cross flows by pedestrians and motorists are permitted.
- *Class III Bike Route:* Bike routes have signs and/or pavement markings and are shared use with pedestrians and motorists on streets or highways.

According to the *Humboldt Regional Bicycle Plan – 2012 Update* (Humboldt County Association of Governments, 2012), Sprowel Creek Road between Redwood Drive and the Community Park has been designated as a future Class III Bike Route, and Humboldt County has included widening of the shoulders to create additional space for bicycles in its list of *Potential Trail Projects with Bike Facilities* (Humboldt County, 2012). Observations indicate that bicycle traffic is rare along this road, with only one cyclist observed during any of the four peak hours for vehicular traffic.

TRANSIT SERVICE

Humboldt Transit Authority (HTA) owns and operates Redwood Transit System (RTS), the public bus system for Humboldt County, California. RTS offers service between Scotia, Fortuna, Loleta, Fields Landing, Eureka, Arcata, McKinleyville, Westhaven, and Trinidad from Monday through Saturday. On Monday through Friday, the Southern Humboldt Transit System provides local and inter-city service to/from locations including Garberville, Redway, Miranda, Phillipsville, Weott, South Fork, and Myers Flat.

Service is provided to Willow Creek from Arcata Monday through Friday. HTA has provided over 400,000 passenger-trips per year. Door-to-door service is available to qualified disabled riders.

HTA also links to other local transit, including Eureka Transit, Arcata and Mad River Transit Service, Redwood Coast Transit, Del Norte Public Transit, and Trinity Transit.

While the availability of bus services to the southern Humboldt County region has substantially improved in recent years, the majority of individuals are likely to continue to use private vehicles due to the long distances between many rural destinations and the centralized nature of the service.

INTERSECTION LEVEL OF SERVICE AND ROADWAY CAPACITY ANALYSIS

The traffic evaluation included an assessment of streets, intersections, and the interface with U.S. 101.

Study Intersections

The following two existing intersections were identified as locations that may be affected by the project:

1. Sprowel Creek Road/US 101 Southbound Ramps
2. Sprowel Creek Road/Redwood Drive

Study Periods

Operating conditions during the AM and PM peak periods were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The morning peak hour occurs between 7:00 and 9:00 AM and reflects conditions during the home to work or school commute, while the PM peak hour occurs between 4:00 and 6:00 PM and typically reflects the highest level of congestion during the homeward-bound commute.

Intersection Level of Service Methodologies

Level of service (LOS) is used to rank traffic operations on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, LOS A represents free flow conditions and LOS F represents forced flow or breakdown conditions. A unit of measure (e.g., in seconds) that indicates a level of delay generally accompanies the level of service designation.

The study intersections were analyzed using methodologies published in the *Highway Capacity Manual* (HCM) (Transportation Research Board, 2000). This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle.

The levels of service for the intersections with side-street stop controls, or those that are unsignalized and have one or two approaches stop-controlled, were analyzed using the "Two-Way Stop-Controlled" intersection capacity method from the HCM. This methodology determines a level of service for each minor turning movement, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and is then related to a level of service.

The study intersections with stop signs on all approaches were analyzed using the “All-Way Stop Controlled Intersection” methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and is then related to a level of service.

The ranges of delay associated with the various levels of service are indicated in **Table 4.16-2**.

TABLE 4.16-2 INTERSECTION LEVEL OF SERVICE CRITERIA

Level of Service (LOS)	Two-Way Stop-Controlled	All-Way Stop-Controlled
A	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.	Delay of 0 to 10 seconds. Upon stopping, drivers are immediately able to proceed.
B	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.	Delay of 10 to 15 seconds. Drivers may wait for one or two vehicles to clear the intersection before proceeding from a stop.
C	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.	Delay of 15 to 25 seconds. Drivers will enter a queue of one or two vehicles on the same approach, and wait for vehicle to clear from one or more approaches prior to entering the intersection.
D	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.	Delay of 25 to 35 seconds. Queues of more than two vehicles are encountered on one or more approaches.
E	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.	Delay of 35 to 50 seconds. Longer queues are encountered on more than one approach to the intersection.
F	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.	Delay of more than 50 seconds. Drivers enter long queues on all approaches.

Source: Transportation Research Board, 2000.

Traffic Operation Standards

In its General Plan, Humboldt County uses the volume-to-capacity ratio for primary roadways to evaluate traffic operation. The operational standard applied is LOS C. For consistency, operation that falls below LOS C would be considered unacceptable. Since no specific thresholds for roadway capacities are presented in the General Plan, based on the designation as well as existing volumes, a threshold of 5,000 vehicles per day was used to evaluate potential impacts on Sprowel Creek Road.

Existing Conditions

The existing conditions scenario provides an evaluation of current operation based on existing traffic volumes during the AM and PM peak periods. This condition does not include project-generated traffic volumes. Volume data were collected on Thursday, April 7, 2011, while local schools were in session.²

Intersection Levels of Service

Under existing conditions, both of the study intersections are operating at acceptable levels (LOS B or better) on individual approaches as well as overall for both peak periods. The existing traffic volumes are shown in **Figure 4.16-2**. A summary of the intersection level of service calculations is contained in **Table 4.16-3**. Copies of the level of service calculations are available in Appendix F.

TABLE 4.16-3 SUMMARY OF EXISTING PEAK HOUR INTERSECTION LEVEL OF SERVICE CALCULATIONS

Study Intersection (Approach)	Existing Conditions			
	AM Peak		PM Peak	
	Delay	LOS	Delay	LOS
1. Sprowel Creek Road/US 101 SB Ramps	3.6	A	3.9	A
(Southbound Approach)	10.2	B	11.1	B
2. Sprowel Creek Road/Redwood Drive	8.3	A	8.7	A

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in *italics*.

Source: Whitlock & Weinberger Transportation, Inc., 2014.

Roadway Capacity

The existing volumes on Sprowel Creek Road west of Garberville are substantially below the assumed threshold of 5,000 vehicles per day.

Future Conditions

Intersections

Future traffic volumes were estimated using growth factors for Caltrans District 1. The factor of 1.10 for U.S. 101 in the vicinity of Garberville was applied to all movements since both of the study intersections are along or directly on the routes to and from the freeway.

² Given that limited growth that has taken place in the Garberville area, these data were considered adequate for 2014 conditions.

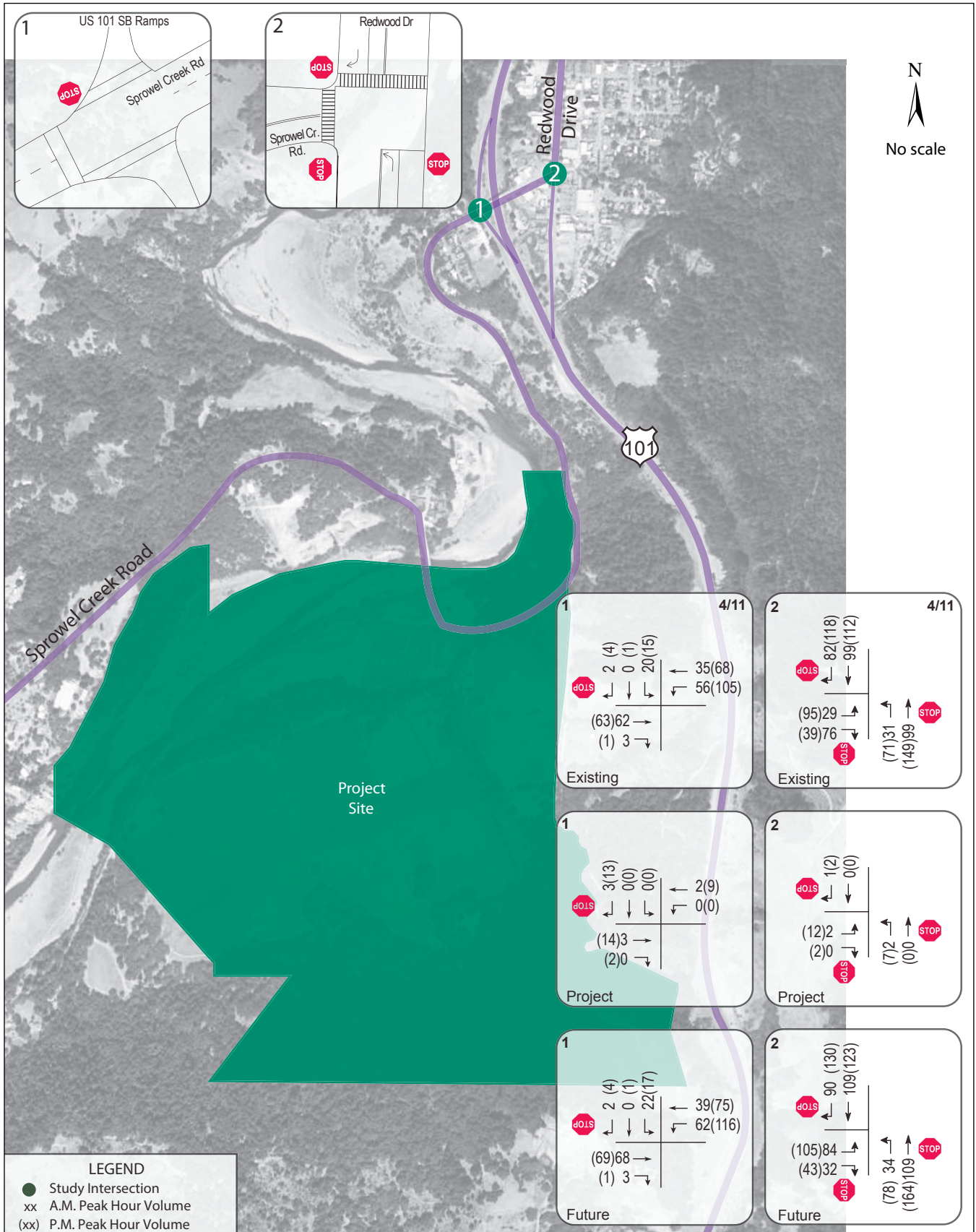


Figure 4.16-2

SOURCE: W-Trans, 2014

LANE CONFIGURATIONS AND TRAFFIC VOLUMES

Under the anticipated future volumes, both of the study intersections are expected to continue operating acceptably, with only minor changes in average delay. Future volumes are shown in Figure 4.16-1 and operating conditions are summarized in **Table 4.16-4**. Copies of the calculations are provided in Appendix F.

TABLE 4.16-4 SUMMARY OF FUTURE PEAK HOUR LEVEL OF SERVICE CALCULATIONS

Study Intersection (Approach)	Future Conditions			
	AM Peak		PM Peak	
	Delay	LOS	Delay	LOS
1. Sprowel Creek Road/US 101 Southbound Ramps	3.7	A	4.0	A
(Southbound Approach)	10.5	B	11.5	B
2. Sprowel Creek Road/Redwood Drive	8.6	A	9.0	A

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in *italics*.
 Source: Whitlock & Weinberger Transportation, Inc., 2014.

Roadway Capacity

Assuming the same growth for traffic along Sprowel Creek Road, future volumes would be expected to increase to about 1,500 vehicles per day near Riverview Lane and 1,200 vehicles near Tooby Memorial Park. These volumes would remain well below the 5,000-vehicle threshold estimated given the road’s classification.

REGULATORY FRAMEWORK

STATE

Caltrans manages interregional transportation, including management and construction of the California highway system. In addition, Caltrans is responsible for permitting and regulation of the use of state roadways.

LOCAL

Humboldt County Department of Public Works

The Humboldt County Public Works Department requires encroachment permits for projects that occur on County rights-of-way and for road improvements. The Public Works Department also requires Transportation Permits for oversize loads.

Humboldt County Planning and Building Department

The Humboldt County Planning and Building Department administers the adopted Humboldt County General Plan. The Planning and Building Department is also overseeing an update of the General Plan.

Adopted Humboldt County General Plan

Relevant Policies

Sections 4320 and 4300 of the adopted Humboldt County General Plan (Humboldt County, 1983) include the following relevant policy related to roads and pathways:

3. *Significant increases in traffic volumes and turning movements on and off a major expressway/freeway at high volume at grade intersections should be discouraged.*

The following policies are found in Section 4311:

1. *Develop an accessible trails network as shown on trails map which includes trails within and between communities, parks and other publicly owned lands.*
3. *Encourage development of trails with varying lengths and difficulty through diverse terrain, scenery, and points of attraction.*
4. *Blend trails into the natural environment to reduce environmental disruption.*
5. *Place priority of bicycle route maintenance on routes that are most heavily used.*

Standards of Significance

In its General Plan, Humboldt County uses the volume-to-capacity ratio for primary roadways to evaluate traffic operation. The operational standard applied is LOS C. For consistency, operation that falls below LOS C would be considered unacceptable. No specific thresholds for roadway capacities are presented in the General Plan.

Draft Humboldt County General Plan Update

The draft Humboldt County General Plan update (Humboldt County, 2012) establishes regional transportation goals, policies, objectives, and actions for various modes of transportation, including intermodal and multi-nodal transportation activities. The draft Humboldt County General Plan update contains two goals relevant to facilities for pedestrians and bicyclists, as follows:

- *To provide guidelines for establishing a safe, efficient, and enjoyable County trails program for the transportation and recreation needs of bicyclists, equestrians, hikers, and joggers.*
- *To increase participation in bicycling, horseback riding, and hiking activities which can provide physical, social, environmental, and economic benefits for County residents and tourists.*

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the proposed project would have a significant traffic impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

LESS-THAN-SIGNIFICANT IMPACTS

Impact on Air Traffic Patterns

The project would be located approximately 1 mile south of the Garberville Airport, which is located in a mountainous region of southern Humboldt County. The airport sits on a bluff above the project site with surrounding mountains in close proximity. The Garberville Airport is at an elevation of 550 feet. The project site is at an elevation of approximately 350 feet, or about 200 feet lower than the airport elevation.

Due to the significant elevation differences between the two locations, there are no proposed project elements that could potentially obstruct or interfere with the flight path or approaches to the airport. No structure, tree, or other object would exceed the height limits established in Section 331 of the Humboldt County Code [16.3.4.1]. Additionally, the proposed project would not exceed heights that require review and approval by the Federal Aviation Administration (FAA) or Airport Land Use Commission (ALUC). Therefore, the project would have no impact on air traffic patterns that would result in substantial safety risks.

Emergency Access Impacts

The project site includes multiple access locations for emergency vehicles. There are four entry locations within the project site that provide access for all vehicle types, and any activities associated with the project would not prevent emergency vehicle access to and from the site. As a result, the project would have no impact on emergency access.

POTENTIALLY SIGNIFICANT IMPACTS

This section addresses the potentially significant traffic impacts of the project and recommended mitigation measures.

The project's potential effects on key intersections, roadways, pedestrian and bicycle facilities, and transit service are assessed, and measures necessary to mitigate significant impacts are identified. These impact analysis scenarios are analyzed to determine the extent to which the project may increase traffic to and from the site and how the potential increase in traffic would affect the surrounding transportation environment.

Conflict with Applicable Plan, Ordinance or Policy for Circulation System Performance

Impact TRAFFIC-1: The project would increase traffic volumes on area roadways. While the volumes associated with typical daily operation would be nominal, medium-sized and large events would generate substantial traffic that could result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation. (PS)

Proposed Project Components

Traffic impacts are identified for each of the following project components (or "levels"), as identified in **Table 4.16-5** and described further below:

1. Impacts due to proposed changes in zoning of the project site;
2. Impacts due to proposed changes in General Plan land use designations for the project site;
3. Impacts of proposed activities or construction projects that would be principally permitted; and
4. Impacts due to proposed activities that would require a conditional use permit.

TABLE 4.16-5 PROJECT IMPACT LEVELS

Level 1	Impacts due to Zoning Change
Level 2	Impacts due to General Plan Land Use Designation Changes
Level 3	Impacts of Activities or Projects Principally Allowed
Level 4	Impacts of Projects Requiring Conditional Use Permit

Project Level 1: Change in Zoning from Agriculture Exclusive to Public Facilities

This component of the project would change the zoning on a portion of the project site from Agriculture Exclusive to Public Facility. (See Chapter 3, Project Description, of this EIR for details.) The change would increase use of the site by the public, which would bring additional cars and people to the site on a regular basis.

Project Level 2: Changes in General Plan Land Use Designation

This component of the project would change the General Plan land use designation of a portion of the project site from AR(5-20) (Agricultural Rural, one dwelling unit per 20 acres to one dwelling unit per 5 acres) and AL(20) (Agricultural Lands, one dwelling unit per 20 acres) to Public Recreation.

Project Level 3: Impacts of Activities or Projects Principally Allowed

Implementation of projects and activities principally allowed under the new zoning and land use designations would result in construction of new community facilities including sports fields, concessions stands, visitor amenities, and parking areas. This change would also allow lower-impact public assembly and small events. These activities would increase the number of trips generated on existing roadways.

Project Level 4: Impacts of Projects Requiring Conditional Use Permit

The project description includes provisions for medium-sized events as well as a festival. These events would require a conditional use permit, and could result in the construction of temporary stages, deployment of portable toilets, and other temporary changes to the site. These events would generate a substantial number of trips on the road network.

Trip Generation

The anticipated trip generation on a typical weekday for the proposed project under the proposed zoning change (Project Level 1) was estimated using standard rates for a County Park (LU#412) published by the Institute of Transportation Engineers (ITE) in the *Trip Generation Manual*, 9th Edition (ITE, 2012). The sites surveyed in developing the rates for this land use had a variety of facilities, including ball fields, soccer fields, camp sites, picnic facilities, trails, bicycling, boating, or swimming facilities and general open space.

While the project site is currently generating trips to the existing Tooby Memorial Park, Park Headquarters, and Community Facilities/Sports Area, use of the park is expected to substantially increased upon completion of the new facilities. The expected trip generation potential for the proposed project was therefore conservatively estimated without any deduction for existing trips, as indicated in **Table 4.16-6**. The proposed project is expected to generate an average of 925 trips per day, including eight trips during the AM peak hour and 37 trips during the PM peak hour. It should be noted that for parks included in the survey of daily trips that were of approximately the same size as the proposed project, the actual numbers of trips were below the average, so this further adds to the conservative estimate of the number of trips the project is expected to generate.

TABLE 4.16-6 TRIP GENERATION SUMMARY

Land Use	Units	Daily		AM Peak Hour			PM Peak Hour				
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
County Park	405.7 Acres	2.28	925	0.02	8	5	3	0.09	37	22	15

Source: Institute of Transportation Engineers, 2012; Whitlock & Weinberger Transportation, Inc., 2014.

Special events and Levels 3 and 4 are discussed below.

Trip Distribution

The pattern used to allocate new project trips to the street network was based on the turning movement and volumes at the study intersections. The assumptions for inbound and outbound were different due to the configuration of the ramp intersections. The trip distribution assumptions are summarized in **Table 4.16-7**.

TABLE 4.16-7 TRIP DISTRIBUTION ASSUMPTIONS

Route	Inbound	Outbound
U.S. 101 South	60	10
U.S. 101 North	30	80
Central Garberville	10	10
Total	100%	100%

Source: Whitlock & Weinberger Transportation, Inc., 2014.

Existing-plus-Project Conditions (Project Level 1)

Upon the addition of project-related traffic to the existing volumes, the study intersections are expected to continue operating acceptable at LOS A overall. These results are summarized in **Table 4.16-8**. Project traffic volumes are shown in Figure 4.16-1. Appendix F contains copies of the calculations.

TABLE 4.16-8 SUMMARY OF EXISTING AND EXISTING-PLUS-PROJECT PEAK HOUR LEVEL OF SERVICE CALCULATIONS FOR PROJECT LEVEL 1

Study Intersection (Approach)	Existing Conditions				Existing plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Sprowel Creek Road/US 101 Southbound Ramps	3.6	A	3.9	A	3.6	A	3.9	A
(Southbound Approach)	10.2	B	11.1	B	10.1	B	10.4	B
2 Sprowel Creek Road/Redwood Drive	8.3	A	8.7	A	8.4	A	8.9	A

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in *italics*.

Source: Whitlock & Weinberger Transportation, Inc., 2014.

It should be noted that with the addition of project-related traffic volumes, average delay on the southbound off-ramp would decrease during both peak hours. While this is counter-intuitive, this condition occurs when a project adds trips to a movement that has delays below the intersection

average, resulting in lower overall average delay. The project would add traffic predominately to the right-turn movement, which has an average delay that is lower than the average for the approach as a whole, resulting in a slight reduction in the average delay for the approach.

The 925 daily trips would increase volumes on Sprowel Creek Road to about 2,300 vehicles per day near Riverview Lane and 2,000 vehicles per day at Tooby Memorial Park. These volumes are still well below the threshold established based on the roadways classification.

The study intersections are expected to continue operating acceptably at the same levels of service upon the addition of project-generated traffic, resulting in a less-than-significant impact. The volume of traffic on Sprowel Creek Road would remain within acceptable limits based on the standard applied.

Future-Plus-Project Conditions

Upon the addition of project-generated traffic to the anticipated future volumes, the study intersections are expected to continue operating at LOS A overall and LOS B on the stop-controlled southbound off-ramp approach to Sprowel Creek Road. The Future-plus-Project operating conditions for Levels 1 and 2 are summarized in **Table 4.16-9** and copies of the calculations are found in Appendix F.

TABLE 4.16-9 SUMMARY OF FUTURE AND FUTURE-PLUS-PROJECT PEAK HOUR LEVEL OF SERVICE CALCULATIONS FOR PROJECT LEVELS 1 AND 2

Study Intersection (Approach)	Future Conditions				Future plus Project			
	AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Sprowel Creek Road/US 101 Southbound Ramps	3.7	A	4.0	A	3.6	A	3.9	A
(Southbound Approach)	10.5	B	11.5	B	10.3	B	10.8	B
2. Sprowel Creek Road/Redwood Drive	8.6	A	9.0	A	8.6	A	9.1	A

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service; results for minor approaches to two-way stop-controlled intersections are indicated in *italics*.
 Source: Whitlock & Weinberger Transportation, Inc., 2014.

Daily volumes would be expected to increase to 2,400 vehicles near Riverview Lane and 2,100 vehicles at Tooby Memorial Playground under projected future conditions.

All study intersections would continue operating at the same acceptable levels of service with the project as without it, for Levels 1 and 2. As was noted for Existing-plus-Project conditions, because the project would add traffic to the right-turn movement from the U.S. 101 South off-ramp, and this movement has lower delays than the left turn on the same approach, the results with the project indicate reduced average delay per vehicle for the approach as a whole with the project. Sprowel Creek Road has adequate capacity to accommodate the project-generated trips.

Special Events

While standard trip generation rates are adequate for evaluating the project's impact on a day-to-day basis, which would include Project Level 3, the project would also include events of various sizes that would require a conditional use permit (Project Level 4).

Project Level 3: Activities or Projects Principally Allowed (Small Events)

The implementation of projects and activities principally allowed under the new zoning and land use designations would result in new community facilities including sports fields, concessions stands, visitor amenities, and parking areas. It would also allow public assembly and small events. However, it should be noted that many of the Project Level 3 small events have historically been taking place at the project site and the proposed project would not result in changes, as described below.

The following small events would occur frequently with the project, with parking on the site:

- *Birthday Parties and Informal Gatherings:* With attendance typically ranging from 10 to 50 people, Tooby Memorial Playground and the large barn in the Park Headquarters have been gathering places for family birthday parties, barbeques, and similar events. Tooby Memorial Playground has served as a location for these types of events for more than four decades. This type of activity would continue with the proposed project, with no limit on the number of these types of events annually. Parking for these types of events would be in existing parking areas at Park Headquarters or Tooby Memorial Park.
- *Weddings and Memorials:* Many weddings and memorial services for community members have taken place at the park. These events would continue in Tooby Memorial Playground, the Park Headquarters, Community Commons Area, and the labyrinth in the Main Agricultural Area. Attendance would be 500 people or less.
- *Small Fundraisers and Events:* Many local nonprofit organizations and community groups have used the park for fundraising activities. Most of these events include a variety of types of amplified music including prerecorded and live performances. These types of events would continue in Tooby Memorial Playground, the Park Headquarters, and the Community Commons Area, with a maximum attendance of 1,000 people.

Project Level 4: Projects Requiring a Conditional Use Permit

Projects that would require a conditional use permit include medium-sized events and the festival, as follows:

- *Medium-Sized Events:* This type of event often features multiple performers and performances by well-known groups or individuals that would attract more attendees. These events would take place in the Community Commons Area. Attendance would be between 800 and 2,500 people daily in addition to staff and vendors during the specific event. Not more than five of these medium-sized events would occur per year.
- *Festival:* The park would host the annual Summer Arts and Music Festival (or an event of a similar nature) that is currently being held at Benbow Lake State Recreation Area. Attendance would range between 2,500 and 5,000 people. The event would occur once per year for a period of no more than two days. The attendance would fluctuate over the course of the day,

and the total number of attendees on the site at any one time would be less than the one-day total. Actual attendees would cap at 4,000, with an additional 1,000 staff, vendors, and event support workers.

Operational Constraints

Using the projected future AM and PM peak hour volumes, an iterative process was employed to determine the number of vehicles that could be generated by the site while maintaining operation of LOS C or better at both of the study intersections. Conditions were evaluated for the following scenarios:

1. Only inbound traffic, such as would be experienced at the beginning of an event;
2. Only outbound traffic, representing the end of an event, and
3. Bi-directional traffic, such as would be occur during the middle of a day-long event with attendees both arriving and leaving during the same hour.

Data collected during special events such as a concert indicate that event attendees typically arrive with at least two persons per vehicle, and generally more. An average vehicle occupancy of 2.5 persons per vehicle was applied, though a higher occupancy would be expected for family-oriented events where three or more persons per vehicle would be typical.

Based on the assumptions applied, the number of vehicles that could be accommodated and associated number of attendees were developed, as indicated in **Table 4.16-10**.

TABLE 4.16-10 SUMMARY OF AVAILABLE CAPACITY

	Inbound Only		Outbound Only		Bi-Directional Flow			
					Inbound		Outbound	
	Vehicles	Persons	Vehicles	Persons	Vehicles	Persons	Vehicles	Persons
AM Peak	750	1,875	540	1,350	650	1,625	475	1,187
PM Peak	725	1,812	475	1,187	675	1,687	415	1,037

Note: Vehicle occupancy of 2.5 persons per vehicle assumed
 Source: Whitlock & Weinberger Transportation, Inc., 2014.

Impact of Small Events

Even using peak volumes that have been factored upward to reflect long-term growth in the area, the circulation system has adequate capacity available to accommodate the trips associated with small events. No improvements are warranted to serve project traffic and none are therefore recommended.

Impact of Medium-Sized Events

The concerts and other types of events that are expected to fit within this category would generally have a specific start time, and the majority of attendees would plan their arrival within the hour or

so prior to the start of the event. The performers and others working at the event would arrive several hours ahead of the start time. If there are multiple performers, some attendees would choose to skip one or more of the acts, and thus may arrive late or leave early.

As noted in Table 4.16-10 for inbound traffic only, between 725 and 750 vehicles per hour could be attracted to the site while still maintaining acceptable traffic operations. While this translates to more than 1,800 persons arriving during a single hour based on a 2.5 person-per-vehicle occupancy, for events attended by more than 1,800 persons, there would be a potential traffic impact. Similarly, events ending during the PM peak hour and having about 1,200 attendees or more could result in unacceptable traffic operations. For this reason, the following mitigation measures are recommended.

Mitigation Measure TRAFFIC-1a: As indicated in the Traffic Assessment Management Control Plan for the project, for events that are expected to exceed 1,200 attendees, flaggers shall be stationed at the intersection of Redwood Drive/Sprowel Creek Road at the conclusion of the event to direct traffic and to reduce delays.

Mitigation Measure TRAFFIC-1b: For events having more than 2,000 attendees, shuttle buses shall be employed to reduce the total number of vehicles leaving the site to a maximum of 700 outbound vehicles in a single hour.

Mitigation Measure TRAFFIC-1c: At medium-sized events, data regarding the number of attendees and resulting volumes of traffic shall be collected so that the number of trips can be monitored and thresholds adjusted if it is determined that attendance patterns or average vehicle occupancy are substantially different from what was assumed. These data shall be included in the annual report reviewed by the Humboldt County Planning Commission.

Impacts of Festival

While the festival would have more attendees than a medium-sized event, because of the type of event it would be, the traffic would be spread out over a much longer period and thus have less of an impact during a single hour. However, based on the assumed vehicle occupancy of 2.5 persons per vehicle, a crowd of 4,000 persons could potentially generate about 1,600 total vehicles.

The parking supply for the project site as proposed is about 700 spaces, though this number is not firm as the parking supply could easily be increased given the substantial amount of open space that could be dedicated to parking if necessary. However, for purposes of this analysis the parking supply was limited to 700 spaces. Assuming that 1,250 event attendees arrive in private vehicles (500 parking spaces with 2.5 persons per vehicle), and further assuming that the 500 attendee spaces are used by a single vehicle all day, the remaining 2,750 attendees would need to travel via bus.

Assuming an average capacity of 72 persons per bus, and occupancy averaging 80 percent, approximately 51 bus trips would be required to transport the remaining attendees to the site. Each bus trip would result in two trip ends, as the bus would need to travel from the off-site parking area to the site, then back to the parking area to load additional passengers. It is anticipated that a fleet of no more than four buses would be deployed, and assuming that a round trip would take at least a ½-hour, the buses would be expected to generate only 24 trips hourly.

The parking for more than 1,000 vehicles would need to be dispersed among numerous off-site locations over the 12 hours of operation, so the bus trips would similarly be spread out over a number of different streets outside the immediate area of Garberville. Some existing passenger loading locations include the Chevron Station for pick-up and Getti-Up Coffee for drop-off in Garberville and Majestic Center in Redway. It should be noted that there is a potential to issue half-day parking passes, which would then allow more attendees to drive to the event and result in a reduced demand for bus trips; however, these trips would occur midday, and the peak hour trips would be unchanged. Thus, this operational adjustment would not affect the results of the analysis.

Given that such events would occur infrequently, and that the number of trips on any particular roadway outside the Garberville area would be relatively low, the off-site impacts associated with shuttles carrying attendees to Level 4 events is expected to be less-than-significant.

Mitigation Measure TRAFFIC-1d: During the large festival events, on-site parking shall be limited to 500 spaces for attendees and 200 spaces for vendors and others working the event. While the vendors and others employed during the festival would likely remain on-site for an hour or more after the event concludes, the limited parking would ensure that the amount of traffic generated during a single hour results in trips that can be adequately handled by the street network. All other attendees would need to arrive by shuttle from off-site parking fields. It is understood that this is how the festival currently operates in Benbow, where there is substantially less parking than could be made available at the project site.

Mitigation Measure TRAFFIC-1e: Festival parking passes shall be made available through advance purchase only, with a variety of purchase options, including buying them on-line or at the usual local ticket outlets where attendees purchase their event tickets. The number of parking passes that can be issued shall be limited for each day of the festival to 500. A separate pass shall be required for each day, with the passes to be displayed on the dashboard of the vehicle. The above requirements shall be addressed in the project's Traffic Management Assessment Control Plan (see Appendix E).

Mitigation Measure TRAFFIC-1f: The project shall be subject to the following annual reporting and review requirements:

- 1. By December 31 of each year during which a medium- or large-sized event is held, the applicant shall prepare and submit 15 copies of a post-event report discussing that year's event(s). Verification of attendance levels shall be discussed.*
- 2. The report shall focus on assessing the effectiveness of the plan of operation, mitigation measures, and monitoring program. The report shall also contain written correspondence from agencies participating in monitoring and/or affected by the event (i.e., Humboldt County Planning Division, Division of Environmental Health, Sheriff's Office, and Public Works Department).*
- 3. Responses to all concerns and issues identified in the report shall be provided, and appropriate measures to be undertaken at the following year's event(s) identified as needed. The annual report shall include sufficient data to assess the effectiveness of all required mitigation measures in relation to the total daily attendance and traffic volume and intensity, and potential safety hazards to pedestrians and bicyclists.*

4. *The post-event report shall be submitted to the Humboldt County Planning Commission for review. The total allowable attendance levels for medium- and large-sized events shall be determined by the Planning Commission on an annual basis after review and approval of the annual report. The allowed attendance levels for medium-sized events shall range from a low of 800 to a maximum of 2,500 persons total. A large-sized event ranging from 2,500 to 4,000 attendees is not allowed until the Planning Commission has reviewed and approved two consecutive annual reports for medium-sized events with attendance levels of at least 1,800 persons. In consultation with the reviewing agencies, the Planning Commission may waive the annual reporting requirements for medium- and large-sized events for up to 5 years should the applicant demonstrate the use has been conducted in conformance with all of the required mitigations, and no changes in attendance levels or mitigation measures are proposed.*
5. *To address area concerns that may arise, the applicant shall hold a minimum of one community meeting in the vicinity of the site within 90 days of each large-sized event. This requirement may be waived by the Humboldt County Planning Director in consultation with the reviewing agencies if no significant community issues have been reported during that year's large-sized event.*

The above combination of mitigation measures would reduce this impact to a less-than-significant level. (LTS)

Conflict with Applicable Congestion Management Program

Impact TRAFFIC-2: The project has the potential to conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways. (PS)

The Humboldt County Association of Governments (HCAOG) is a Joint Powers Agency comprised of the seven incorporated cities (Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Trinidad), and the County of Humboldt. It is the designated Regional Transportation Planning Agency (RTPA) and, as such, publishes the Humboldt County Regional Transportation Plan (RTP). In this plan, the RTPA states its goal "for Humboldt County to have a comprehensive, coordinated and balanced multi-modal transportation system, so that people in the region can travel and move goods safely and efficiently by the modes that best suit the individual or business/industry, and society at large."

The County does not have an applicable congestion management program beyond what is provided in the RTP. The potential project impacts on roadway service levels are addressed in Impact TRAFFIC-1. Potential impacts on modes other than motor vehicles are discussed below and addressed in TRAFFIC-4.

Mitigation Measure TRAFFIC-2: Refer to Mitigation Measures TRAFFIC-1a through 1f and Mitigation Measures TRAFFIC-4a through 4e. (LTS)

Safety Hazards

Impact TRAFFIC-3: The project has the potential to increase safety hazards associated with access and circulation, especially in the Community Commons area (Area 4) of the site. Specifically, limited sight distance at any or all of the project driveways would result in a potentially unsafe condition. (PS)

Access to the site would occur at a number of locations including the Park Headquarters, Tooby Memorial Park, the Community Facilities/Sports Area, and the Community Commons.

A number of improvements to site access and circulation are proposed, including the following:

- Unpaved parking areas near the main entrance to the Park Headquarters and at the Community Facilities/Sports Area off Camp Kimtu Road would be expanded. The parking lot at Tooby Memorial Playground would be redesigned for increased safety. A minimum of two access points would be provided for each parking area for medium and large events. Expansion of unpaved parking areas would occur to accommodate moderate-sized events and activities in the Park Headquarters, the Main Agricultural Area, along Camp Kimtu Road, and at the Community Facilities/Sports Area.
- A simple one-lane bridge would be installed over a ravine in the Community Commons area. This bridge would facilitate one-way traffic flow as necessary during larger events.
- Temporary large event parking for higher numbers of cars is proposed for the Main Agricultural Area, Community Commons, and the Community Facilities/Sports Area. New or expanded fencing for public safety is proposed for Tooby Memorial Playground, Park Headquarters, Main Agricultural Area, the Community Commons, and the Community Facilities/Sports Area.
- There is an existing ranch road system that provides access throughout the site for moving farm equipment and property maintenance. It would be maintained and upgraded as appropriate for use as general service roads during events in the Park Headquarters, Main Agricultural Area, Community Commons, and the Community Facilities/Sports Area.
- The existing river access road at the Sprowel Creek Road bridge would be improved for unpaved parking, public access and non-motorized boats. An improved river access would be constructed in Tooby Memorial Playground to upgrade the access to the river for swimming and for people to carry small non-motorized watercraft down to the river for launching.

The following discussion reviews potential hazards associated with site access, circulation, and parking.

Sight Distance

At driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting to enter the roadway and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to turn left or right without requiring the through traffic to radically alter their speed.

Sight distance along Sprowel Creek Road at the driveways to the Park Headquarters, Community Commons, and Tooby Memorial Playground was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans (Caltrans, 2012). The

recommended sight distances both for drivers entering and exiting a driveway are based on stopping sight distance.

Sight distances at the driveways were field measured. Since Sprowel Creek Road does not have a posted speed limit, a 40-mile-per-hour (mph) design speed was assumed. Given the winding nature of the roadway as well as the width, it is likely that most drivers would be traveling slower than this, so the assumed design speed provides a conservative safety assessment.

Sight Distance at Community Commons Area

The existing driveway located at the easterly side of the park site would primarily be used only during medium-sized special events and the festival. While drivers exiting the site would have more than 300 feet of sight distance in both directions, a vehicle waiting to turn left into the site would not be seen by a driver approaching the access point until they were about 200 feet away. Sight distance for drivers following a vehicle stopped to turn left into the site is less than the 300 feet needed for a 40-mph approach speed.

Mitigation Measure TRAFFIC-3: During events held in the Community Commons (Areas 4A and 4B), warning signs shall be posted along Sprowel Creek Road in advance of the driveway indicating that there is potentially stopped traffic ahead. While drivers would typically be able to make the left turn with little, if any, delay, this safety measure would ensure that there is adequate warning for drivers approaching the area. (LTS)

Sight Distance at Park Headquarters and Tooby Memorial Playground

Sight lines are considerably in excess of 300 feet in each direction at both the Park Headquarters Tooby Memorial Playground driveways. Sight distance is adequate in both directions and approaching the Park Headquarters and Tooby Memorial Playground driveways.

Sight Distance at Community Facilities/Sports Area

Sight lines along Camp Kimtu Road were found to be more than 500 feet in each direction, so they would be adequate for speeds in excess of 50 mph. Sight distance is adequate in both directions and approaching the Community Facilities/Sports Area driveway on Camp Kimtu Road.

Parking Capacity

The existing parking lots at the Tooby Memorial Playground, Park Headquarters, and Community Facilities/Sports Area are adequate for typical daily events and small special events. During medium-sized events and the festival, parking demand at the site would vary depending on the type of events being held. This is addressed in the Plan of Operation - Traffic Assessment Management Control Plan (see **Appendix E**).

Parking for medium-sized events would take place in the Community Commons area with overflow to the main Agricultural Area. These areas have large open fields that could easily be used for parking during events. Parking for these events would be located in the Community Commons (Area 4) adjacent to the Park Headquarters (Area 2) and designated fields in the Main Agricultural Area (Area 3), and temporary parking would be provided in the Community Facilities/Sports Area (Area 5). More than 7 acres of space have been identified that can be made available for parking.

Per Section 109.1.3.3.4 of the Humboldt County Code, 18 accessible spaces would be required within this parking supply. Vehicles would enter the site via Tooby Ranch Road.

Likewise, the festival would provide parking using a portion of the site's open space. It is recommended that the parking supply be limited to space for 500 attendee vehicles to park in addition to 200 staff, volunteers, vendors, and performers (see Mitigation Measure TRAFFIC-1d above). A maximum of 100 vehicles for staff and vendors would remain on-site overnight for security and for early shifts. Conservatively assuming 350 square feet per parked vehicle to include the 9-foot-by-18-foot parking space and room for drive aisles, a total of about 5.5 acres would need to be set aside for parking. About 7 acres have been identified for parking, so adequate space to provide the necessary parking is available.

The existing facilities together with available open spaces can provide adequate parking for both typical daily operation and special events.

As noted above, drivers entering the site for the festival should be required to purchase a parking pass in advance and have it available when they enter the site, as recommended in Mitigation Measure TRAFFIC-1e above. This would reduce the time needed to clear a queue of traffic entering the parking area, resulting in minimal delays that would back up onto Sprowel Creek Road.

Conflict with Provisions for Public Transit, Bicycles, and Pedestrians

Impact TRAFFIC-4: The project could conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. This is especially true for pedestrian use during medium- and large-sized events. (PS)

The project includes improvements to the existing pedestrian path under Sprowel Creek Road bridge, between the Riverfront Area and Tooby Memorial Playground, to avoid pedestrian use of roadways between these two areas.

Facilities for Non-Motorized Modes

Garberville and Redway are the business centers of Southern Humboldt County, with a greater concentration of businesses in Garberville. While Garberville is a busy business hub for the Southern Humboldt community, the population living within the town of Garberville is only 193 persons based on 2010 Census data. By contrast, the neighboring town of Redway has a much higher population of 1,225 persons and is 3.8 miles from the park.

The town of Garberville is the main commercial area serving the outlying rural areas including Shelter Cove, Etersburg, Briceland, Whitethorn, Redway, Alderpoint, Fort Seward, Harris, Casterlin, Miranda, and Myers Flat. The Southern Humboldt Unified School District serving this area has a single high school; there are no schools in the town of Garberville.

Residents in Southern Humboldt are vehicle-centric and regularly travel distances such as 25 miles to school or 75 miles to Eureka one way. The steep terrain in the area and the distances between destinations do not promote walking and bicycling as convenient methods of transportation.

Pedestrian Facilities

Pedestrian Behavior. Pedestrian studies have routinely concluded that most people will walk no more than ¼-mile to reach public transportation. The ¼-mile standard is also supported by park equity research. Jennifer Wolch, now at the University of California at Berkeley, wrote “a quarter mile is reasonable for parents taking toddlers and small children to a park for everyday outings and playground opportunities. Trips of more than a quarter mile are unlikely to be acceptable to parents.”

Acceptable walking distances will vary depending on geography, climate conditions, age, health, time availability, quality of surroundings, safety, climate, land use, trip purpose, and many other factors. Most people will walk longer distances for exercise purposes, but prefer to walk shorter distances when they are commuting to a destination or in a hurry.

Considerable research has been performed recently on factors that make areas inviting to pedestrians. As mentioned above, the most commonly cited industry standard for the acceptable walking distance is ¼-mile. Barriers to walkability include weather, time, distance, a steep grade, lack of shelter, safety, or loud traffic noise.

Existing Conditions in Project Area. The walk to the project site from the town of Garberville has few of the characteristics that would classify it as highly walkable. There is open exposure to the elements, loud traffic noise, and a long, sustained, steep grade. The walk from Garberville to the Community Park would be characterized as having a low-walkability ranking by these standards. The steep grade alone makes this a difficult walk that would deter even hardy walkers, particularly on the return.

Central Garberville is 1.23 miles from the main entrance to Park Headquarters (Area 2). Garberville is 1.75 miles from the entrance to Camp Kimtu (Area 5) where the community sports facilities are proposed. The population within the walking distance of ½-mile of the main entrance to the Community Park is 60 persons. The population living within the ½-mile radius of the proposed Area 5 community sports facilities is 46 persons.

By contrast, Redwood Fields in the Cutten area of Eureka, cited as a comparable, has a population of 1,433 people living within a ½-mile radius. The density of the population surrounding these fields together with the level roadways and existing sidewalks would make it likely that this location would experience a much higher level of pedestrian traffic than the project site.

Based on current park use, it is reported by staff that the large majority of walkers and bicyclists using the Community Park trails commute by vehicle to the park and then walk or bicycle on the trails within the park. Walkers prefer to spend their walking time in a natural park setting on the trails within the park rather than traveling along a paved roadway. A walker out for exercise or pleasure is more likely to spend the hour they have on a beautiful trail than walking about 2½ miles to reach the park and return home. A user walking to the park would have a total trip in the range of 3 to 4 miles, which is outside the range of what may be desired by most recreational walkers.

The 2002 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, by the National Highway Traffic and Safety Administration and the Bureau of Transportation Statistics, reports results of a survey of 7,500 people nationwide over the age of 16 on their walking and bicycling

habits. It was reported that the most common destination for walking is home (59 percent of walking trips), while the destination of a park or recreation area was reported by 7 percent of walkers, shopping accounted for another 7 percent, and 6 percent of walking trips were to work. Eighty-one percent of respondents walk once a week during the summer months.

Using the statistics from the 2002 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, and generously calculating that 10 percent of the 193 residents in the town of Garberville would be willing to walk a distance of 1 mile (four times the usual acceptable walking distance of ¼-mile one-way), and noting that 81 percent walked once weekly with 7 percent choosing the destination of a park or recreational area, the park would generate an average of one pedestrian trip in one week during the summer months based on nationwide typical pedestrian behavior.

Considering the typical behavior of pedestrians for the 60 persons living within a ½-mile radius of the project site, and assuming one-half of the 60 residents within a ½-mile radius of the project site were walkers, 81 percent walked once weekly with 7 percent going to a park or recreational area, the park would generate two pedestrian trips per week.

Tooby Memorial Park and playground are located within the project site and have been in use by the public since the 1960s. Park staff reports very few park users either walking or bicycling to the park in the past decade.

Pedestrian Activity Generated by Project. While events would generate more activity at the park, the potential for walking trips remains low as there would still be a small population within walking distance, and of these residents, an even smaller number would be interested in attending the special events held at the site.

Given the rural nature of the site, low resident population surrounding the project site and in the town of Garberville, the distance to the project site and the difficult terrain of the roadway to the project site, including a steep grade to be climbed when leaving, pedestrian traffic to and from Garberville or other areas off-site is expected to continue to be limited. The proposed project would not produce sufficient pedestrian traffic to warrant providing improved pedestrian facilities, including upgrades to the existing shoulders or roadways.

Pedestrian activity would, however, be expected between and through the various components of the project. Paths and trails already exist on the site linking the Park Headquarters area through the Main Agricultural Area to the Community Facilities/Sports Area and the Community Commons, with multiple options existing for some routes that provide recreational opportunities for walking around the site. The proposed improved connection under the Sprowel Creek Road bridge between the Riverfront Area and Tooby Memorial Playground would provide connectivity for the northernmost facilities, and a crosswalk is proposed on Kimtu Road connecting the Riverfront area and the Community Facilities/Sports Area. However, no facilities connecting Tooby Playground to the Park Headquarters have been proposed. While there would likely be a minimal number of pedestrian crossings during typical operating conditions, there could be a substantial number of pedestrians during medium-sized special events and the large festival event.

Pedestrian facilities serving the project site are expected to be generally adequate, though as proposed there is not a connection between the Riverfront/Tooby Memorial Playground and the Park Headquarters. For this reason, the following mitigation measure is recommended.

Mitigation Measure TRAFFIC-4a: For medium-sized special events and the festival, a temporary marked crosswalk shall be created connecting the Tooby Memorial Playground to the Park Headquarters area. The crossing shall be placed to maximize sight lines, and during periods of peak usage, there shall be a crossing guard or flagger available to assist pedestrians and control traffic. This measure is included in the Traffic Assessment Management Control Plan (see Appendix E).

Bicycle Facilities

There are no existing bicycle facilities in the vicinity, so bicyclists must share the roadway with vehicular traffic. While cyclists could easily travel at the same speed as vehicular traffic on the trip to the site, which is downhill, leaving the site requires uphill travel, which is typically quite a bit slower for cyclists. Park staff reports that the majority of bicyclists using the park arrive in vehicles, then unload their bicycles to ride the trails. With the low-resident population surrounding the park, bicycling to the site is not expected to be a primary mode of travel, though bicyclists do need to be accommodated on the roadway. The planned future widening of shoulders by the County would provide additional space for bicyclists to move over and allow vehicular traffic to pass.

In addition, the project site plan does not identify the provision of bicycle parking or storage facilities. Bicycle facilities serving the project site are not expected to be adequate.

Mitigation Measure TRAFFIC-4b: "Share the Road" signs shall be posted, and consideration given to installing "sharrows" to indicate the potential presence of cyclists. Sharrows are markings that include a cyclist and arrows, and they are placed in the lane to identify the road as a shared use facility.

Mitigation Measure TRAFFIC-4c: For large festival events, accommodations shall be made either on the shuttle vehicles or by dedicated vans to ferry cyclists to the top of the hill on Sprowel Creek Road.

Mitigation Measure TRAFFIC-4d: Bicycle racks shall be included in each of the park's major entrances to encourage bicycle travel.

Transit Service

There are no regularly scheduled transit routes serving the project site. It is, however, anticipated that shuttle buses would be used during the festival and perhaps some of the medium-sized events. Permanent transit facilities serving the project site are not expected to be needed, but temporary shelters would be needed during events.

Mitigation Measure TRAFFIC-4e: To facilitate shuttle bus users, a temporary shelter shall be provided during events that use a shuttle bus, both to protect attendees and to provide guidance as to the location of the shuttle stop.

The combination of the above mitigation measures would reduce this impact to a less-than-significant level. (LTS)

REFERENCES

- California Department of Transportation (Caltrans), 2009. *Collision Data on California State Highways*.
- California Department of Transportation (Caltrans), 2012. *Highway Design Manual*, 6th Edition.
- California Highway Patrol, 2006-2011. *Statewide Integrated Traffic Records System (SWITRS)*.
- California State Parks, 2015. Community Fact Finder. Website http://www.parks.ca.gov/?page_id=26166 accessed on March 23, 2015.
- Donahue, Ryan, 2011. *Pedestrians and Park Planning: How Far Will People Walk?*, Trust for Public Land, May 13. Website <http://cityparksblog.org/2011/05/13/pedestrians-and-park-planning-how-far-will-people-walk/> accessed on March 24, 2015.
- Humboldt County, 1983. *Humboldt County General Plan: Volume I Framework Plan*.
- Humboldt County, 2012. *Humboldt County General Plan Update – Planning Commission Approved Draft*.
- Humboldt County Association of Governments, 2012. *Humboldt Regional Bicycle Plan – 2012 Update*. Humboldt Transit Authority (HTA). Website <http://www.hta.org/>, accessed April 10, 2013.
- Humboldt County Association of Governments, 2014. *VROOM...Variety in Rural Options of Mobility*, Public Review Draft 2.
- Institute of Transportation Engineers (ITE), 2012. *Trip Generation Manual*, 9th Edition.
- Schroeder, P. & Wilbur, M. (2013, October). *2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, Volume 2: Findings Report*. (Report No. DOT HS 811 841 B). Washington, DC: National Highway Traffic Safety Administration.
- SNO-TRAN, 2013 *A Guide to Land Use and Public Transportation, Volume I*. Website <http://ntl.bts.gov/DOCS/GL.html>, 3/26/2015.
- Transportation Research Board, 2000. *Highway Capacity Manual*.
- U.S. Department of Transportation (US DOT). National Highway Traffic Safety Administration, *National Survey of Pedestrian and Bicyclist Attitudes and Behaviors*, page 94. Website <http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/810971.pdf>, accessed March 30, 2015.
- Wolch, J., J. Wilson, and J. Fehrenbach, 2002. *Parks and Park Funding in Los Angeles: An Equity Mapping Analysis*. University of Southern California Sustainable Cities Program. Website http://dornsife.usc.edu/geography/ESPE/documents/publications_parks, accessed March 30, 2015.

4.17 UTILITIES AND SERVICE SYSTEMS

INTRODUCTION

This section addresses potential project impacts on water, solid waste disposal, and energy services. Other sections of the Draft EIR address impacts on other services. Specifically, wastewater and drainage systems are addressed in Section 4.9, Hydrology and Water Quality; hazardous waste disposal is addressed in Section 4.8, Hazards and Hazardous Materials; schools, police, and fire protection services are addressed in Section 4.14, Public Services; and parks and recreation services are addressed in Section 4.15, Recreation.

ENVIRONMENTAL SETTING

WATER

The analysis of water impacts in this EIR is based on the “Water Supply and Demand Analysis Memorandum” prepared for the project applicant by GHD (GHD, 2014). The “Water Supply and Demand Analysis Memorandum” is included as Appendix G of this EIR.¹

Existing Water Sources and Supply

Three sources of water are currently in use at the project site (GHD, 2014):

- Source 1, a non-potable source that comes from the South Fork Eel River by a permitted infiltration gallery. This source has capacity to generate 107 gallons per minute (gpm) based on the existing pumping system. If pumping is assumed for 12 hours per day, this source can produce approximately 2.3 million gallons per month, with the amount varying slightly by the number of days in the month.
- Source 2, a potable source that comes from a tributary spring. The capacity of this source is 1.4 gpm and the monthly capacity ranges from approximately 56,000 gallons per month to 62,000 gallons per month depending on the number of days in the month. This source is not used during the months of July through October, due to an existing forbearance program.
- Source 3, a potable source that comes from a well located in Tooby Memorial Park. The capacity of this source is unknown; however, it currently generates approximately 7,950 gallons per month for the caretaker’s unit and irrigation in Area 1.

¹ This section of the EIR relies on the “Water Supply and Demand Analysis Memorandum” (GHD, 2014) contained in Appendix G. A later study of water supply and demand was conducted for purposes of evaluating potential impacts on aquatic habitat in the South Fork Eel River. This study (*Independent Review of Southern Humboldt Community Park Water Supply and Demand Analysis and Potential Impacts on Surface Water and Aquatic Habitat*, prepared by Pacific Watershed Associates in 2015) included a refined estimate of the project’s irrigation water demand. Please refer to Section 4.4, Biological Resources, for details on this study.

A fourth source of potable water (Source 4), a well owned by the project applicant and located in Area 4 of the project site, is available but is not currently in use. The capacity of this source is 2.5 gpm, and assuming 12 hours of pumping per day the capacity is estimated to range from approximately 50,400 gallons per month to approximately 55,800 gallons per month, depending on the number of days in the month (GHD, 2014).

Table 4.17-1 summarizes these sources. The pump at the infiltration gallery and the upland well (after installation) were assumed to run for 12 hours per day. Table 11 in the “Water Supply and Demand Analysis Memorandum” (Appendix G of this EIR) presents water source capacity by month.

According to the California Department of Public Health (CDPH), the water system at the project site is classified as “Transient Non-Community Water System,” meaning that it is not a public water system. (See Appendix A of the “Water Supply and Demand Analysis Memorandum” [Appendix G of this EIR] for the CDPH “Decision Tree for Classification of Water Systems.”)

Existing Water Demand

Table 4.17-2 shows existing water demand at the project site by water source, estimated from existing known uses. As shown in the table, the total peak demand at the site is 367,706 gallons per month, mostly attributable to irrigation, and the total off-peak demand is 21,379 gallons per month (GHD, 2014). Peak is defined as May 1 through October 31 (6 months), and off-peak is defined as November 1 through April 30 (6 months). See Table 2 in the “Water Supply and Demand Analysis Memorandum” (Appendix G of this EIR) for existing water demands at the project site by area.

Water Storage

SHCP currently maintains one 55,000-gallon water storage tank. The tank holds water from the spring (Source 2) and is located on an adjacent property (Assessor’s Parcel Number 222-091-11), located immediately east of the project site boundary near the boundary between Area 3 and Area 4 of the project site. This tank is plumbed with a 1.5-inch line to hydrant connections, including a connection on the project site (GHD, 2014).

SOLID WASTE DISPOSAL

The Humboldt Waste Management Authority (HWMA) is a Joint Powers Authority (JPA) that was created to provide economical coordination of solid waste management and disposal services. JPA members include Humboldt County and the cities of Arcata, Blue Lake, Eureka, Ferndale, Rio Dell, and Trinidad. The HWMA manages contracts with solid waste disposal companies and coordinates the disposal of waste collected within the boundaries of member jurisdictions. In addition, the HWMA manages waste reduction programs on behalf of Humboldt County (Humboldt County, 2012).

The HWMA manages contracts for the transport of the solid waste for disposal at either the Anderson Landfill in Shasta County or Dry Creek Landfill near Medford, Oregon. The Anderson Landfill has a daily permitted disposal of about 1,018 tons per day and a remaining capacity of

TABLE 4.17-1 EXISTING WATER SOURCES AT PROJECT SITE

Source No.	Water Source	Permit	Water Rights Filings	Pump	Storage Capacity	Potable	Conditions
1	South Fork Eel River – Infiltration Gallery	CDFW, LSA (R1-2009-0238)	SWRCB, Statement of Water Diversion and Use: S0243379	Gould's submersible pump 107 gpm (2013)	None	No	Rate of diversion 108 gpm or 10% of Stream flow (lesser of the two).
2	Spring – Unnamed Tributary			None. Gravity feed	55,000-gallon tank	Yes	Rate of diversion 1.39 gpm. No draw of water July 2 to October 31 each year.
3	Tooby Memorial Park – Well	-		Grundfos submersible pump	None	Yes	Capacity unknown.
4	Upland Park – Well	-	Will apply after use starts	None; to be installed in the future	None	Yes	Capacity approximately 2.5 gpm.

Notes: CDFW = California Department of Fish and Wildlife, SWRCB = State Water Resources Control Board, gpm = gallons per minute

Source: GHD, 2014.

TABLE 4.17-2 EXISTING WATER DEMAND AT PROJECT SITE BY WATER SOURCE

Source	Peak Demand (gallons per month)	Off-Peak Demand (gallons per month)
Source 1 (Non-Potable)	328,015	167
Source 2 (Potable)	31,741	13,262
Source 3 (Potable)	7,950	7,950
Total	367,706	21,379

Source: GHD, 2014.

about 8 million tons. The Anderson Landfill is not expected to reach capacity until 2036. The Dry Creek Landfill has a remaining capacity of about 50 million tons without additional site expansion. It is anticipated that the Dry Creek Landfill could provide disposal capacity for its current service area, including Humboldt County, for another 75 to 100 years (Humboldt County, 2012).

Humboldt County has a franchise agreement with Recology Humboldt County for the solid waste and recycling services in Garberville and Redway. For residents outside Garberville or Redway not served by curbside collection, the public can self-haul garbage and recycling to the Redway transfer station operated by Eel River Disposal.

Solid waste within the project site is collected weekly in an on-site dumpster contracted through Recology Humboldt County (Lobato, 2014a).

ENERGY

The majority of energy consumed in Humboldt County is imported, with the exception of biomass energy and electricity. While the majority of electricity (73 percent) is generated within the county, a large portion of this locally generated electricity is generated using natural gas (through the 163-megawatt PG&E Humboldt Bay Power Plant that began operation in mid-2010), and the natural gas is primarily imported. The rest of locally generated electricity is primarily produced from biomass (Pacific Lumber and Fairhaven Power), with the remainder coming from local hydroelectric facilities and a very small amount from distributed rooftop solar electric and wind energy systems (Humboldt County, 2012).

PG&E currently serves the project site from three service connections: one for an agricultural well, one for the two residences and outbuildings in Area 2 (Park Headquarters), and one in Area 1 (Tooby Memorial Park) that is used for a caretaker's residence and limited park uses (Lobato, 2014a).

REGULATORY FRAMEWORK

STATE INTEGRATED WASTE MANAGEMENT ACT

The California Integrated Waste Management Act of 1989 (Assembly Bill [AB] 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, AB 939 required city and county jurisdictions to plan and implement programs to divert 50 percent of the total waste stream from landfill disposal by the year 2000. AB 939 also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. California cities and counties, including Humboldt County, are required to submit annual reports to the state on their progress toward AB 939 goals.

The County has prepared and adopted an Integrated Waste Management Plan (IWMP) consistent with the Integrated Waste Management Act. The IWMP addresses source reduction and recycling, household hazardous waste, and countywide landfill capacity needs (Humboldt County, 2012).

In 2011, AB 341 (Chesbro) was signed by Governor Brown and became law. The law made it a policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020. In complying with this state requirement, property owners are to arrange for services consistent with local laws or requirements, such as recycling collection services.

STATE OF CALIFORNIA ENERGY EFFICIENCY STANDARDS (TITLE 24)

Any buildings constructed on the project site would be required to comply with State of California energy conservation regulations (Energy Efficiency Standards for Residential and Nonresidential Buildings, Title 24, Part 6, of the California Code of Regulations). These regulations specify the State of California's minimum energy efficiency standards and apply to new construction of nonresidential and residential buildings. The standards regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Compliance with these standards is verified and

enforced through the local building permit process. Humboldt County reviews development plans prior to project approval to ensure that Title 24 energy conservation and efficiency standards are met and incorporated into project design.

HUMBOLDT COUNTY GENERAL PLAN

Water

Sections 3360 and 3361 of the Humboldt County General Plan contain the following relevant goals and policies related to water (Humboldt County, 1984):

- Goal 1: To maintain or enhance the quality of the County's water resources and the fish and wildlife habitat utilizing those resources.
- Goal 2: To maintain a dependable water supply, sufficient to meet existing and future domestic, agricultural, industrial needs and to assure that new development is consistent with the limitations of the local water supply.
- Policy 1: Ensure that land use decisions are consistent with the long term value of water resources in Humboldt County.
- Policy 2: Regulate development that would pollute watershed areas.
- Policy 3: Ensure that the intensity and timing of new development will be consistent with the capacity of water supplies.
- Policy 4: Existing water uses shall be considered during the review for new water uses.
- Policy 5: The availability of groundwater should be used as a prime factor in determining the desirable amount of residential development in a particular area in order to protect groundwater resources from depletion or contamination.
- Policy 6: Projects must provide evidence of water availability prior to recordation of map.
- Policy 7: Maximize the use of water conservation techniques appropriate for new and existing development.
- Policy 10: Large water export projects will not be approved or supported unless specific requirements and assurances are satisfied. These shall include the 1978 water policy statement policies regarding "Water Export Projects on Humboldt County Streams."
- Policy 13: Ensure that projects located within state designated wild, scenic or recreational river basins are consistent with the guidelines in the State Wild and Scenic Rivers Act (as amended).

[NOTE: the Humboldt County General Plan states that the South Fork Eel River from the mouth of Section Four Creek near Branscomb to the river mouth below Weott has been designated as a component of the Wild and Scenic Rivers System. This stretch of the river includes the portion that extends through the project site.]

Solid Waste Disposal

Sections 4610 and 4611 of the Humboldt County General Plan contain the following relevant goals and policies related to solid waste (Humboldt County, 1984):

- Goal 2: Protect and improve the County environment, public health, safety, and economy.
- Goal 3: Reduce the amount and toxicity of waste generated by residents, businesses, industries, and institutions in the County to the greatest degree feasible.
- Goal 4: Establish an integrated waste management hierarchy consisting of the following: Source reduction, reuse and repair, recycling, composting, materials recovery, environmentally safe energy recovery, environmentally safe transformation, and landfill disposal.
- Goal 5: Maximize the achievement of integrated waste management objectives through education, economic incentives and voluntary participation in waste reduction programs.
- Goal 6: Maximize the opportunity for individuals and groups to participate in the planning and the implementation of waste reduction programs.
- Goal 7: Maximize the use of previously discarded materials as a resource for local businesses and manufacturers.
- Goal 8: Minimize, to the greatest degree possible, the per capita waste generated by the users.
- Goal 9: Ensure the coordination of and cooperation with all Federal, State and local programs and regulations.
- Policy 1: Reduce litter and other illegal solid waste disposal.
- Policy 4: Minimize the environmental impact of solid waste handling and disposal by mitigation measures such as using bear proof containers and fencing.
- Policy 7: Encourage waste reduction through source reduction, reuse and repair, recycling and recovery, and marketing programs.

Energy

The Humboldt County General Plan does not contain any relevant goals or policies related to energy resources.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

SIGNIFICANCE CRITERIA

Water

Based on Appendix G of the CEQA Guidelines, the project would have a significant impact on water facilities if it would:

- Require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.

Solid Waste Disposal

Based on Appendix G of the CEQA Guidelines, the project would have a significant impact on solid waste disposal facilities if it would:

- Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Not comply with federal, state, or local statutes and regulations related to solid waste.

Energy

Based on CEQA Section 21100(b)(3), the project would have a significant impact on energy utilities if it would:

- Result in the wasteful, inefficient, or unnecessary consumption of energy.

LESS-THAN-SIGNIFICANT IMPACTS

Water Supply

Water supplies are expected to be sufficient to serve the project, and the project would not require new or expanded water entitlements. The project's impact would therefore be less than significant in relation to this significance criterion.

Total Water Demand

According to the "Water Supply and Demand Memorandum" (Appendix G of this EIR), total water demand from the project would range from approximately 33,566 gallons per month (the estimate for the months of December and February) to 1,552,821 gallons per month (the estimate for the month of July, assuming minimum spots field irrigation). Total water supply would range from approximately 2,263,565 gallons per month (the estimate for the month of February) to 2,506,090 gallons per month (the estimate for the months of January, March, May, and December).

Total water demand is a combination of potable and non-potable uses served by multiple water sources, and the maximum month demand of 1,552,821 gallons per month (assuming minimum sports field irrigation) is in July. Under the proposed project water system (water supply Option 2 described in the "Water Supply and Demand Memorandum"), the demands on the Eel River infiltration gallery would be 1,475,565 gallons per month for non-potable uses compared to a supply of 2,388,240. Thus, there would be no shortage of supply for the infiltration gallery demands. For the spring and upland well, the demand in July when the forbearance period begins would be 48,661 gallons per month, compared to a supply of 55,800 gallons plus 55,000 gallons in

stored water. Thus, there is also no supply shortage for these sources. For the Tooby Park well, the demand would be 28,595 gallons per month, and supply is anticipated to meet demand.

Groundwater Supplies

Groundwater sources include the Tooby Park well and upland well. As shown in Table 13 of the “Water Supply and Demand Analysis Memorandum” (Appendix G of this EIR), the existing and proposed facilities using the Tooby Park well as a water source include the caretaker’s unit, irrigation, and restrooms (toilets, sinks and drinking fountains), all within Area 1. These facilities would continue to use the Tooby Park well as a water source, and demand ranges from a low of 9,072 gallons (January, February, March, November, and December) to a high of 30,245 gallons in September. The upland well is proposed to be used in conjunction with the spring to meet a majority of the potable water demands in the park. Assuming full use of the spring source, the upland well has a minimum demand of zero in the non-forbearance period of November through June, and a maximum demand of 48,661 gallons in the month of July. Upland well capacity ranges from a low of 50,400 gallons per month in February to a high of 55,800 gallons per month (in January, March, May, July, August, October, and December). Therefore, remaining capacity for the upland well during operations is estimated at a low of 7,139 gallons in July and a high of 55,800 gallons in December.

Consistency with General Plan Policies Regarding Water Supply

The proposed project would be consistent with the Humboldt County General Plan goals and policies listed under “Regulatory Framework” above. Specifically, the project would be consistent with Policies 3, 5, and 6 in that there would be a sufficient water supply for the project as identified in the “Water Supply and Demand Analysis Memorandum” (Appendix G of this EIR). Consistent with Policy 7, the project includes water conservation techniques; for example, the water used for irrigation and livestock in Area 2 has been changed to the infiltration gallery non-potable source in order to maximize potable water throughout the park. Consistent with Policy 13, the proposed project does not include any dam, reservoir, diversion, or other water impoundment facility on the Eel River, which is designated as a State Wild and Scenic River.

Water Entitlements

As shown in Table 4.17-1, the project applicant has a Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW) (R1-2009-0238) for Sources 1 and 2. Sources 1, 2, and 3 have a Statement of Water Diversion and Use (S0243379) on file with the State Water Resources Control Board (SWRCB). Source 4 (an existing but currently unused well in Area 4) would also require a Statement of Water Diversion and Use with the SWRCB.

Conclusion

Existing water supplies are expected to be sufficient for the project’s everyday use and for emergency purposes. The impact is less than significant, and no mitigation measures are necessary.

Solid Waste Disposal

The landfills serving the project would have sufficient capacity to accommodate the project's solid waste disposal needs. Therefore, the project's impact on landfill capacity would be less than significant.

The applicant estimates that everyday uses of the park (recreation and small gatherings) would generate approximately 130 yards of trash and 40.5 cubic feet of recyclables per year. The annual large-sized event would generate approximately 80 yards of trash, 1.5 tons of recyclables, and 600 pounds of paper/cardboard. The five medium-sized events per year would generate a total of 130 yards of trash, 2.5 tons of recyclables, and 1,000 pounds of paper/cardboard. The ten small events per year would generate a total of 15 yards of trash, 80 cubic feet of recyclables, and 200 pounds of paper/cardboard (Lobato, 2014b). Use of the proposed sports fields and skate park would generate a total of approximately 10,700 pounds (5.35 tons) of solid waste per year (Lobato, 2014c). Construction of buildings and structures included in the project would also generate solid waste and debris.

As discussed under "Environmental Setting" above, the HWMA manages contracts for the transport of the solid waste for disposal at either the Anderson Landfill in Shasta County or Dry Creek Landfill near Medford, Oregon. The Anderson Landfill has a daily permitted disposal of about 1,018 tons per day and a remaining capacity of about 8 million tons. The Anderson Landfill is not expected to reach capacity until 2036. The Dry Creek Landfill has a remaining capacity of about 50 million tons without additional site expansion. It is anticipated that the Dry Creek Landfill could provide disposal capacity for its current service area, including Humboldt County, for another 75 to 100 years. Therefore, the proposed project would be served by a landfill with sufficient permitted capacity to accommodate solid waste disposal needs. The solid waste generated by the project would represent a relatively small percentage of total landfill capacity, and the project's impact on landfill capacity would be less than significant.

Energy

The project would result in very little energy use except during large events when energy may be needed for temporary lighting or other uses. Project construction would also involve temporary use of energy. The project would not result in wasteful, inefficient, or unnecessary consumption of energy, and impacts would be less than significant.

As described in Chapter 3, Project Description, of this EIR, proposed lighting by area is as follows:

- **Area 1 – Tooby Memorial Park.** Outdoor lighting is proposed at the existing caretaker's residence and at the restrooms. Temporary lighting would be used on special occasions that continue beyond dark. Solar and battery-powered lighting options would be used whenever possible.
- **Area 2 – Park Headquarters.** Standard outdoor lighting may be installed at and between existing buildings. Additional solar and battery-powered lighting options would be used whenever possible.

- **Area 3 – Main Agricultural Area.** No permanent lighting fixtures would be installed. Special events each year may continue past dusk and would use portable lighting stations to illuminate the parking areas. Up to three temporary lighting stations for parking areas would be provided.
- **Area 4 – Community Commons.** One to three temporary light stands would be positioned in the parking lots during evening seasonal events. The entry to the event site would also be lit. Low-voltage lighting would be used to light the portable toilets. Portable solar and battery-powered lighting would be used when possible. Craft and food booths that remain open after dark would also provide their own lights. At the environmental camp, temporary solar or battery-powered lighting would be used to light portable toilets.
- **Area 5 – Community Facilities/Sports Area.** For occasional night games held during sports tournaments, lighting stands may be provided for the fields. Bathroom facilities and the concessions would also have outdoor lighting.
- **Area 6 – Riverfront.** No lighting is proposed for this area.
- **Area 7 – Forestland.** No lighting is proposed for this area.

As indicated above, much of the lighting would be temporary, and in many cases solar and battery-powered lighting would be used whenever possible. In several areas of the site, no lighting is proposed. The project therefore would not result in wasteful, inefficient, or unnecessary consumption of energy.

POTENTIALLY SIGNIFICANT IMPACTS

This section addresses the potentially significant utilities impacts of the project and recommended mitigation measures.

Water Facilities

Impact UTIL-1: The project would require or result in the construction of new water facilities, the construction of which could cause significant environmental effects. (PS)

The project would include installation of water tanks, potable water lines, and irrigation lines, as described in Chapter 3, Project Description, of this EIR. All of the proposed water facilities would be located on the project site.

The construction and installation of these new water facilities could cause significant environmental effects. These effects are evaluated in this EIR. (See Section 4.3, Air Quality, Impact AIR-1; Section 4.4, Biological Resources, Impact BIO-2; Section 4.5, Cultural Resources, Impact CULTURAL-2; Section 4.6, Geology and Soils, Impact GEO-2; Section 4.7, Greenhouse Gas Emissions, Impact GHG-1; Section 4.8, Hazards and Hazardous Materials, “Less-than-Significant Impacts;” Section 4.9, Hydrology and Water Quality, Impact HYDRO-1; and Section 4.12, Noise, Impact NOISE-2.)

Additional water facilities beyond those included in the project are not expected to be needed to serve the project. The existing on-site fire hydrant connection is located close to the proposed large event site, providing easy access in case of fire. The SHCP owns a portable 300-gallon fire

suppression water-pumper tank installed on a four-wheel-drive truck that can provide access to most areas of the project site (GHD, 2014). The park is not located within the Town of Garberville, and only three residences are located at the site. If an emergency takes place, there are a total of four water sources that these residences can divert water from to use.

Mitigation Measure UTIL-1: The project shall comply with all applicable mitigation measures identified in this EIR. Compliance with these measures would ensure that the impact of the proposed water facilities included in the project would be reduced to a less-than-significant level. (LTS)

Solid Waste Disposal

Impact UTIL-2: The project would comply with federal, state, or local statutes and regulations related to solid waste. However, The Humboldt County Division of Environmental Health has identified the potential for impacts resulting from the handling of solid waste and recycling at the project, especially during events attracting 500 or more attendees. (PS)

The volume of solid waste generated by the project would depend on the size, nature, and timing of events. The applicant has provided estimates of solid waste generation from everyday uses of the park as well as from the proposed special events. (See discussion of solid waste disposal under “Less-than-Significant Impacts” above.)

As discussed in Chapter 3, Project Description, day-to-day use of the park is projected to draw a maximum of 800 persons per day during the peak seasons (late spring, summer, and early fall). Additional visitors would be allowed at the park for special events under a conditional use permit. Under the conditional use permit, one annual event per year with up to 5,000 attendees (4,000 guests plus up to 1,000 staff, vendors, and performances) and up to five events per year with 800 to 2,500 attendees are proposed.

An on-site dumpster issued by Recology Humboldt County, which provides weekly trash collection, is proposed to be used for regular trash collection. During small and large events, cardboard, plastic and aluminum items would be collected in ten 50-gallon recycling barrels strategically placed within the project site and recycled. Event staff and volunteers would recycle materials on a regular basis. An unspecified number of 50-gallon barrels would be available for trash and would be placed strategically throughout the event area and in parking areas. Waste generated by events or in excess of the dumpster’s capacity would be taken to the Eel River Disposal container site in Redway by the park staff when necessary. The SHCP indicates that the entire site would be cleaned up after the event to the condition it was in before the event (Lobato, 2014a).

Waste generated by the project would likely not affect the disposal contracts managed by the HWMA. However, the Humboldt County Division of Environmental Health has expressed concern regarding the management of solid waste and recyclables during events. Therefore, impacts from solid waste would be potentially significant without adequate mitigation.

Mitigation Measure UTIL-2: The applicant shall submit a plan for the management of solid waste and recycling for events that would attract 500 or more attendees. The plan shall be

subject to approval by the Humboldt County Division of Environmental Health. Prior to events attracting 500 or more attendees, the applicant shall manage solid waste and recyclables a manner consistent with the approved plan. (LTS)

Energy

The project would not result in any potentially significant energy impacts.

CUMULATIVE IMPACTS

Water

CEQA Guidelines Section 15130(a) states that “an EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable, as defined in Section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not ‘cumulatively considerable,’ a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.”

The proposed project, in conjunction with other past, present, and reasonably foreseeable future projects, as listed in Table 6-1, would not result in a cumulatively considerable effect on water supply and demand or the need for new or expanded water entitlements and water facilities because the proposed project would have an adequate water supply to meet its needs, and future individual projects would be analyzed with regard to water supply and demand against existing entitlements, and a determination would be made about whether there is a sufficient water supply.

Most of the cumulative projects listed in Table 6-1 are small residential, retail, hospitality, and related uses that would use minimal amounts of water. The Garberville Sanitary District (GSD) water intake refurbishment project is the refurbishment of the existing water intake from the South Fork Eel River. The GSD project is a drinking water system improvement project, not a water capacity-increasing project. None of the cumulative projects listed in Table 6-1 would use a substantial amount of water that would be considered cumulatively considerable.

Overall, the effect of the proposed project on water service, in combination with other past, present, and reasonably foreseeable future projects, would not be cumulatively considerable.

Solid Waste Disposal

For solid waste disposal service, the geographic scope for assessing cumulative impacts consists of the service areas of the Anderson Landfill in Shasta County and the Dry Creek Landfill in Medford, Oregon. These landfills have adequate capacity, as discussed under “Environmental Setting” above.

Construction of buildings and structures included in the proposed project, in conjunction with past, present, and reasonably foreseeable future projects, could result in a cumulative increase in construction-related solid waste and debris. Operation of the project also would contribute to cumulative increases in solid waste and debris. Comprehensive implementation of state and local waste reduction and diversion requirements and programs has and would continue to reduce the

potential for exceeding existing capacities of the landfills, which still have adequate capacity. Mitigation Measure UTIL-2 would ensure that solid waste from the project is responsibly managed.

Overall, the effect of the proposed project on solid waste disposal service, in combination with other past, present, and foreseeable projects, would be less than significant. The proposed project would not result in or contribute to any significant cumulative solid waste disposal service impacts.

Energy

For electrical and natural gas service, the geographic scope for assessing cumulative impacts is PG&E's northern and central California service area.

Despite annual statewide increases in energy consumption, the net increased energy demand from the project, combined with other past, present, and reasonably foreseeable future projects, would not result in a significant cumulative impact, for the following reasons:

- As discussed in the project-specific analysis above, the proposed project would not result in any significant impacts on energy services. Many energy uses associated with the project would be temporary, and in many cases solar and battery-powered lighting would be used whenever possible.
- The proposed project and other projects have been and would be required to comply with all applicable standards of Title 24 of the California Code of Regulations.
- PG&E, which provides energy to the project site and vicinity, produces much of its energy from renewable sources and has plans in place to increase reliance on renewable energy sources. Because many agencies in California have adopted policies seeking increased use of renewable resources (and have established minimum standards for the provision of energy generated by renewable resources), it is expected that PG&E will continue to meet future demand for energy via a gradually increasing reliance on renewable resources, including small-scale sources such as photovoltaic panels and wind turbines, in addition to larger-scale facilities, such as wind farms. Therefore, although the proposed project and other anticipated projects would be expected to increase the demand for energy-producing facilities, this increase in demand would likely be met through the development of renewable resources that would have fewer environmental effects than the development of new conventional gas- or coal-fired power plants.

Thus, the project would not result in or contribute to any significant cumulative energy service impacts.

REFERENCES

GHD, 2014. *Water Supply and Demand Analysis Memorandum*. (Included as Appendix G of this EIR.)

Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 3360, 3361, 4610, and 4611.

Humboldt County, 2012. *Humboldt County General Plan Update Draft Environmental Impact Report*, April 2, pages 3.3-29 through 3.3-31 and 3.9-4.

Lobato, Kathryn, 2014a. E-mail regarding "Humboldt Park EIR – Services/Utilities Questions," June 10.

Lobato, Kathryn, 2014b. E-mail regarding "Waste generation – SoHum Park," July 6.

Lobato, Kathryn, 2014c. E-mail regarding "Waste generation sports," July 8.

United States Environmental Protection Agency (EPA), 1999. *South Fork Eel River Total Maximum Daily Loads for Sediment and Temperature*. December 16.

5. ALTERNATIVES

The State CEQA Guidelines (Section 15126.6) require that an EIR describe and evaluate the comparative merits of a range of reasonable alternatives to the project, or to the location of the project, that could feasibly attain most of the basic objectives of the project. The CEQA Guidelines further require that the discussion focus on alternatives capable of avoiding or substantially lessening any of the significant effects of the project, including the “No Project” Alternative. Furthermore, if the environmentally superior alternative is the “No Project” Alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

The project objectives are discussed in Chapter 3, Project Description. This discussion will focus on alternatives that could address potentially significant impacts. The EIR identifies potentially significant impacts that can be reduced to a less-than-significant level with implementation of mitigation measures.

Three alternatives are evaluated in this section:

- Alternative 1: No Project
- Alternative 2: Reduced Public Facilities Acreage
- Alternative 3: Benbow Lake State Recreation Area

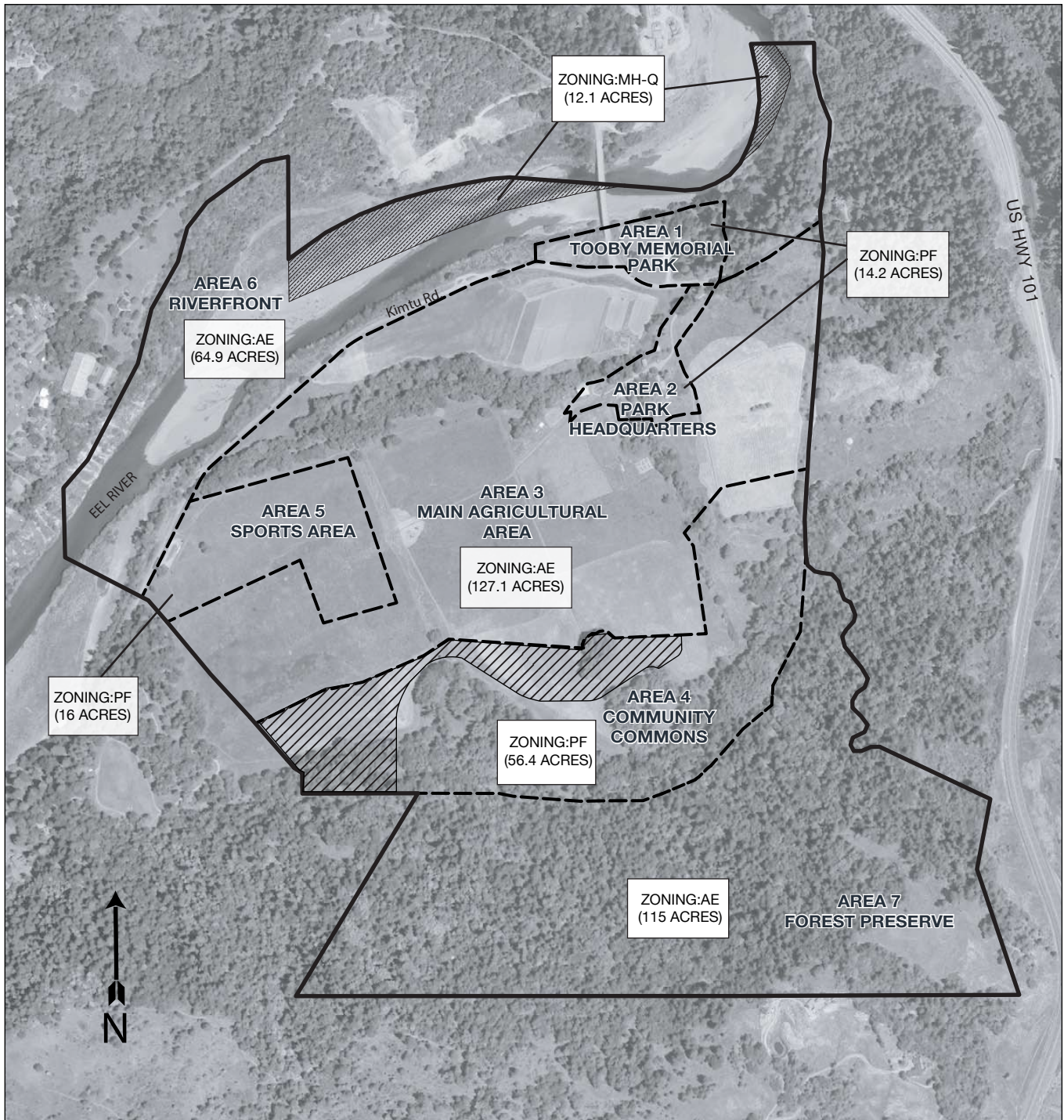
5.1 SUMMARY OF ALTERNATIVES

ALTERNATIVE 1: NO PROJECT

The No Project Alternative would leave the site in an unchanged condition from its existing use. It is uncertain if existing park activities at Tooby Memorial Park would be allowed to continue under existing Agriculture Exclusive zoning. No public uses and access of the property would be allowed. There would be no public access to trails, public events, and no festival events would occur. The site would not go through any rezoning or General Plan amendment. For this reason, the No Project Alternative also addresses what land uses could occur without such rezoning or General Plan amendment. This alternative would not meet many of the project objectives.

ALTERNATIVE 2: REDUCED PUBLIC FACILITY ACREAGE ALTERNATIVE

This alternative would reduce the amount of land to be rezoned from Agriculture Exclusive to Public Facility from 86.6 acres to 69.5 acres. By reducing the acreage, more agricultural land would be preserved. About 17.1 acres of land originally proposed to be designated in Area 4 as Public Facility would retain its agricultural zoning (**Figure 5-1**). Some of this acreage has been shown to be “Farmland of Statewide Significance.” This alternative would also protect a known cultural resource area. This alternative would meet all of the project objectives.




PF = PUBLIC FACILITIES
 AE = AGRICULTURE EXCLUSIVE
 MH-Q = HEAVY INDUSTRIAL
 ACREAGE TO BE LEFT AS AGRICULTURE EXCLUSIVE

Figure 5-1

SOURCE: Huber C&D, 2014

ALTERNATIVE 2 - REDUCED PUBLIC FACILITIES ACREAGE

ALTERNATIVE 3: BENBOW LAKE STATE RECREATION AREA ALTERNATIVE

The Benbow Lake State Recreation Area Site alternative would occur if some or all of the proposed project were located on a site other than the Southern Humboldt Community Park. Benbow Lake State Recreation Area (APN 033-301-017 and 033-301-018) is approximately 2 miles south of the proposed project site. This alternative is similar in nature to the No Project Alternative because the project applicant does not own and cannot purchase or allow community uses of the Benbow site as a Community Park. Most of the significant project features would be eliminated in this Alternative 3 with the exception of six temporary events. The project applicant would not have control of the property for agricultural or organized recreation purposes. As with the No Project Alternative, no sports facilities construction activities could occur on the Benbow site.

Given the limited use of the Benbow site for anything requiring the permanent installation of improvements, the Benbow Alternative analyzes the impacts of conducting the parts of the proposed project that could occur on the site which are six temporary events not associated with permanent improvements. Under this Alternative 3, it is assumed that the Southern Humboldt Community Park (SHCP) site would not be available for other project features.

There are numerous project objectives and goals that cannot be satisfied with the Benbow Alternative that render the site inappropriate for this project. The size of Benbow Lake State Recreation Area is a limiting factor. The Benbow 40-acre site (with about 7 acres of accessible land) is significantly less than the project site's 405 acres. Thus, site uses are significantly constrained at the Benbow site. In addition, the permanent changes in community facilities proposed for the proposed project site, such as the facilities for organized sports including soccer, baseball, softball, and football fields and as a facility for organized tournaments for various sport competitions, would not be possible at the Benbow site. Also, the Benbow site would not be available to the community for additional recreational facilities.

Additional project features that would not be able to occur at the Benbow site include the playground, skate park, dog park, bike skills park, and 3.5 miles of multi-purpose trails for bicyclists, hikers, and equestrians. There would be no appropriate location for community-based agriculture such as CSA programs, farming, grazing, animal husbandry, and agriculturally-based cottage industry. There also would be no facilities on-site that would be appropriate community meeting spaces.

Without the majority of the proposed project features and particularly the income-generating features of the project occurring at the Benbow site, Alternative 3 would be economically infeasible.

The Benbow Lake State Recreation Area is not under the control of the Southern Humboldt Community Park and as such, none of the project applicant's proposed facilities could be constructed on the site.

5.2 ALTERNATIVES CONSIDERED AND REJECTED

RELOCATION OF SOME ON-SITE FACILITIES

This alternative addresses some of the earlier proposals for the project site that were identified in the Notice of Preparation. Since that time, many elements of the project were revised to account for specific environmental constraints (e.g., wetlands) on the site. For this reason, the applicant does not wish to go back to the earlier proposals, but they are explained herein for context on the evolution of the site planning for the project.

Changes to Public Facility Zone

The original area proposed for Public Facility (PF) zoning included 96.7 acres in one, continuous, crescent-shaped area. The discovery of wetlands in the area initially planned for the sports fields caused a redesign of the plan in order to avoid impacts on the wetland and buffer zones.

The Public Facility area was then broken up into four different areas: Area 1-Tooby Memorial Park, Area 2-Park Headquarters, Area 4-Community Commons, and Area 5-Community Facilities. As reconfigured, the proposed PF-zoned areas now total 86.6 acres—10 acres less than originally proposed.

Other possible locations for the sports fields were rejected because they would require significant road building and would bring public vehicles through the center of the project site. Road construction would create more significant ground disturbances, as well as an impact to the aesthetic appeal with a public two-lane roadway bisecting the site. Such a roadway would affect the overall open space and natural beauty of the site. Improvements were redesigned to be located close to existing roadways and infrastructure to avoid and minimize those impacts.

Approximately 15 acres (planned for sport fields) were removed from the PF zone and became part of what is now of Area 3-Main Agricultural Area. Area 5-Community Facilities/Sports Area was added to the plan.

Removal of the Multi-Family Residential Area

In addition, the 3-5 acre area proposed for multi-family residential zoning was abandoned when it was discovered that wetlands existed at that site. Another suitable location on the project site could not be found. Thus, residential uses were removed from consideration.

ALTERNATIVE WITHOUT LARGE FESTIVAL EVENTS FOR FIRST TWO YEARS

This alternative would delay any large events on the project site (4,000 project attendees) until 2 years after issuance of the Conditional Use Permit so that the County and applicant could monitor the small and medium events and do “adaptive management” to determine what additional measures may be needed to allow large events to run smoothly. Otherwise, this alternative would match the proposed project in all ways. The applicant would provide monitoring reports to Humboldt County each year for the first 2 years, summarizing how the small and medium events have run and identifying any issues that may need to be addressed. This monitoring would also

include any issues raised by the Humboldt County Sheriff's Office, the California Highway Patrol, and other applicable agencies. This alternative would meet all of the project objectives. However, it was rejected because it would not be significantly different from the proposed project.

5.3 IMPACTS OF ALTERNATIVES

This section summarizes the impacts of each alternative as compared to the proposed project. When impacts are similar to the proposed project, this is called out. A comparison of the alternatives to the proposed project is provided in **Table 5-1**.

ALTERNATIVE 1: NO PROJECT

Aesthetics

This alternative would leave the site unchanged. No additions of new facilities or recreational amenities would occur, and thus no changes to existing visual conditions would occur. No new parking would be added at the site that would require landscape screening. This alternative would not include any rezoning or a General Plan amendment; thus, up to 54 new residential units could possibly be developed on the site, which would result in potential visual impacts depending on the design and location of new residences. However, it is assumed that visual impacts of such new residences could be mitigated by proper site planning and landscape screening.

Agricultural/Forestry Resources

This alternative would leave the existing agricultural operations in place and no changes to prime agricultural soils would occur. However, if new residences are developed on the site within the areas where residential uses are allowed, prime agricultural lands could also be removed under the No Project Alternative. In addition, more impacts to forestry resources could occur if areas of the "Forest Preserve" are used for new residential development.

Air Quality

No construction of new structures would occur under this alternative except for the possibility of 54 new residences under existing zoning. New construction-related and operation-related emissions would occur if residences were constructed. If no new development took place, emissions would be much lower than estimated for the project. With residential construction, mitigation measures for construction emissions could be implemented as proposed for the project.

Biological Resources

If no development took place on the site, there would be no impacts on biological species or habitats. However, developing the site with up to 54 residential units could have substantial impacts on sensitive natural resources and wildlife habitat. Potential impacts would depend on specific development plans, but the extent of grading and impervious surfaces of roadways, residences, and other improvements would most likely be much greater than under the proposed project. Grading and development could affect areas of freshwater marsh and seasonal streams for roadway access and lot development, which are largely avoided under the proposed project.

TABLE 5-1 COMPARISON OF IMPACTS OF PROJECT ALTERNATIVES (AFTER MITIGATION)

Environmental Issue Area	PP Proposed Project	ALT 1 No Project and No Rezoning	ALT 2 Reduced Public Facility Acreage	ALT 3 Benbow Lake State Recreation Area
Aesthetics	LTS	LTS	LTS	LTS+
Agricultural/Forestry Resources	SU	SU+	SU-	LTS-
Air Quality	LTS	LTS	LTS	LTS-
Biological Resources	LTS	LTS+	LTS	LTS-
Cultural Resources	LTS	SU+	LTS-	LTS-
Geology and Soils	LTS	LTS	LTS	LTS-
Greenhouse Gas Emissions	LTS	LTS+	LTS	LTS-
Hazards and Hazardous Materials	LTS	LTS	LTS	LTS
Hydrology and Water Quality	LTS	LTS	LTS	LTS-
Land Use and Planning	LTS	LTS	LTS	LTS
Mineral Resources	LTS	LTS	LTS	LTS
Noise	LTS	LTS-	LTS	LTS
Population and Housing	LTS	LTS	LTS	LTS
Public Services	LTS	LTS+	LTS	LTS
Recreation	LTS	LTS	LTS	LTS+
Transportation/Traffic	LTS	LTS	LTS	LTS-
Utilities and Service Systems	LTS	LTS	LTS	LTS

Notes: PP = Proposed Project
 ALT 1 = No Project Alternative
 ALT 2 = Reduced Public Facility Acreage
 LTS = less than significant
 SU = significant and unavoidable
 + = Greater adverse impact than proposed project
 - = Lesser adverse impact than proposed project

Source: A. Skewes-Cox, 2015.

Drainage improvements to address flooding and surface runoff could also affect areas of freshwater marsh and the bank stability of seasonal streams, particularly if runoff volumes and velocities increase as a result of impervious surfaces. Residential development could also result in substantial tree removal where existing unpaved roadways are widened to accommodate minimum roadway standards, changes in drainage ways, and other required modifications.

Cultural Resources

No ground-disturbing activities would occur under this alternative unless new residential structures were built. Therefore, there would be no potential to affect archaeological resources, paleontological resources, or human remains interred outside of formal cemeteries. If residential units were built on the site, the impacts would largely depend on where those units would be located. Generally speaking, however, a development of 54 units would potentially have more impacts on archaeological resources than the proposed project. Such impacts would occur from the (presumably) greater volume of soil that would need to be moved to construct a 54-unit development. This ground disturbance would have the potential to affect previously unrecorded (i.e., buried) prehistoric archaeological deposits that could be located on terraces along the South Fork of the Eel River. Indirect impacts on archaeological resources would likely be the same or similar to those of the project and would occur from increased exposure of recorded archaeological deposits to unauthorized collection and foot traffic.

The known historical resource consists of the Wood/Tooby Ranch Complex. A 54-unit development would potentially affect this resource by introducing new construction that could impair this resource's integrity of setting, one of seven components of integrity that are used to evaluate a resource's historical significance. Demolition or relocation of the buildings from such a development would also have a potentially significant, unavoidable impact, even after mitigation. Without knowing the details of this proposed alternative, it could have a potentially greater impact on historical resources than the proposed project.

Geology and Soils

No new structures would be built under this alternative unless new residences were developed as allowed by existing zoning. Without new development, there would be no potentially significant impacts related to seismic and geologic hazards under this alternative, including hazards related to ground shaking, seismic-related ground failure, lateral spreading, slope instability, and differential and total settlement. If new residential units were constructed, there could be impacts related to existing geologic conditions, and each new development would require a geotechnical study to determine the required mitigation measures.

Greenhouse Gas Emissions

No demolition of buildings or construction of new structures would occur under this alternative unless new residences were constructed. Therefore, there would be no greenhouse gas (GHG) emissions related to construction activity. There would be no new operational GHG emissions, and existing emissions of GHGs would continue. With new residential development, GHG emissions could be similar to the proposed project and may even be greater due to the potential for 54 new residential structures.

Hazards and Hazardous Materials

No demolition of buildings would occur under this alternative unless new residences were constructed as allowed by existing zoning. The impacts associated with hazardous materials would be similar to those of the proposed project, and all potential impacts could be mitigated.

Hydrology and Water Quality

No new structures would be built under this alternative unless new residences were constructed as allowed by existing zoning. If there were no development, no effects on stormwater quality related to construction or operation of the project would occur. Therefore, the project's potential hydrology and water quality impacts would be avoided under this alternative if there were no development. If there were new residences on the site, increased stormwater would result and on-site retention of runoff would be required on a site-specific basis. During construction, Best Management Practices would be required to reduce erosion and sediment impacts. The hydrology impacts of the residential development are potentially significant and implementation of the existing requirements with the performance standards contained in Mitigation Measures HYDRO-1 and HYDRO-2 would be required to mitigate the impacts to a less-than-significant level.

Land Use and Planning

The No Project Alternative would not require a General Plan amendment or rezoning for the project site. No changes would occur in the land uses at the site; no potential conflicts with General Plan policies would occur. However, new residential development could occur under the existing zoning, which could possibly result in land use conflicts between residential uses and nearby mining activities on the north side of the South Fork Eel River, depending on the location of new residences.

Mineral Resources

Under the No Project Alternative, on-site gravel extraction activities would continue. New residential development may result in some land use conflicts with such operations, depending on the location of the residences.

Noise

The No Project Alternative would leave the site in an unchanged condition from its existing use unless new residences were developed. The absence of large festival events at the site would reduce on-site, temporary noise impacts. New residential construction is not expected to result in any significant noise impacts that could not be easily mitigated.

Population and Housing

The No Project Alternative, like the proposed project, would not induce significant population or housing growth or displace any communities. Thus, impacts would be similar to those of the proposed project and no mitigation measures would be required.

Public Services

Impacts of this alternative would be comparable to those of the project because this alternative would not create a need for new or physically altered fire stations or police facilities, schools, or recreational facilities. The recreational facilities proposed by the project would not be built. New residential development would require increased police and fire services, but these may be similar

demands to the proposed project. With residential development as allowed by current zoning, there could be increased demands on schools as compared to the proposed project.

Transportation/Traffic

Under this alternative, the site would not have increased trips associated with special events on the site. If there were residential development, new residences could generate about 540 daily trips, assuming about 10 trips per single-family home. However, peak hour trips would not be expected to result in significant changes in level of service at nearby intersections. This issue would require further study once locations of residences were known, and depending on how many homes are proposed under existing zoning.

Utilities and Service Systems

Impacts of this alternative would be comparable to those of the project because the alternative 1) would not require the construction of new water treatment facilities or expansion of existing facilities, 2) would not require new or expanded water entitlements, 3) would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, 4) would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, 5) would not exceed landfill capacity, and 6) would not conflict with federal, state, or local statutes and regulations related to solid waste. Impacts of new residential development on the site would generally be similar to the proposed project; however, the impacts on utilities would depend on how many residences are ultimately developed.

ALTERNATIVE 2: REDUCED PUBLIC FACILITY ACREAGE

Aesthetics

This alternative would leave more land in agricultural use. With less acreage in Area 4 that could ultimately be converted to public facility use, the site would retain more of its rural character. The area is currently used for hay crops and is assumed to remain in this use. In addition, some trails traverse this area and these are also assumed to remain.

Agricultural/Forestry Resources

This alternative would retain about 17 acres of agricultural land, including Farmland of Statewide Significance by not changing the designation from Agriculture Exclusive to Public Facility. While there would still be significant, unavoidable impacts related to removal of prime farmland, this alternative would reduce the loss of farmland acreage on the overall site. Without this 17 acres designated as Public Facility, expansion of active uses would be constrained to 39.4 acres in Area 4 and the existing hay production in this area is likely to remain. Total agricultural land to remain in Agriculture Exclusive zoning would be 335.7 rather than 318.7 acres.

Air Quality

Air quality impacts would be similar to the proposed project. With retention of the agricultural acreage, there could be some emissions associated with agricultural operations but this would not be significant.

Biological Resources

Biological impacts would be similar to the proposed project. Hay crop production would most likely continue as an existing practice, under both this alternative and proposed project. And there would be no changes in the location of existing or proposed trails and other facilities as a result of this alternative, so biologically there would no substantial difference in impacts to common and sensitive biological and wetland resources as compared to the proposed project.

Cultural Resources

This alternative would protect a previously recorded archaeological deposit by limiting development in this portion of Area 4. Historic resource impacts would be similar to the proposed project.

Geology and Soils

Impacts related to seismic and geologic hazards under this alternative, including hazards related to ground shaking, seismic-related ground failure, lateral spreading, slope instability, and differential and total settlement would be similar to the proposed project. By leaving the 17 acres in an agricultural designation (vs. Public Facility), long-term impacts may be slightly reduced due to the reduced amount of development that could occur in this area of the site.

Greenhouse Gas Emissions

GHG emission impacts would be similar to the proposed project. However, by retaining the 17 acres in agricultural zoning, less acreage of the site would be developed which could reduce the long-term potential for GHG emissions.

Hazards and Hazardous Materials

The impacts associated with hazardous materials would be similar to those of the proposed project, and all potential impacts could be mitigated.

Hydrology and Water Quality

The project's potential hydrology and water quality impacts would be similar to the proposed project. Over the long term, the retention of the 17 acres in agricultural use may result in less site development which would have water quality and runoff benefits.

Land Use and Planning

This alternative would have a small area (about 17 acres) retained as Agriculture Exclusive as compared to the proposed project, thus resulting in less acreage subject to a General Plan amendment and rezoning. The retention of these agricultural lands would conform to County policies encouraging the retention of such lands.

Mineral Resources

Impacts related to mineral resources would be similar to the proposed project.

Noise

Noise impacts of Alternative 2 would be similar to the proposed project. Over the long term, the retention of the 17 acres in an agricultural designation could result in reduced noise impacts as compared to ultimately developing this acreage in public facility uses.

Population and Housing

Impacts would be similar to those of the proposed project and no mitigation measures would be required.

Public Services

Impacts of this alternative would be comparable to those of the project because this alternative would not create a need for new or physically altered fire stations or police facilities, schools, or recreational facilities.

Transportation/Traffic

Traffic impacts of this alternative would be similar to the proposed project.

Utilities and Service Systems

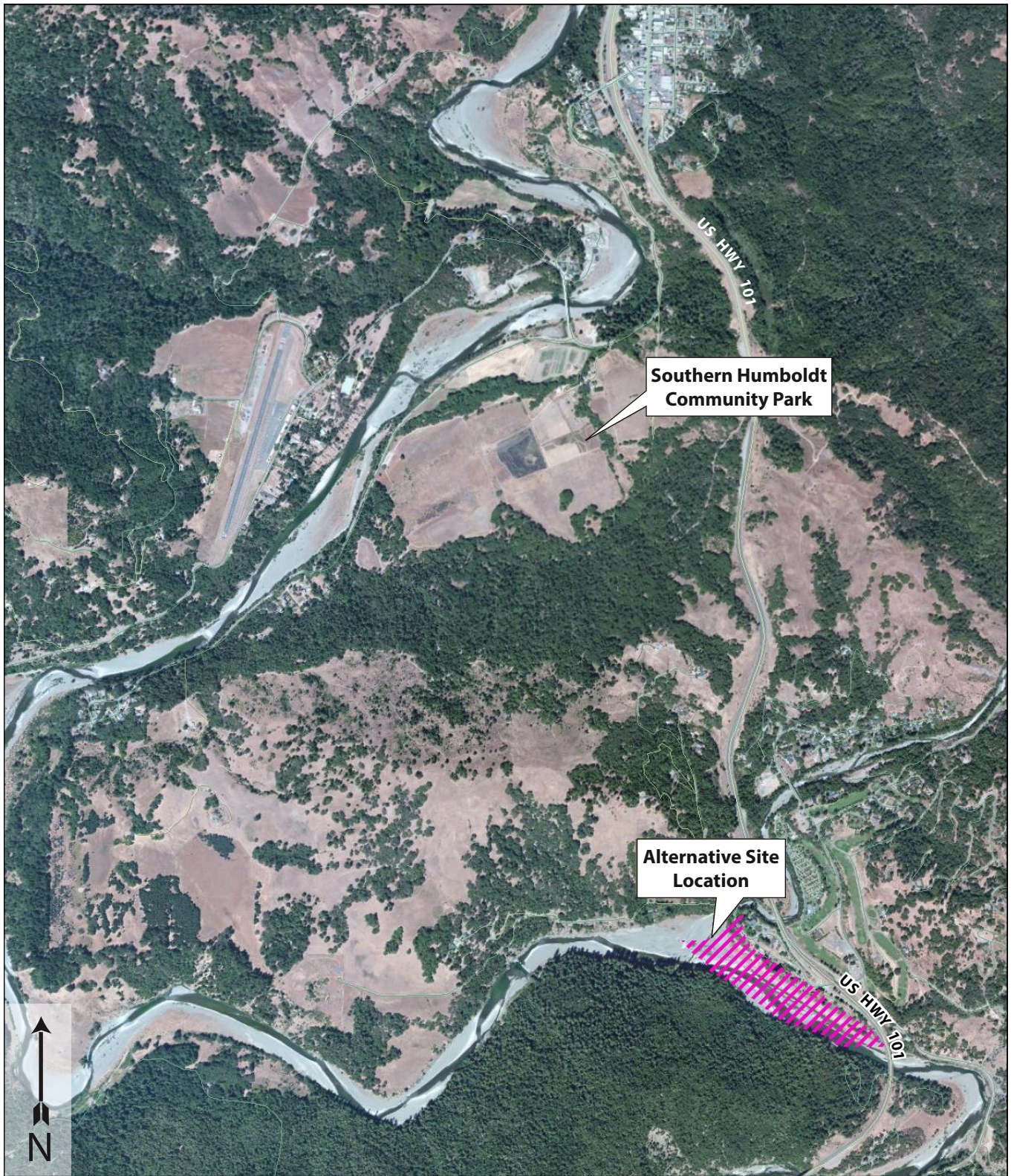
Impacts of this alternative would be comparable to those of the project because the alternative 1) would not require the construction of new water treatment facilities or expansion of existing facilities, 2) would not require new or expanded water entitlements, 3) would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, 4) would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, 5) would not exceed landfill capacity, and 6) would not conflict with federal, state, or local statutes and regulations related to solid waste.

ALTERNATIVE 3: BENBOW LAKE STATE RECREATION AREA ALTERNATIVE

The Benbow Lake State Recreation Area Site Alternative (hereinafter referred to as the “Benbow Alternative” or “Alternative 3”) would occur if some or all of the proposed project were located on a site other than the Southern Humboldt Community Park. Benbow Lake State Recreation Area (APN 033-301-017 and 033-301-018) is approximately 2 miles south of the proposed project site (see map below in **Figure 5-2**).

Given the steep topography of the general area, and the need to locate the public facilities of the proposed project near population centers, alternative sites are extremely limited. The Benbow site is considered the only site in the area that could feasibly accommodate the proposed project.

The Benbow site is adjacent to and west of Lake Benbow Drive on the property known as 360 Lake Benbow Drive. This site was selected for comparison purposes in this EIR because it has some key qualities similar to the proposed site location. The Benbow Lake State Recreation Area property is currently used for picnicking, swimming, and some similar public assembly activities as those proposed by the Southern Humboldt Community Park. Like the proposed project site, the



0 1000 2000 3000
 FEET, approximate

Figure 5-2

ALTERNATIVE 3 - SITE AT BENBOW STATE PARK

SOURCE: Humboldt County Planning Dept., 2015

Benbow site has good access to the South Fork of the Eel River; it is near U.S. Highway 101; and, it is a relatively large site, more than 40 acres in size, with flat areas for camping and for concerts. It should be noted that the Benbow Lake State Recreation Area campground has been closed since 2013 due to budget cuts.

While there are similarities between the Benbow site and the proposed project site that work well as an alternative considered in the EIR, there are also some important differences. Many of the uses described in the EIR for the SHCP property are not feasible to be accommodated at the Benbow site. For example, since the Benbow site is owned by California State Parks, it would not be available for any of the agricultural or organized sport uses proposed for the SHCP project. Proposed physical changes to the project site would not be possible. It would also not be feasible as a site for any of the other uses listed below that require the permanent installation of structures, facilities, equipment, or other permanent improvements:

- One of the most common features of the proposed project is a trail system that includes 3.5 miles of existing trails and 3 miles of new additional trails, a labyrinth, benches, way-finding signs, and interpretive signs, Tooby playground, kiosks and shade structures, and a fenced dog park. These features would not occur at the Benbow site.
- Additional proposed Community Park uses that would be unlikely to occur at the Benbow site range from weddings and memorial services to non-profit fundraisers, community enrichment and educational classes.
- No community facilities would be constructed for meetings or classes or workshops and those activities would be unlikely to occur.
- Proposed recreational uses that would not occur at the Benbow site include sports facilities with soccer fields, baseball fields, a football field, sports storage facility, a disc golf course, specialty group camping, sporting events, tournaments, bicycle races, and skate park.
- Agricultural uses would not occur, including general agricultural production, community agricultural use of existing structures (e.g., two barns, greenhouses, outbuildings, chicken coop, stables, and farm stand), horse stable facilities, and equestrian uses. Agricultural products processing would not occur such as post-harvest handling and market preparation.
- Agricultural storage and refrigeration would not be available at the Benbow site. Community supported agricultural (CSA) projects would not occur.
- Cottage industry, value-added farm products, food products, nursery, or seed production would not occur at the Benbow site.
- Watershed management, forest management, and ecological restoration projects would not occur at the Benbow site.

This alternative is similar in nature to the No Project Alternative because the project applicant does not own and cannot purchase or allow community uses of the Benbow site as a Community Park. Most of the significant project features would be eliminated in this Alternative 3 with the exception of six temporary events. The project applicant would not have control of the property for agricultural or organized recreation purposes. As with the No Project Alternative, no residential construction activities could occur on the Benbow site.

Given the limited use of the Benbow site for anything requiring the permanent installation of improvements, the Benbow Alternative analyzes the impacts of conducting the parts of the proposed project that could occur on the site which are six temporary events not associated with

permanent improvements. Under this Alternative 3, it is assumed that the SHCP site would not be available for other project features.

AESTHETICS

The Benbow Alternative would cause increased impacts on visual quality as compared to the proposed project because the Benbow site is closer to, and more visible from, U.S. Highway 101 which is a heavily-travelled corridor. While there would be different people affected, there would be about the same number of neighbors visually impacted by the project at the Benbow site. Lighting of nighttime events could result in glare for both neighbors and motorists on U.S. Highway 101.

AGRICULTURE

The Benbow site has been used for recreational purposes by the public for many years. Currently, there are no agricultural uses of the Benbow site; thus, impacts to agriculture would be lessened with this project alternative.

AIR QUALITY

No construction of new structures would occur under this alternative. With many of the project features eliminated in this alternative, no new construction would take place and as such, emissions would be lower than estimated for the project. Construction and operational emissions would be less than for the proposed project due to the reduced activities at the Benbow site. Some operational emissions associated with transportation would occur with the use of the site for six temporary events, but these would not be significant. If diesel generators were used to provide electricity for music events, some emissions would also be associated with these diesel generators.

BIOLOGICAL RESOURCES

There are biological resources on the project site that are not found on the Benbow site. For example, there is a large wetland feature at the north end of the proposed project site. Impacts to biological features would be less with the use of the Benbow site. Both sites have access to the Eel River with swimming areas which are well used by the community. But impacts to biological resources associated with use of the Eel River would be similar to the proposed project and would not be significant.

CULTURAL RESOURCES

No ground-disturbing activities would occur under this alternative at the Benbow site. Therefore, there would be no potential to affect archaeological resources, paleontological resources, or human remains interred outside of formal cemeteries. Indirect impacts on archaeological resources would likely be reduced, as compared to the proposed project, as related to exposure of recorded archaeological deposits to unauthorized collection and foot traffic because there would be less intensive use of the Benbow site as compared to the use of the proposed project site.

GEOLOGY AND SOILS

No new structures would be built under the Benbow Alternative. Without new development, there would be no potentially significant impacts related to seismic and geologic hazards under this alternative, including hazards related to ground shaking, seismic-related ground failure, lateral spreading, slope instability, and differential and total settlement. Temporary use of the Benbow site for events would expose visitors to the potential for seismic activity but this impact would not be significant.

GREENHOUSE GAS EMISSIONS

No demolition of buildings or construction of new structures would occur under the Benbow Alternative. Therefore, there would be no GHG emissions related to construction activity. There would be increased operational GHG emissions due to increased traffic to the Benbow site. GHG emissions would be less than those of the proposed project due to reduced activity at the Benbow site.

HAZARDS AND HAZARDOUS MATERIALS

The Benbow site is in an area of high fire hazard according to the County's Framework Plan. This is the same hazard rating that applies to the proposed project site. Accordingly, impacts associated with exposure to the threat of wildland fire are the same with both the Benbow site and the proposed project. No demolition of buildings would occur under this alternative, thus resulting in reduced potential hazards associated with asbestos removal.

HYDROLOGY AND WATER QUALITY

No new structures would be built under this alternative. Thus, this alternative would not result in increased runoff during storm events. There would be no effects on stormwater quality related to construction or operation of the project except for the potential increase in oils and grease in areas of parking for the six community events that could occur at the Benbow site. Therefore, the project's potential hydrology and water quality impacts would be reduced under this alternative.

LAND USE AND PLANNING

The Benbow site would not require a General Plan amendment or rezoning for the project site. The site is currently used for recreational purposes. No changes would occur in the land uses at the site; no potential conflicts with General Plan policies would occur. However, no new community recreational facilities such as sports field would be able to be located at this site.

MINERAL RESOURCES

Under this Alternative 3, no gravel extraction activities would be impacted. This would be similar to impacts at the proposed project site.

NOISE

The Benbow site would have similar noise impacts to the proposed project. While there would be different people affected by exposure to noise and vibrations, there generally would be the same number of neighbors impacted by the project at the Benbow site because the residential density of the surrounding properties is similar to the proposed project site.

POPULATION AND HOUSING

The Benbow Alternative, as the proposed project, would not induce significant population or housing growth or displace any communities. Thus, impacts would be similar to those of the proposed project and no mitigation measures would be required.

PUBLIC SERVICES

Impacts of this alternative would be comparable to those of the project because this alternative would not create a need for new or physically altered fire stations or police facilities, schools, or recreational facilities. However, the recreational facilities proposed by the project would not be built, leaving the general area with very limited recreational facilities as compared to the proposed project.

TRANSPORTATION/TRAFFIC

Under this alternative, the Benbow site would have increased trips associated with six special events on the site. Access to the Benbow site would be less constrained as compared to the proposed project. The access to the SHCP property is along Sprowel Creek Road, a two lane paved road that narrows in some areas to 20 feet or less with little or no shoulders. In comparison, the Benbow site is accessed by Lake Benbow Drive, a relatively flat, two-lane paved road that is 30 feet in width with 5-foot paved shoulders on either side. Also, the Benbow site is approximately 2,000 feet from U.S. Highway 101, which is much closer than the proposed project to this highway. Therefore, this alternative has fewer traffic safety impacts compared to the proposed project. With reduced on-site activities, Alternative 3 would also have less traffic generated as compared to the proposed project.

UTILITIES AND SERVICE SYSTEMS

Impacts of this alternative would be comparable to those of the project because the alternative 1) would not require the construction of new water treatment facilities or expansion of existing facilities, 2) would not require new or expanded water entitlements, 3) would not require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, 4) would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, 5) would not exceed landfill capacity, and 6) would not conflict with federal, state, or local statutes and regulations related to solid waste. Fewer people over the year would attend the Benbow site as compared to the proposed project; thus, water supply and wastewater treatment impacts would be reduced as compared to the proposed project. It is assumed that temporary sanitary waste facilities would be used during the six annual events.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The CEQA Guidelines require that the “environmentally superior alternative” be identified. If the environmentally superior alternative is the No Project Alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

For this project, the No Project Alternative would not be the environmentally superior alternative as it would leave the site in the existing zoning in which up to 54 new residences could be developed, potentially resulting in more impacts than identified for the proposed project. Thus, the Environmentally Superior Alternative would be Alternative 2 in which a total of 335.7 acres would remain in an agricultural designation and would not be rezoned as Public Facility. All of the project objectives would be met.

While Alternative 3 has reduced impacts compared to the proposed project, this alternative is very limited as to what could occur at the Benbow site and many of the project objectives would not be met. For this reason, Alternative 3 was not considered the Environmentally Superior Alternative.

6. CEQA CONSIDERATIONS

6.1 SIGNIFICANT IRREVERSIBLE EFFECTS

California Environmental Quality Act (CEQA) states that impacts associated with a proposed project may be considered to be significant and irreversible for the following reasons:

- Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes the removal or non-use thereafter unlikely;
- Primary impacts and, particularly, secondary impacts (such as a highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses; and
- Irreversible damage can result from environmental accidents associated with the project.

This project would include the development of new on-site facilities such as playing fields, parking areas, restrooms, camping facilities, trails, pedestrian bridges, and playground equipment. Some structures would be permanent and their installation would constitute an irreversible use of these lands, as it is unlikely that the buildings would be removed for many years. The proposed project would irretrievably commit materials to the construction and maintenance of new buildings/ structures. In addition, the construction and operation of the project would result in the use of energy, including fossil fuels. The applicant is committed to reducing energy use and has proposed some energy saving features such as the use of solar lighting whenever possible. The project is not expected to result in any activities likely to cause accidents that could lead to irreversible environmental damage.

6.2 SIGNIFICANT UNAVOIDABLE IMPACTS

Development in accordance with the project would convert agricultural land to non-agricultural use, reducing the overall inventory of agricultural land in Humboldt County. No mitigation is available for this loss of agricultural land. The impact would therefore be significant and unavoidable.

6.3 GROWTH INDUCEMENT

Section 15126.2(d) of the CEQA Guidelines requires that EIRs discuss the potential for projects to induce population or economic growth, either directly or indirectly. CEQA also requires a discussion of ways in which a project may remove obstacles to growth, as well as ways in which a project may set a precedent for future growth.

POPULATION AND ECONOMIC GROWTH

The proposed project does not involve a residential component; therefore, it would not directly result in population growth. The proposed project would directly generate temporary employment opportunities on-site. Operation of the proposed Community Park would incrementally increase

long-term employment associated with park maintenance. Maintenance of the proposed project would require the need to hire one or two new employees to operate and maintain the Southern Humboldt Community Park (SHCP). The Community Park is designed to accommodate the recreational needs of existing southern Humboldt residents. If new employees are required, it is not likely that these positions would induce people to relocate to the area to fill the new job opportunities.

Activities that would be principally permitted under new zoning involve the use of the site for community assembly and events numerous times each year such as sport fields, sporting events, weddings, classes, and birthday parties. These activities would trigger the potential for additional seasonal employment. During large festivals, up to 1,000 staff could be on the site for the short duration of the festival but this would not result in the indirect growth inducing impact of requiring nearby housing as employees would be from both the local area and more distant locations.

The project would have beneficial economic impacts on local businesses by temporarily increasing the demand for goods and services in southern Humboldt County during the community assembly events and any sports tournaments that may be held at the project site. The project also has a similar beneficial impact on non-profit organizations and private sector businesses that sell concessions at the ball fields and events. However, such economic benefits would not result in any significant growth inducement.

For activities that would require a Conditional Use Permit on the property, such as seasonal events, these activities may provide new part time seasonal employment. The seasonal nature of this employment makes it unlikely that such employment would, however, induce new residents to move to the area. The Summer Arts and Music Festival has been held in the southern Humboldt area for 36 years and it would be hard to argue that it has induced growth in southern Humboldt County. Any growth inducing impacts of the community assembly events are temporary, and limited in nature.

REMOVAL OF OBSTACLES TO GROWTH

The proposed project would facilitate development of a park on land currently designated for mixed agricultural and clustered rural residential uses. The proposed land use and zoning would reduce the number of potential residences that could be developed on the site. However, the proposed project would potentially allow transfer of those development “credits” to another part of the County; thus, there would be no change in the overall development potential for the County.

The proposed project does not include expansion of water services beyond those currently allocated to the property. No new roads or other major infrastructure would be developed as part of the project. Thus, the project would not result in removing obstacles to growth.

6.4 CUMULATIVE IMPACTS

The CEQA Guidelines require a discussion of the cumulative effects that could result from a project (Section 15130). Cumulative impacts could result from the combination of the project and past, present, and probable future projects. This analysis can either be based on a list of such projects or a summary of projections in an adopted General Plan or related planning document.

For this EIR, the authors selected to rely on a list of projects that could occur in the general vicinity of the project, as the scale and location of this project would have the most relevant cumulative impacts related to the immediate vicinity (i.e., tree removal, traffic, etc.). At the time of publication of this Draft EIR, the following were the most relevant cumulative projects for consideration, as shown in **Table 6-1**.

Cumulative projects are evaluated at the end of each section of Chapter 4, by topic.

TABLE 6-1 CUMULATIVE PROJECTS IN VICINITY OF PROJECT SITE

Key Parcel #	Location ^a	Project Description	Effective Date	Notes
223-311-014-000	The project is in the Redway area, on the southeast side of Evergreen Road, at the intersection of Evergreen Drive and Tunnel Road, on the properties known as 1101 and 1151 Evergreen Road.	A Conditional Use Permit for the construction and operation of an approximately 26,450-square-foot business center on an approximately 128,555-square-foot parcel (after lot merger). Proposed uses include a mix of retail sales and service as well as manufacturing.	07/22/2005	New
222-156-019-000	The project is located in the Garberville area, on the north side of Kadin Way, approximately 150 feet east from the intersection of Connick Creek Road and Kadin Way, on the property known as 10 Kadin Way.	A Special Permit for a cottage industry which began without the benefit of County review. The applicant proposes to operate a commercial kitchen to produce samosas and mango sauce. There is no foot traffic to the site; all goods are sold off-site.	10/26/2012	Existing/minor change
222-091-002-000	The project site is located in the Garberville area, on the north side of Camp Kimtu Road, just west from the intersection of Camp Kimtu Road with Sprowel Creek Road, on the property known as 1122, 1144 Sprowel Creek Road.	Conditional Use Permit, Surface Mining Permit and Reclamation Plan to continue mining on a site already in operation. The proposed new permit would result in the extraction of a maximum volume of 50,000 cubic yards (cy) in a given year, not to exceed an annual average of 40,000 cy over a 3-year period. The new Conditional Use Permit would expand the extraction area to include gravel bars on both sides of the river and an adjacent upstream property. Additionally, the applicant proposes to expand the processing site to include the "incidental use" of two properties adjacent to the existing processing site for limited processing-related activities and remove the limitations on maximum volumes for specific gravel bars in favor of a total maximum volume for any combination of gravel bars included in the project area, thus allowing more flexibility for adaptive management strategies.	09/14/2004	
222-211-002-000	The project is located in in the Garberville area, on the north side of Old Briceland Road, approximately 2.3 miles west from the intersection of Sprowel Creek Road and Old Briceland Road, on the property known as 1901 Old Briceland Road.	This project is a Special Permit for a secondary dwelling unit built without the benefit of County review. The 336-square-foot residence is located on an approximately 13.5-acre parcel. The parcel is currently served by two on-site septic systems	7/18/2014	Minor
222-111-009-000	The project site is located in the Garberville area, on the east side of Sprowel Creek Road, approximately 400 feet south from the intersection of Sprowel Creek Road with Briceland Road on the property known as 2166 Sprowel Creek Road	A Special Permit to bring an existing Secondary Dwelling Unit into zoning compliance. The structure is 768 square feet in size and 13 feet in height. The Secondary Dwelling Unit and the existing primary residence are on a 0.69-acre parcel	/ /	Minor
223-061-011-000	The project is located in Humboldt County, in the Garberville area, on the north side of Sprowel Creek Road, approximately 0.36 miles northeast from the intersection of Camp Kimtu Road and Sprowel Creek Road, on the property known as 1353 and 1777 Sprowel.	Split 30-acre parcel into two; 1 23 acres, other 7 acres. Single-family residence on each	09/18/2007	Two new residences
223-171-006-000	The project is located in Humboldt County, in the Garberville area, on the west side of Bear Canyon Road, approximately 260 feet southwest from the	Conversion of a portion of an existing 1,800-square-foot commercial building (formerly operated as a Health Club) to a Medical Cannabis Collective engaged in the distribution of medical cannabis amongst qualified members.	03/18/2011	Change in use

TABLE 6-1 CUMULATIVE PROJECTS IN VICINITY OF PROJECT SITE

Key Parcel #	Location ^a	Project Description	Effective Date	Notes
223-171-011-000	intersection of Redwood Drive and Bear Canyon Road, on the property known as 1385 Redwood Drive. The project is located in Humboldt County, in the Garberville area, on the west side of Redwood Drive, approximately 763 feet north from the intersection of Bear Canyon Road and Redwood Drive, on the property known to be in Southwest 1/4 Section 13 Towns.	Instream gravel operation.	10/22/2012	New
223-135-003-000	The project is located in the Garberville area in the following areas: On the northwest, north, east & south sides of the intersection of Skyway Road and Highway 101, on the properties known in Sections 11, 12, and 13 Township.	A Final Map Subdivision of 1,054 acres into Parcels 1, 2, 3, 4, and Remainder of approximately 386, 362, 259, 9.8, and 37 acres, respectively. The subdivision will allow for termination of the Wallan-Johnson partnership of the subject lands.	05/31/2006	Subdivision but no specific project
223-136-003-000	The project is located in the Garberville area, on the north side of Alderpoint Road, approximately 1.10 miles northeast from the intersection of Highway 101 and Alderpoint Road, on the properties known to be in Section 18 Township.	Intermittent extraction/processing of up to 50,000 cy with average annual rate not exceeding 35,000 cy from existing rock quarry.	01/06/2009	Existing with change
033-301-020-000	The project is located in the Benbow area, on both sides of Mountain View Road, approximately 0.65 miles north from the intersection of Lake Benbow Drive and Mountain View Road, on the property known as 500 Mountain View Road.	CUP/SP for 145-foot cell tower.	05/16/2008	Cell tower
033-301-014-000	The project site is located in Humboldt County, in the Benbow area, on the south side of Benbow Dam Road, approximately 800 feet west from the intersection of Benbow Dam Road with Lake Benbow Drive, on the property known as 255 Benbow Dam Road.	A Special Permit is required for a 400-square-foot addition to an existing legal, non-conforming second unit of ±1608 square feet.	06/01/2000	Minor
033-301-015-000	The project site is located in Humboldt County, in the Benbow area, on the east side Lake Benbow Drive, approximately 500 feet northwest from the intersection of Lake Benbow Drive with Highway 101, on the property known as 445 Lake Benbow Drive.	A Special Permit to allow the Benbow Inn to construct an addition to the existing inn which will exceed the 45-foot height limit of the zone. The project will add 18 new suites, a new conference room, and new restrooms.	06/12/2002	Expansion

TABLE 6-1 CUMULATIVE PROJECTS IN VICINITY OF PROJECT SITE

Key Parcel #	Location ^a	Project Description	Effective Date	Notes
223-311-011-000	The project site is located in Humboldt County, in the Redway area, on the east side of Evergreen Road, approximately 150 feet south from the intersection of Evergreen Road with Barnett Road, on the property known as 1241 Evergreen Road.	Establishment of a transmission repair shop (minor automobile repair) within a proposed 6,000-square-foot building, approximately 16 feet in height. The vacant 0.17-acre parcel is located in the Meadows Business/Industrial Park.	05/18/2001	New repair shop
223-311-032-000		Grading and site preparation of a parcel in the Meadows Business Park.	03/13/2008	Site prep
223-311-035-000	The project site is located in the Humboldt Hill area on the North side of Fisher Lane, approximately 300 feet East from the intersection of Humboldt Hill Road with Fisher Lane	A Special Permit for an exception to the number of off-street parking spaces for a proposed church.	06/10/2005	Parking
223-311-009-000	The project site is located in the Garberville area, on the west side of Evergreen Road, approximately 0.45 mile north from the intersection of Evergreen Road with Redwood Drive, on the property known as 1270 Evergreen Road.	The Design Review of an approximately 6,000-square-foot commercial building in the Evergreen Business Park. The metal building's exterior and roof will be painted and non-reflective. The building will be approximately 20' in height.	//	Design Review only
223-311-029-000	The project is located in the Redway area, on the northeast side of Barnett Road, approximately 450 feet southeast of the intersection of Barnett Road and Evergreen Road, on the property known as 1911 Barnett Road.	A Conditional Use Permit for the construction and operation of an approximately 7,500-square-foot business center and an approximately 2,880-square-foot office building on an approximately 61,800-square-foot parcel. Proposed uses include a mix of wholes	07/01/2005	New business center and office building
223-311-012-000	The project site is located in the Redway area, east of Evergreen Road, approximately 450 feet northeast of the intersection of Evergreen Road with Tunnel Road, on the property known as 1211 Evergreen Road.	A Conditional Use Permit and Special Permit for the development of a 7,000-square-foot commercial building .	04/30/2004	New commercial building
222-111-009-000	The project site is located in the Garberville area, on the east side of Sprowel Creek Road, approximately 400 feet south from the intersection of Sprowel Creek Road with Briceland Road on the property known as 2166 Sprowel Creek Road.	A Special Permit to bring an existing Secondary Dwelling Unit into zoning compliance. The structure is 768 square feet in size and 13 feet in height. The Secondary Dwelling Unit and the existing primary residence are on a 0.69-acre parcel; both residences	//	Minor
032-043-001-000	The project site is located in Humboldt County, in the Garberville area, at the southeast corner of the intersection of Locust Street and Pine Street, on the property known as 783 Locust Street.	An applicant-initiated General Plan Amendment and Zone Reclassification to change the designation of the 9,800-square-foot parcel that is currently planned Residential, Multiple-Family (RM) and zoned Apartment Professional (R-4) to Commercial General (CG)	10/07/2010	GPA and rezoning from residential to commercial

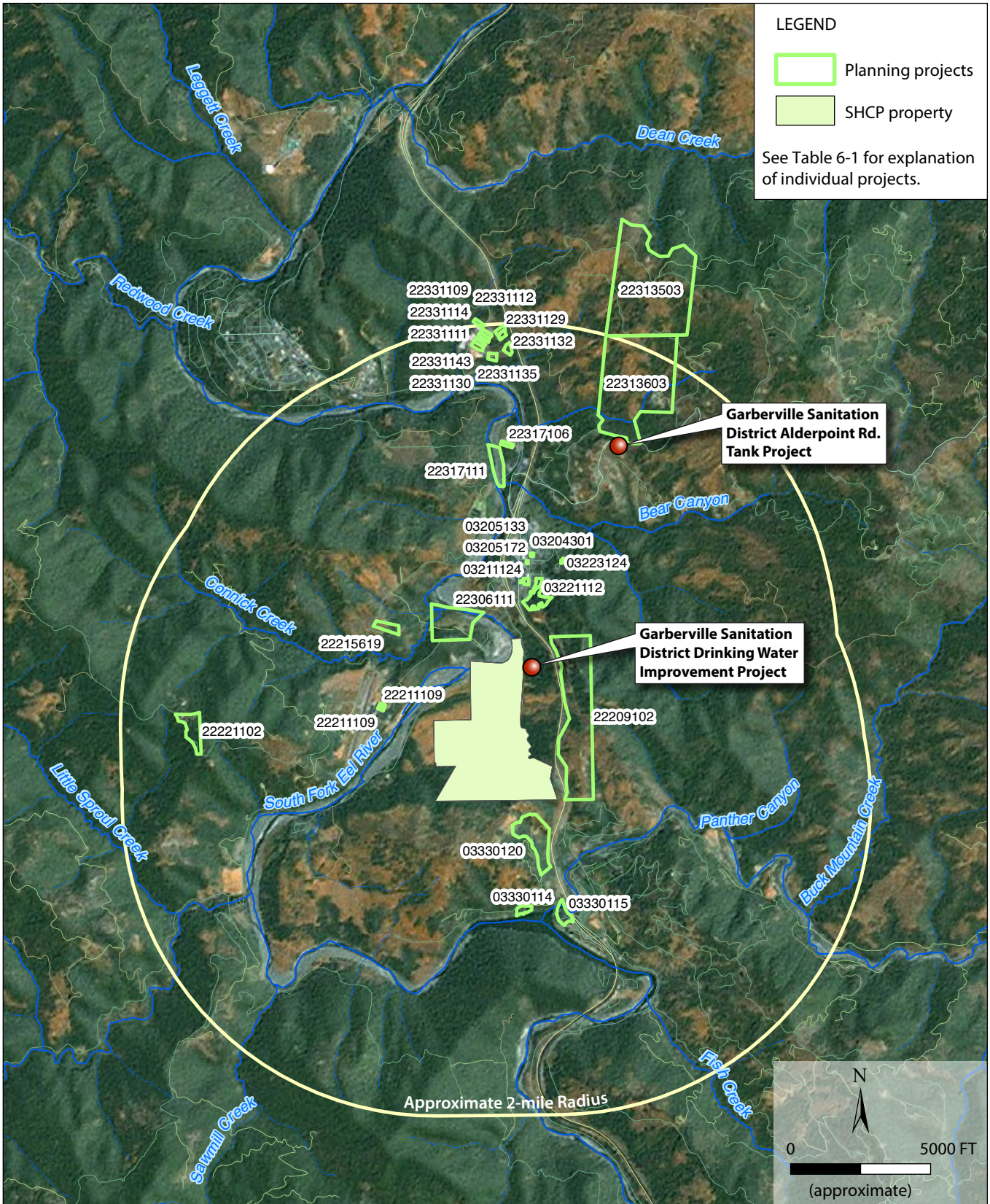
TABLE 6-1 CUMULATIVE PROJECTS IN VICINITY OF PROJECT SITE

Key Parcel #	Location ^a	Project Description	Effective Date	Notes
032-211-012-000	The project is located in the Garberville area, on both sides of Hillcrest Drive, approximately 230 feet southeast of the intersection of Hillcrest Drive and Locust Street, on the property known as 1160 Hillcrest Drive and properties.	An application for the subdivision of a 19.4+/-acre parcel into two parcels of about 10.7 and 8.7 acres. Parcel 1 is developed with a single-family residence. Proposed Parcel 2 is vacant. Community water is on site and available to Parcel 2.	//	Possible new single-family residence
032-051-072-000	The project site is located in the Garberville area, on the north side of Melville Road, approximately 150 feet east from the intersection of Melville Road with Redwood Drive.	A Special Permit application to allow a reduction in the number of parking spaces and loading spaces required for the construction of a two story commercial building of 12 rental units.	05/04/2001	Parking
032-051-033-000	The project is located in the Garberville and Redway areas. The proposed Garberville distribution facility is located on the south side of Maple Lane.	A Conditional Use Permit is requested to allow operation of a Medical Cannabis Collective with storefront facilities in the Garberville and Redway areas. The Collective proposes to engage in the distribution of Medical Marijuana (Cannabis)	//	Medical marijuana use
032-231-024-000	The project site is located in the Garberville area, east of Maple Lane, approximately 500 feet southeast of the intersection of Pine Lane with Maple Lane, on the property known as 799 Maple Lane.	A Zone Reclassification	05/21/2004	Rezoning of 0.13 acres from TPZ to R-1
APN Unknown (see dot on map)		Garberville Sanitary District (GSD) to replace a 30,000-gallon tank with a 200,000-gallon tank at the same location as the existing tank. GSD proposes construction of a 200,000-gallon tank, increasing available storage by 170,000 gallons.		
APN Unknown (see dot on map)		Drinking Water System Improvement Project. GSD proposes: 1) the refurbishment of the existing water intake from the south fork of the Eel River, including installation of a duplex pumping system; 2) construction of a new surface water treatment plant (SWTP) on Tooby Ranch Road; 3) construction of a new pipeline within the roadway easement in Tooby Ranch Road to Sprowel Creek Road, where the line will connect the new SWTP to the existing 8-inch Kimtu transmission line; and 4) construction of a new 8-inch line inside the Town of Garberville within Sprowel Creek Road, starting at the west side of the Highway 101 overpass to the Redwood Drive intersection. The project was designed to treat up to 336 gallons per minute (gpm) from the South Fork of the Eel River plus up to 33 gpm of recycled backwash water.		

Notes: Y=Yes

^a See Figure 6-1 for parcel location.

Source: Humboldt County Planning Department and K. Lobato, 2014.



SOURCE: Humboldt County Dept. of Planning, 2014, and K. Lobato, 2014

Figure 6-1
**CUMULATIVE PROJECTS WITHIN
 TWO MILES OF PROJECT SITE**

7. EIR AUTHORS

The Draft EIR was prepared by the following CEQA consultants¹ under the direction of Kathryn Lobato of the Southern Humboldt Community Park and Michael Richardson of the Humboldt County Planning Department. The lead agency is:

Humboldt County Planning Department
3015 H Street
Eureka, CA 95501
707 | 445.7541
Contact: Mr. Michael Richardson

EIR CONSULTANTS

Amy Skewes-Cox, AICP: *Overall EIR Preparation and Management*
P.O. Box 422
Ross, CA 94957
(amysc@rtasc.com)

Dalene Whitlock, Whitlock & Weinberger, Inc.: *Transportation*

Jim Martin, Environmental Collaborative: *Biological Resources*

Joshua Carman, James Reyff, Michael Thill, Carrie Janello: Illingworth & Rodkin, Inc.: *Noise, Air Quality, and Greenhouse Gas Emissions*

Natalie Macris: *Project Management Assistance and Editing; Services, Utilities, Recreation, and Energy*

Tim Jones, LSA: *Cultural Resources*

Susan Smith (Wordsmith): *Word Processing*

Todd Taylor and Bruce Abelli-Amen, Baseline: *Hazards, Hydrology and Geology*

Tom Camara and Ron Teitel: *Graphics*

Other Project Consultants

Agriculture and Forestry

Annjanette Dodd, Ph.D., P.E. Manhard Consulting, Senior Project Manager LESA Modeling

¹ Consultations with local, State, and federal agencies, as well as other references, are included in Chapter 8, References.

Farmland of Statewide Importance

Owen F. Goode, Manhard Consulting, Design Technician, GIS mapping and design

Soils Maps

Stacy M. Ventresca, Manhard Consulting, GIS Analyst

Jonathan Hooper, NRCS Soil Mapping, Consultant

Timothy Metz, Restoration Forestry Inc.

Biology

Kyle Weir, Botanical and Wetland Consultant

J. Brett Lovelace, J.B. Lovelace and Associates, Special Status Species, wildlife consultant, excerpts, figures and tables

Michael Van Hattem, Environmental Scientist, California Department of Fish and Wildlife

Water Conservation

Gordon Leppig, Senior Environmental Scientist, California Department of Fish and Wildlife

Jane Arnold, Senior Environmental Scientist, California Department of Fish and Wildlife

Cultural Resources

J.M. Roscoe, Donald Verwayen, M.A.; RPA and Erik Whiteman, M.A., RPA, Roscoe & Associates

Louis Hoaglin Sr., Eel River Nation of Sovereign Wailaki

Geology

Kenneth Theilson, P.E., Winzler & Kelly

Noise

Michael Richardson, Humboldt County Planning Department, Senior Planner, Project Planner

Fred M. Svinth, INCE, Associates, AIA

Illingworth & Rodkin, Inc., Environmental Noise Assessment

Public Services

John Miller, Humboldt County Planning Department, Planner

Rebecca Crow, Project Manager P.E., GHD

Sargent Swithenbank, Humboldt County Sherriff Department

Kent Scown, Fire Chief, Garberville Fire Protection District

Recreation

Michael Richardson, Humboldt County Planning Department; Senior Planner, Project Planner

John Miller, Humboldt County Planning Department, Planner

Transportation

Dalene Whitlock, P.E. PTOE, Principal, Whitlock and Weinburger Transportation Inc. (W-Trans)

Tom Mattsen, Director, Humboldt County Department of Public Works

Robert Bronkall, Deputy Director, Humboldt County Department of Public Works

Dan Moody, Traffic Consultant, City of Eureka, consultation

Justin Crellin, General Manager, & Casandra Taliferro, Board of Directors, Mateel Community Center, Summer Arts and Music Festival

Utilities and Services

John Miller, Humboldt County Planning Department, Planner
Rebecca Crow P.E., GHD, Senior Project Manager
Stephanie Gould, GHD, Project Engineer
James Alcorn, GHD, Project Engineer

Board of Directors, Southern Humboldt Community Park

Dennis Huber, Eric Kirk Attorney, Rachel Sowards-Thompson, Carol Van Sant, Ross Huber,
Kristina Suarez, Elissa Martin, Jim Truitt,

Emeritus

Timothy Metz RPF, Peter Ryce, Stephen Dazey

Other Contributors

Miska Schwartz, GHD, consultation, project strategy, wetland consultations
Praj White, Manhard Engineering, Engineering Senior Project Manager
Owen F. Goode, Manhard Consulting, GIS mapping
Stacy M. Ventresca, Manhard Consulting, GIS Analyst
Meghan Ryan, Manhard Consulting, Environmental Planner

8. REFERENCES

4.1 AESTHETICS

State of California, 2013. State's Scenic Highway Program. Website <http://www.dot.ca.gov/hq/LandArch/scenic/schwy.htm>, accessed August 6, 2014.

4.2 AGRICULTURAL/FORESTRY RESOURCES

Herson, A.I. and G.A. Lucks, 2008, *California Environmental Law and Policy: A Practical Guide*. Point Arena, CA. Solano Press Books, pages 287-292 and 365-367.

Humboldt County, 1983, *Humboldt County General Plan: Volume I Framework Plan*.

Humboldt County, 1987, *Garberville/Redway/Alderpoint/Benbow Community Plan*, adopted by the Board of Supervisors, June 30, 1987, Sections 2724, 2725, and 2752. Website <http://www.humboldt.gov/DocumentCenter/Home/View/285>.

Humboldt County, 2012, *Humboldt County General Plan Update*.

Lobato, Kathryn, Executive Director, Southern Humboldt Community Park, 2014. E-mail communication re. "4.XX_AgForestry," August 16.

Lobato, Kathryn, Executive Director, Southern Humboldt Community Park, 2015. E-mail communication re. "SHCP Ag. Land Issues," June 22.

State of California Department of Conservation, 2014, *Farmland Mapping and Monitoring Program*.

U.S. Department of Agriculture, Natural Resources Conservation Service, 2013. Farmland Protection Policy Act. Last revised: unknown. Website http://www.nrcs.usda.gov/wps/portal/nrcs/detail/?ss=16&navtype=SUBNAVIGATION&cid=nrcs143_008275&navid=10017018000000&position=Welcome.html&ttype=detail accessed April 29, 2013.

4.3 AIR QUALITY

Bay Area Air Quality Management District (BAAQMD), 2011. *California Environmental Quality Act Air Quality Guidelines*.

Bay Area Air Quality Management District (BAAQMD), 2014. *Air Quality Standards and Attainment Status*. http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm, accessed August 12, 2014.

California Air Resources Board (CARB), 2005. *Air Quality and Land Use Handbook*.

- California Air Resources Board (CARB), 2009. *The California Almanac of Emissions and Air Quality: 2009 Edition*.
- Garberville Sanitary District, 2010. *Initial Study and Environmental Checklist for Garberville Sanitary District Water System Improvement Project*, April.
- North Coast Unified Air Quality Management District (NCUAQMD), 1995. *Particulate Matter (PM₁₀) Attainment Plan*, May 11.
- North Coast Unified Air Quality Management District, 2014a. Website <http://www.ncuaqmd.org/index.php?page=northcoast.airbasin>, accessed August 12.
- North Coast Unified Air Quality Management District, 2014b. Personal communication with Casey Zaglin, Illingworth & Rodkin, Inc. and Brian Wilson, NCUAQMD, August 12.
- North Coast Unified Air Quality Management District, 2014c. *Regulation 1: Rules 101 – Definitions*. Revised February 20.
- United States Environmental Protection Agency (EPA), 2013. *Federal Register Vol. 78, No. 10, 40 CFR Parts 50, 51, 52 et al, National Ambient Air Quality Standards for Particulate Matter, Final Rule*, January 15.

4.4 BIOLOGICAL RESOURCES

- California Department of Fish and Game (CDFW), 2010. *Notice of Preparation for the Southern Humboldt Community Park (SCH#2010092037)*, letter to Mr. Michael Richardson, Senior Planner, Humboldt County Planning and Building Department from Neil Manji, Regional Manager, October.
- California Exotic Pest Plant Council, 2006. *The CalEPPC List: Exotic Pest Plants of Greatest Ecological Concern in California*, March.
- Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*. Website <http://humboldt.gov/DocumentCenter/View/4363>.
- J. B. Lovelace & Associates, 2012. *Special-Status Wildlife Survey Report*, Southern Humboldt Community Park, December.
- Mad River Biologists, 2002. *Southern Humboldt Community Park Feasibility Study*, prepared for Southern Humboldt Working Together, Incorporated, November.
- Pacific Watershed Associates, 2015. *Independent Review of Southern Humboldt Community Park Water Supply and Demand Analysis and Potential Impacts on Surface Water and Aquatic Habitat*. Memo to Kathryn Lobato, Southern Humboldt Community Park from Brad Job, P.E., Senior Civil Environmental Engineer, November 24.

Wear, K.S., 2011. *Botanical Survey, Wetland Delineation, and Stream Assessment Results, Southern Humboldt Community Park*. Prepared for Southern Humboldt Community Park, October.

4.5 CULTURAL RESOURCES

Baumhoff, Martin A., 1958. California Athabascan Groups. *University of California Anthropological Records* 16(5). Berkeley.

Burns, Jennifer, 2008. *A Cultural Resources Investigation of the Garberville Sanitary District Water Systems Project Located in Humboldt County, California*. Bayside, CA: Roscoe & Associates.

County of Humboldt, 1987. *Garberville, Redway, Alderpoint, Benbow Community Plan*. Website <http://www.humboldt.gov/DocumentCenter/Home/View/285>, accessed August 2014.

Flynn, Katherine, 1976. *Moody Bridge Reconstruction Project, Garberville, California*. Novato, CA: Archaeological Resource Service.

Flynn, Katherine, 1977. *Archaeological Test Procedures at 4-HUM-316, Tooby Ranch, Garberville—Moody Bridge Project*. Novato, CA: Archaeological Resource Service.

Fredrickson, David A., 1974. Cultural Diversity in Early Central California: A View from the North Coast Ranges, *Journal of California Anthropology* 1:41-54.

Shipley, William F., 1978. Native Languages of California. In *California*, edited by Robert F. Heizer, pp. 80-90. *Handbook of North American Indians, Volume 8*, William C. Sturtevant, general editor. Washington, D.C.: Smithsonian Institution.

Kroeber, Alfred L., 1955. Nature of the Land-Holding Group. *Ethnohistory* 2:303-314.

Kyle, Douglas E, 2002. *Historic Spots in California*, revised edition, Palo Alto, CA: Stanford University Press.

McLaughlin, R.J., et al., 2000. *Geology of the Cape Mendocino, Eureka, Garberville, and Southwestern Part of the Hayfork 30 x 60 Quadrangles and Adjacent Offshore Area, Northern California*. Washington, D.C.: U.S. Geological Survey.

National Park Service, 1997. *National Register Bulletin: How to Apply the National Register Criteria for Evaluation*. Washington, D.C.: U.S. Department of the Interior.

Roscoe, James, William Rich, and Donald Verwayen, 2008. *A Cultural Resources Investigation of the Kimtu Meadows Waterline Project Located near Garberville, Humboldt County, California*. Bayside, CA: Roscoe & Associates.

Salisbury, Melinda, and James Roscoe, 2012. *A Cultural Resources Investigation of the California Department of Fish and Game Greater Eel River Arundo Eradication Phase II Project (R157), Humboldt County, California*. Arcata, CA: Roscoe & Associates.

University of California Museum of Paleontology, 2014. UCMP Specimen Search Online Database. Website <http://ucmpdb.berkeley.edu/>, accessed July 2014.

Van Kirk, Susie, James Roscoe, Bill Rich, and Donald Verwayen, 2001. *A Cultural Resources Investigation of the Proposed Community Park at Tooby Flat, Garberville, Humboldt County, California*, Eureka, CA: Roscoe & Associates.

Verwayen, Donald, and Erik Whiteman, 2008. *A Cultural Resources Management Plan for the Southern Humboldt Community Park*, Arcata, CA: Roscoe & Associates.

4.6 GEOLOGY AND SOILS

California Geologic Survey (CGS), 2010. 2010 Fault Activity Map of California, Geologic Data Map No. 6. Website <http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html>, accessed July 28, 2014.

California Geologic Survey (CGS), 2008. Ground Motion Interpolator. Website http://www.quake.ca.gov/gmaps/PSHA/psha_interpolator.html, accessed July 28, 2014.

California Geologic Survey (CGS), 2002. How Earthquakes and Their Effects are Measured. Website http://www.conservation.ca.gov/cgs/information/publications/cgs_notes/note_32/Documents/note_32.pdf, accessed June 2, 2014.

Huber C&D, 2014. Proposed Project Topographical Map, Southern Humboldt Community Park, April 27.

Humboldt County, 2014. GIS Hazard Mapping, Historic Landslides. Website <http://gis.co.humboldt.ca.us/Freeance/Client/PublicAccess1/index.html?appconfig=hazards>, accessed July 28, 2014.

Humboldt County, 2002. Natural Resources and Hazards Report (Section 10), November.

Humboldt County, 1987. Garberville Redway Alterpoint Benbow Community Plan, adopted by the Board of Supervisors June 30.

Natural Resources Conservation Service (NRCS), 2014. Web Soil Survey. Website <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, accessed July 30, 2014.

4.7 GREENHOUSE GAS EMISSIONS

California Air Resources Board (CARB), 2003. The Greenhouse Effect and California. Website <http://www.arb.ca.gov/cc/ccms/factsheets/ccbackground.pdf>, accessed July 2014.

California Air Resources Board (CARB), 2008. *Climate Change Scoping Plan: A Framework for Change*, December.

- California Air Resources Board (CARB), 2013. *Trends in California GHG Emissions for 2000 to 2011- Trends of Emissions and Other Indicators*, October. Website http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_trends_00-11_2013-10-02.pdf, accessed November 2013.
- California Energy Commission (CEC), 2007. *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 – Final Staff Report, publication # CEC-600-2006-013-SF*, Sacramento, CA. December 22, 2006, and January 23, 2007, update to that report.
- California Public Utilities Commission (CPUC), 2010. GHG Calculator version 3c, October 7, 2010. Website http://ethree.com/public_projects/cpuc2.php, accessed October 2013.
- Humboldt County, 1984 (with updates through 1994), *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 2522, 2523, 2724, 2725, 2752, 4420, and 4430. Website <http://humboldt.gov/DocumentCenter/View/4363>.
- Humboldt County, 2012. *Draft Climate Action Plan: A Strategy for Greenhouse Gas Reduction and Adaptation to Global Climate Change*, January.
- Intergovernmental Panel on Climate Change, 2007. *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC*, Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.), Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- North Coast Unified Air Quality Management District (NCUAQMD), 2011. *Rule 111 – Federal Permitting Requirements for Sources of Greenhouse Gases*, January 20.
- U.S. Environmental Protection Agency (EPA), 2011. *The U.S. Greenhouse Gas Emissions and Sinks: Fast Facts*. Website epa.gov/climatechange/Downloads/ghgemissions/fastfacts.pdf, accessed November 2013.

4.8 HAZARDS AND HAZARDOUS MATERIALS

- CAL FIRE, 2007. Fire Hazard Severity Zones in State Responsibility Areas, Humboldt County, adopted November 7.
- Environmental Data Resources (EDR), 2014a. Aerial Photograph Decade Package, S. Humboldt Community Park, 934 Sprowel Creek Road, Garberville, CA, July 30.
- Environmental Data Resources (EDR), 2014b. Radius Map with Geocheck, S. Humboldt Community Park, 934 Sprowel Creek Road, Garberville, CA, July 29.
- Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 2522, 2523, 2724, 2725, 2752, 4420, and 4430. Website <http://humboldt.gov/DocumentCenter/View/4363>.

Humboldt County, 2007. Garberville Airport Master Plan Report, January 2007 Draft Report Revised May 2007.

Humboldt County, 2002. Natural Resources and Hazards Report (Chapter 12), November.

Humboldt County OES, 2002. Emergency Operations Plan, Humboldt Operational Area, June.

State Water Resources Control Board (SWRCB), 2014. Geotracker database for Alice Jewett Elementary School site, Alderpoint Road, Alderpoint, CA. Website http://geotracker.waterboards.ca.gov/map/?global_id=T0602300363#, accessed July 29, 2014.

4.9 HYDROLOGY AND WATER QUALITY

California Department of Water Resources (DWR), 2014. California's Groundwater: Garberville Town Groundwater Basin, San Mateo Subbasin, Bulletin 118, February 27.

Federal Emergency Management Agency (FEMA), 1982. Flood Insurance Rate Map, Humboldt County, California and Incorporated Areas, Map Number 0600601835B, revised July 19.

FEMA, 2005. Letter of Map Amendment Determination Document (Removal), Case No. 05-09-0296A, February 1.

GHD, Inc., 2014. Water Supply and Demand Analysis Memorandum, July 16.

Humboldt County, 1984. Humboldt County General Plan, Volume I, Framework Plan, as amended by resolutions through 1998.

North Coast Regional Water Quality Control Board (NCRWQCB), 2011. Water Quality Control Plan for the North Coast Region, May.

United States Environmental Protection Agency (EPA), 1999. South Fork Eel River Total Maximum Daily Loads for Sediment and Temperature. December 16.

Western Regional Climate Center (WRCC), 2014a. Monthly Climate Summary, Garberville California. Website: <http://www.wrcc.dri.edu/cgi-bin/cliRECtM.pl?ca3320>, accessed July 28.

Western Regional Climate Center (WRCC), 2014b. Monthly Climate Summary, Richardson Grove State Park, California. Website <http://www.wrcc.dri.edu/cgi-bin/cliRECtM.pl?ca7404>, accessed July 28.

Winzler & Kelly, 2007. Draft Water Resources Technical Report for Humboldt County Community Development Division, November.

4.10 LAND USE AND PLANNING

Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 2522, 2523, 2724, 2725, 2752, 4420, and 4430. Website <http://humboldt.gov.org/DocumentCenter/View/4363>.

Humboldt County, 1987, *Garberville/Redway/Alderpoint/Benbow Community Plan*, adopted by the Board of Supervisors, June 30, 1987, Sections 2500, 2724, 2725, and 2752. Website <http://www.humboldt.gov.org/DocumentCenter/Home/View/285>.

Humboldt County, 2005. Humboldt County Code (Zoning Regulations), Sections 314-3.3, 314-7.1, and 314-32. Website <http://www.humboldt.gov.org/137/County-Code>.

Lobato, Kathryn, Executive Director, Southern Humboldt Community Park, 2014. E-mail correspondence, August 8.

Southern Humboldt Community Park, 2010. *General Plan Amendment*, page 23, July.

4.11 MINERAL RESOURCES

Humboldt County Extraction Review Team (CHERT), 2014. 2013 Post-Extraction Report, Discussion Draft, February.

Humboldt County, 1984. Humboldt County General Plan, Volume I, Framework Plan, as amended by resolutions through 1998.

4.12 NOISE

Humboldt County Community Development Services, 1984. *Humboldt County General Plan, Volume 1, Framework Plan*, Section 3240 Noise.

Humboldt County Community Development Services, 2012. *Humboldt County General Plan, Planning Commission Approved Draft*, March 19.

4.13 POPULATION AND HOUSING

Humboldt County, General Plan Update EIR, Housing Element Multi-Family 6-11-11, United States Census 2000 and 2010. Website <http://factfinder.census.gov/>.

State of California, Department of Finance, Sacramento, California, 2011. *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change, January 1, 2010 and 2011*.

State of California, Department of Finance, California State Data Center, "2010 U.S. Census." Website http://www.dof.ca.gov/research/demographic/state_census_data_center/census_2010/view.php.

California Selected Housing Characteristics: 2005-2009 Data Set: 2005-2009 American Community Survey 5-Year Estimates Survey: American Community Survey City-data.com.

Erick Eschker, *Humboldt Economic Index 12/2011*, Humboldt State University.

Humboldt County Public Health Branch, Humboldt Partnership for Active Living, Human Impact Partners, 2008. *Humboldt County General Plan, Humboldt County Health Impact Assessment*, March.

Waxman, Deborah T., *Creating Affordable Housing in Humboldt County* (Master's Thesis).

2003 Housing Element Update to Humboldt County General Plan. Approved December 16, 2003, amended November 30, 2004.

Smith, Michael D.; Steinberg, Steven J. Room to Grow? Website <http://humboldt-dspace.calstate.edu/xmlui/handle/2148/426>.

4.14 PUBLIC SERVICES

Garberville Fire Protection District (GFPD), 2014. E-mail from Kent Scown, Garberville Fire Protection District, to Kathryn Lobato, Southern Humboldt Community Park, September 2.

Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 4710 and 4720.

Humboldt County, 2012. *Humboldt County General Plan Update Draft EIR*, pages 3.4-1, 3.4-2, 3.4-8, 3.4-10, 3.4-11, 3.4-13, 3.4-19, and 3.4-25, April.

Humboldt County Sheriff's Office (Sheriff's Office), 2014. Notes from meeting with Sergeant Swinthenbank by Kathryn Lobato, Southern Humboldt Community Park, August 26.

Southern Humboldt Unified School District (SHUSD), 2014. Website http://www.humboldt.k12.ca.us/sohumb_usd/school/schools.html, accessed June 6.

U.S. Fire Administration (USFA), 2008. *Water Supply Systems and Evaluation Methods, Volume II: Water Supply Evaluation Methods*.

4.15 RECREATION

Humboldt County, 2012. *Humboldt County General Plan Update Draft Environmental Impact Report*, pages 3.14-1 through 3.14-3, April 2.

4.16 TRANSPORTATION/TRAFFIC

California Department of Transportation (Caltrans), 2009. *Collision Data on California State Highways*.

- California Department of Transportation (Caltrans), 2012. *Highway Design Manual*, 6th Edition.
- California Highway Patrol, 2006-2011. *Statewide Integrated Traffic Records System (SWITRS)*.
- California State Parks, 2015. Community Fact Finder. Website http://www.parks.ca.gov/?page_id=26166 accessed on March 23, 2015.
- Donahue, Ryan, 2011. *Pedestrians and Park Planning: How Far Will People Walk?*, Trust for Public Land, May 13. Website <http://cityparksblog.org/2011/05/13/pedestrians-and-park-planning-how-far-will-people-walk/> accessed on March 24, 2015.
- Humboldt County, 1983. *Humboldt County General Plan: Volume I Framework Plan*.
- Humboldt County, 2012. *Humboldt County General Plan Update – Planning Commission Approved Draft*.
- Humboldt County Association of Governments, 2012. *Humboldt Regional Bicycle Plan – 2012 Update*. Humboldt Transit Authority (HTA). Website <http://www.hta.org/>, accessed April 10, 2013.
- Humboldt County Association of Governments, 2014. *VROOM...Variety in Rural Options of Mobility*, Public Review Draft 2.
- Institute of Transportation Engineers (ITE), 2012. *Trip Generation Manual*, 9th Edition.
- Schroeder, P. & Wilbur, M. (2013, October). *2012 National Survey of Bicyclist and Pedestrian Attitudes and Behavior, Volume 2: Findings Report*. (Report No. DOT HS 811 841 B). Washington, DC: National Highway Traffic Safety Administration.
- SNO-TRAN, 2013 *A Guide to Land Use and Public Transportation, Volume I*. Website <http://ntl.bts.gov/DOCS/GL.html>, 3/26/2015.
- Transportation Research Board, 2000. *Highway Capacity Manual*.
- U.S. Department of Transportation (US DOT). National Highway Traffic Safety Administration, *National Survey of Pedestrian and Bicyclist Attitudes and Behaviors*, page 94. Website <http://www.nhtsa.gov/DOT/NHTSA/Traffic%20Injury%20Control/Articles/Associated%20Files/810971.pdf>, accessed March 30, 2015.
- Wolch, J., J. Wilson, and J. Fehrenbach, 2002. *Parks and Park Funding in Los Angeles: An Equity Mapping Analysis*. University of Southern California Sustainable Cities Program. Website http://dornsife.usc.edu/geography/ESPE/documents/publications_parks, accessed March 30, 2015.

4.17 UTILITIES AND SERVICE SYSTEMS

GHD, 2014. *Water Supply and Demand Analysis Memorandum*. (Included as Appendix G of this EIR.)

Humboldt County, 1984 (with updates through 1994). *Humboldt County General Plan, Volume 1, Framework Plan*, Sections 3360, 3361, 4610, and 4611.

Humboldt County, 2012. *Humboldt County General Plan Update Draft Environmental Impact Report*, April 2, pages 3.3-29 through 3.3-31 and 3.9-4.

Lobato, Kathryn, 2014a. E-mail regarding "Humboldt Park EIR – Services/Utilities Questions," June 10.

Lobato, Kathryn, 2014b. E-mail regarding "Waste generation – SoHum Park," July 6.

Lobato, Kathryn, 2014c. E-mail regarding "Waste generation sports," July 8.

United States Environmental Protection Agency (EPA), 1999. *South Fork Eel River Total Maximum Daily Loads for Sediment and Temperature*. December 16.