PUBLIC DRAFT INITIAL STUDY and ENVIRONMENTAL CHECKLIST

FOR

SANHEDRIN TIMBER COMPANY
GENERAL PLAN AMENDMENT, REZONE, AND BOUNDARY LINE ADJUSTMENT

CITY PROJECT FILE NO. GPA 22-01; ZC 22-01, BLA 22-04

May 2025

Lead Agency:
City of Willits

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I. PROJECT SUMMARY

Date: May 2025

Project Title: Sanhedrin Timber Company General Plan Amendment, Rezone, and Boundary Line Adjustment

Lead Agency: City of Willits

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111 E. Commercial Street, Willits, California 95490

Location: The proposed Project is located on the properties located at 23701 N. Highway 101 (N Main Street), Willits, California and identified by Assessor's Parcel Numbers (APNs): 108-040-11, also known as "Quail Meadows," and 108-040-18 (Site). See Figure 1: Location Map. The Site is located at the northern end of the Willits city limits, adjacent to the north of an existing log yard located on Casteel Lane and operated by North Fork Lumber (existing log yard). See Figure 2: Vicinity Map.

Coastal Zone: No

Affected Parcel(s): APNs: 108-040-11 and 108-040-18

City of Willits Land Use Designation: Commercial General (C-G) (see Figure 3: General Plan Amendment Figure)

City of Willits Zoning Designation: APN 108-040-11: Heavy Commercial (C2); APN 108-040-18: Community Commercial (C1) (see Figure 4: Rezone Figure)

Anticipated Permits and Approvals:

1) Adoption of Mitigated Negative Declaration by the City of Willits
2) General Plan Amendment through the City of Willits
3) Rezone through the City of Willits
4) Boundary Line Adjustment through the City of Willits
5) Site Plan Review and Grading Permit through the City of Willits
6) Lake or Streambed Alteration Agreement (LSAA) through the California Department of Fish and Wildlife (CDFW)
7) Section 401 Water Quality Certification (WQC) through the North Coast Regional Water Quality Control Board (NCRWQCB)
8) Section 404 Nationwide Permit (NWP) through the U.S. Army Corps of Engineers (USACE)

Tribal Cultural Resources: Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

On December 14, 2022, in compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, the City of Willits sent consultation letters to the Tribal Historic Preservation Officer (THPO) or appropriate representative for each of the following 15 Native American tribes: Coyote Valley Band or Pomo Indians, Guidiville Indian Rancheria, Hopland Band of Pomo Indians, Cahto Tribe, Manchester Band of Pomo Indians of the Manchester Rancheria, Middletown Rancheria of Pomo Indians, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Redwood Valley or Little River Band of Pomo Indians, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, Yokayo Tribe, and Torres Martinez Desert Cahuilla Indians. Two Native American tribes, the Manchester Band of Pomo Indians of the Manchester Rancheria and the Sherwood Valley Rancheria of Pomo, responded to request additional information. No Native American tribes responded with concerns regarding the proposed Project.

CEQA Requirement:
The proposed Project is subject to the requirements of the California Environmental Quality Act (CEQA). The Lead Agency is the City of Willits. The purpose of this Initial Study (IS) is to provide a basis for determining whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration. This IS is intended to satisfy the requirements of the CEQA (Public Resources Code, Div. 13, Sec. 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

CEQA encourages lead agencies and applicants to modify their projects to avoid significant adverse impacts (CEQA Section 20180I (2) and State CEQA Guidelines Section 15070(b) (2)).

Section 15063(d) of the State CEQA Guidelines states that an IS shall contain the following information in brief form:

1) A description of the project including the project location
2) Identification of the environmental setting
3) Identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to provide evidence to support the entries
4) Discussion of means to mitigate significant effects identified, if any
5) Examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls
6) The name of the person or persons who prepared and/or participated in the Initial Study

II. PROJECT DESCRIPTION

This Initial Study (IS) has been prepared to evaluate potential environmental impacts from the proposed Sanhedrin Timber Company Entitlements project (Project), which includes a General Plan Amendment (GPA), Rezone, and Boundary Line Adjustment (BLA). The Project is proposed on the properties located at 23701 North Highway 101 (N Main Street), Willits, California and identified by Assessor's Parcel Numbers (APNs): 108-040-11, also known as "Quail Meadows," and 108-040-18 (Site). See Figure 1: Location Map. The Site is located at the northern end of the Willits city limits, adjacent to the north of an existing log yard located on Casteel Lane and operated by North Fork Lumber (existing log yard). See Figure 2: Vicinity Map.

The Site has a land use designation of Commercial General (C-G) per the Willits General Plan 2020 (1992). Quail Meadows has a zoning designation of Heavy Commercial (C2) pursuant to Ordinance No. 90-13 adopted by the Willits City Council June 13, 1990, and APN: 108-040-18 has a zoning designation of Community Commercial (C1) according to the City of Willits Zoning map dated May 2010. Sanhedrin Timber Company, LLC (Applicant) requests a GPA and Rezone to change the existing land use and zoning designations of the Site to Industrial General (M-G) and Heavy Industrial (MH), respectively, to facilitate expansion of an existing log yard operation. See Figures 3 and 4: General Plan Amendment Figure and Rezone Figure, respectively. Additionally, the Applicant requests a BLA to retain an approximately 2.2-acre portion of APN: 108-040-18 along N Main Street for future commercial use. The approximately 2.2-acre parcel would maintain the C-G and C1 land use and zoning designations, respectively, and would not be included in the proposed GPA and Rezone (see Figures 3 and 4). See Figure 5: Site Plan for the approximate location of the proposed BLA. For the purposes of this IS, the portion of the Site proposed for land use and zoning changes is referred to as "Project Area."

Though the Applicant requests a GPA and Rezone in order to expand an existing log yard, the proposed entitlements would allow for future development of industrial uses permitted under the M-G land use designation and MH zoning designation. Pursuant to the City of Willits Municipal Code (Code) Chapter 17.28 – Heavy Industrial (MH) Zone, the MH zoning designation allows for principal permitted uses of a variety of industrial uses, as defined in Code Sections 17.28.010 – *Purpose* and 17.28.020 – *Principal permitted uses*, subject only to such regulations as are needed to control nuisances and protect surrounding areas. Therefore, for the purposes of this analysis, it is presumed that the proposed GPA and Rezone would result in the development of a typical industrial use allowed in the MH zoning district, which may directly result in physical changes to the existing environment.

Project Proposal

General Plan Amendment, Rezone, and Boundary Line Adjustment

As discussed above, the Applicant proposes to amend the land use designation of the Project Area from C-G to M-G and zoning designations from C1 and C2 to MH through a GPA and Rezone, respectively (see Figures 3 and 4). Additionally, the Applicant proposes a BLA to relocate the boundary line between APN: 108-040-18 (currently approximately 10.64 acres) and Quail Meadows (currently 10.61 acres) to the northwest in order to establish an approximately 2.2-acre parcel adjacent to N Main Street and an approximately 19.05-acre parcel for the expanded log yard. The proposed boundary line configuration is shown on Figure 5 (a and b): Site Plan. The GPA and Rezone are proposed for the 19.05-acre parcel (Project Area), while the 2.2-acre parcel would remain with C-G and C1 land use and zoning designations, respectively, for future commercial use. The proposed acreages within each land use and zoning district, following the proposed BLA and GPA/Rezone, are provided in Table 1, below.

Table 1. Proposed Acreages, Land Use, and Zoning.

APN	Size (acres)		Land Use		Zoning	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
108-040-18	10.64	2.2	C-G	C-G	C1	C1
108-040-11	10.61	19.05	C-G	M-G	C2	MH

As a result of the proposed GPA and Rezone, principally permitted and conditionally permitted uses in the MH zoning district, as defined in Code Chapter 17.28 – *Heavy Industrial (MH) Zone*, would be permitted in the Project Area. Table 2, below, lists the uses principally and conditionally permitted in the MH, C1, and C2 zoning districts. As shown, a portion of the uses currently allowed in the C1 and C2 zoning districts, as defined in Code Chapters 17.22 – *Community Commercial (C1) Zone* and 17.24 – *Heavy Commercial (C2) Zone*, respectively, would continue to be allowed, subject to the same or alternative permitting requirements in the MH zoning district. Use Groups listed in Table 2, below, are defined in Code Chapter 17.06 – *Use Group Classifications.*

Table 2. Principally Permitted and Conditionally Permitted Uses Allowed in Existing and Proposed Zoning Designations.

Use Group	Use Type	Zoning District		
		C1	C2	MH
Group 2 – Residential				
2(a)	Single-family residence	C*	C*	C*
2(b)	Two family residences	C	--	--
2€	Group residential	C	--	--
2(f)	Supportive housing	C	C*	C*
2(g)	Transitional housing	C	C*	C*
2(i)	Single room occupancy units	C	C	--
Group 4 – Visitor Accommodation				
4(a)	Campgrounds	--	C	--
4(b)	Tourist accommodations	C	P	--
Group 6 – Business and professional offices		P	P	--
Group 8 – Business support services		P	P	--
Group 10 – General consumer services		P	P	--
Group 12 – Retail trade				
12(a)	General retail trade	P	P	--
12	Retail trade, except general retail trade	C	C	--
Group 14 – Eating and drinking places				
14(a)	Eating places	P	P	--
14(b)	Drinking places	C	C	--
14(c)	Drive-in restaurants	C	C	--
Group 16 – Adult entertainment		C	P	--
Group 18 – Social services		P	P	--
18(c)	Child day care services	--	--	P*/C*
Group 20 – Private institutions				
20(a)	Private educational or religious institutions	P	P	--
20(b)	Cultural or social institutions	P	P	--
20(c)	Health care institutions	C	C	--

Use Group	Use Type	Zoning District		
		C1	C2	MH
Group 22 – Sports and recreational facilities				
22(a)	Indoor sports and recreation facilities	P	P	--
22(b)	Outdoor sports or recreational facilities	--	C	C
Group —4 - Automotive				
24(a)	Light automotive repair	C	P	P
24(b)	Major auto repair	--	C	P
24(c)	Auto sale and rental	--	P	P
24(d)	Car washes	--	P	P
Group 26 – Vehicular storage				
26(a)	Impound storage	--	--	P
26(b)	Recreational vehicle storage	--	--	P
26(c)	Fleet storage	--	--	P
26(d)	General parking	C	--	P
Group 28 – Vehicle fuel sales				
28(a)	Retail gasoline sales	C	C	--
28(b)	Truck stops	--	C	P
Group 30 – Light equipment repair and sale		P	P	--
Group 32 – Heavy equipment repair and sale				
32(a)	Heavy equipment repair	--	C	P
32(b)	Heavy equipment sale	--	P	P
Group 34 – Wholesaling, Storage, and Distribution				
34(a)	Indoor wholesaling and storage	--	C	P
34(b)	Outdoor wholesaling and storage	--	--	P
34(c)	Fuel jobbing	--	--	C
34(d)	Construction yards	--	C	P
Group 36 – Public Services				
36(a)	Minor Transportation	--	--	P
36(b)	Public Service Facilities	--	--	P
36(c)	Major Transportation	--	--	P
Group 40 – Festival activities		C	C	C
Group 42 – Agriculture				
42(a)	General agriculture	--	--	P
42(b)	Concentrated stock operations	--	--	C
42(c)	Heavy agriculture	--	--	C
Group 46 – Interment services				
46(a)	Cremation	P	P	--
46(b)	Interment	C	C	--
46(c)	Undertaking	P	P	--
Group 47 – Custom printing		--	P	--
Group 48 – Custom manufacturing		C	C	P
Group 50 – Industrial				
50(a)	General industrial	--	--	P
50(b)	Intermediate industrial	--	--	P
50(c)	Heavy industrial	--	--	C

Use Group	Use Type	Zoning District		
		C1	C2	MH
50(d)	Very heavy industrial	--	--	C
Group 54 – Extractive		--	--	C
Group —6 - Scrap operations		--	--	C
Group 57 – Medical and Adult Use Cannabis Activities and Industrial Hemp Activities				
57(a)	Indoor cannabis cultivation	--	--	P
57(b)	Cannabis and industrial hemp manufacturing	--	--	P
57(c)	Cannabis dispensary	--	P	P
57(d)	Cannabis and industrial hemp laboratories and research	P	P	P
57(e)	Cannabis distribution	--	P	P
57(f)	Cannabis packaging and processing	--	--	P
57(g)	Cannabis infusion	--	--	P

*Notes: P=Principally permitted; C=Conditionally permitted; *=as an accessory to a permitted use*
Source: Chapters 17.22, 17.24, & 17.28 of the City of Willits Municipal Code

Principally permitted and conditionally permitted uses in the portion of the Site to be retained in the C-G land use and C1 zoning designation would remain unchanged.

Site Plan Review

Following approval of the proposed entitlements, the Project would be subject to the City's Site Plan Review process described in Code Chapter 17.70 – *Site Plan Review*. This process would enable the Director of Community Development to confirm that the proposed development is in conformity with Title 17 – *Zoning* of the Code and the standards listed in Code Section 17.70.040 – *Planning director findings and conditions*, and apply conditions to the Project, as deemed necessary, to protect the public health, safety, and welfare. This same process would be required for conceptual industrial development as per Code Section 17.70.020 – *Site plan review requirement*, the Site Plan Review process is required before a building permit is issued for applications involving new construction, additions or structural alterations. Any conditions of approval, including mitigation measures identified in the CEQA Initial Study, would be applied through the Site Plan Review process.

Site Development

Development associated with the proposed Project would generally include vegetation removal; grading; and reuse or removal of existing structures. Vegetation removal and grading activities would facilitate the construction of rocked log storage areas, internal access roads, and access points between the existing log yard and the Site, parking near the office, and two (2) water storage ponds. The Site would be leveled and surfaced with compacted base rock, sufficient to withstand log storage and truck traffic. Gravel access roads would be maintained, upgraded, and/or constructed, as needed, to facilitate on-site circulation and to connect the existing log yard and the Site. This would require upgrades to existing drainage crossings and the construction of multiple new drainage crossings between the existing log yard and the Site. Additionally, two (2) irrigation ponds would be constructed for storage and fire suppression needs. Refer to Figure 5: Site Plan for approximate locations of the proposed ponds. At this preliminary stage, it is anticipated that the ponds will be designed to have storage capacities of approximately 1.0 acre-feet (ac-ft) and 0.85 ac-ft. However, details on the specific locations, capacities, and dimensions of the proposed ponds would be refined following project entitlements.

An existing approximately 1,500-square-foot office structure, located in the southwestern portion of Quail Meadows, would be retained. This office structure was previously utilized as an office and has existing connections to electricity (PG&E), water (City), and wastewater disposal (City). This structure is proposed to be utilized as an office to support the log yard operation. Dilapidated tennis courts, located in the southeastern portion of the Site, landscaping, and other minor improvements associated with the RV park that previously occupied Quail Meadows would be removed. An approximately 6,900-square-foot existing storage unit building located in the eastern portion of the Site may additionally be removed.

The Site is currently accessed from N Main Street via a paved driveway at the southwest corner of Quail Meadows. The Applicant proposes to utilize both the Quail Meadows entrance and the Casteel Lane entrance at the existing log yard for accessing the Site. An additional unimproved driveway is located at the northwest corner of the Site. This driveway is located within the 2.2-acre portion of the Site proposed to be maintained in the C1 zoning designation, is intended for light administrative use only and not for industrial truck or equipment traffic, and no improvements or modifications are proposed. As noted above, the Site contains various internal gravel access roads utilized for the previous development. These gravel access roads would be maintained, upgraded, and/or constructed, where needed, to facilitate on-site circulation.

See Figure 5: Site Plan for details on the conceptual proposed site development. Site development would require removal of 116 mature [greater than or equal to 12 inches in diameter at breast height (DBH)] trees as provided in Table 3, below. As shown on the Tree Survey map (Appendix A), the trees along the eastern edge of the Site are proposed to be retained. Pursuant to a Tree Survey completed by Victor Hollister, Registered Professional Forester (RPF) No. 3180, in April 2023 (see Appendix A), tree species anticipated to be removed include American sycamore (*Platinus occidentalis*), apple (*Malus domesticate*), Austrian pine (*Pinus nigra*), bigtooth aspen (*Populus tremula*), black poplar (*Populus nigra*), black willow *(Salix nigra*), California black oak (*Quercus kelloggii*), Chinese juniper (*Juniperus chinensis*), Lombardy poplar (*Populus nigra*), non-native maple (*Acer spp.*), olive (*Olea europaea*), Oregon ash (*Fraxinus latifolia*), Oregon white oak (*Quercus garryana*), ponderosa pine (*Pinus ponderosa*), sweet gum (*Liquidambar styracifula*), valley oak (*Quercus lobata*), and walnut (*Juglans spp.*).

Table 3. Inventory of Mature Trees to be Removed.

Tree Type	Mature Tree Size Ranges (DBH)		
	≥12 to ≤18 inches	>18 inches	TOTAL
California black oak	1	1	*2*
Valley oak		1	*1*
Oregon white oak	4		*4*
Bigtooth aspen	7	10	*17*
Austrian pine	1	1	*2*
Non-native maple	15	5	*20*
Chinese juniper	1		*1*
Ponderosa pine	1	1	*2*
Walnut	1		*1*
Oregon ash		1	*1*
American sycamore	5	1	*6*
Black willow	14	1	*15*
Black poplar	16	28	*44*
TOTAL	**66**	**50**	***116***

During construction, Best Management Practices (BMPs) would be implemented in accordance with a Stormwater Pollution Prevention Plan (SWPPP) to be prepared for the project pursuant to the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP), administered through the State Water Resources Control Board (SWRCB). Compliance with the CGP and a project-specific SWPPP would help to prevent the discharge of construction waste, debris, and contaminants from construction materials, tools, and equipment from leaving the Site.

Conceptual Industrial Development

Although the Applicant proposes to utilize the Site for an expanded log yard, the analysis contained in this IS includes an evaluation of environmental impacts as they relate to a future typical industrial development that would be principally permitted under the MH zoning district. To determine the extent of potential environmental impacts, it is assumed that a future project would entail a General Industrial or Intermediate Industrial use. As defined in Code Section 17.06.020 – *Listing of use groups*, a General Industrial (Use Group 50a) includes "*Industrial plants and facilities used primarily for the manufacturing compounding, processing, assembling, packaging, treatment or fabrication of goods, materials and products*" and an Intermediate Industrial use (Use Group 50b) includes "*Any production, processing, cleaning, service, testing, repair, or storage of materials other than those listed under [General Industrial]*." It is further assumed that other principally permitted uses in the MH zoning district would result in similar or lessened impacts as the conceptualized General Industrial or Intermediate Industrial use and, therefore, environmental impacts would be adequately captured by this analysis. As mentioned above, should industrial development, aside from the proposed log yard, be proposed in the future, upon receipt of an application for the proposed use, the City would make a determination if additional CEQA analysis is warranted.

According to Code Section 17.28.040 – *MH Lot regulations*, as the southwest corner of the Site is adjacent to a property within the Single-Family Residence (R1) zoning district (see Figure 3), a 20-foot setback from the residential zone would be required for future development. However, no residential districts are adjacent to the remainder of the Site and pursuant to the *Land Use Density and Building Intensity Standards* provided in the Willits General Plan 2020 (1992) Volume II – Technical Appendices (page II-33), no lot regulations would apply to the remainder of the Site. Additionally, the Code does not include applicable lot regulations for either the C1 or C2 zoning designations (pursuant to Code Section 17.22.040 – *C1 Lot regulations* and 17.24.040 – *C2 Lot regulations*), aside from minimum lot area, lot width, and yards, none of which are a concern at the Site. Building height in the C1, C2, and MH zoning designations would be limited to 45 feet. Besides the 20-foot setback required from the R1 zoning district at the southwest corner of the Site, as the Code does not contain lot regulations that would place limitations on development in the C1, C2, or MH zoning designations, for the purposes of this analysis, it is assumed that the proposed GPA and Rezone would not affect the area of a potential future development.

Development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such as water tanks and/or ponds to serve as back-up water supplies and for fire suppression needs; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures. Building permit applications for a typical industrial facility would be subject to review by the Little Lake Fire District for compliance with the California Fire Code (CFC) in place at the time of building permit application submittal. Typical conditions would be anticipated to be related to maintaining site access and circulation for emergency equipment, emergency water supply, property signage, flammable materials storage, and other conditions as required by the Fire Marshal in accordance with the current CFC at the time a project is proposed.

Improvements associated with a typical industrial facility would be reviewed by applicable City departments and outside agencies as warranted upon submittal of a formal application. For purposes of this analysis, it is assumed that a future industrial development application would conform with applicable Code requirements and regulations established for the MH zoning district.

Due to the size of the Site and the nature of industrial uses, it can be assumed that construction activities would cause disturbance to greater than 1 acre of land and would therefore be subject to the CGP, administered through the SWRCB. Compliance with the CGP would ensure that BMPs would be implemented in accordance with a project-specific SWPPP. The SWPPP would help to prevent the discharge of construction waste, debris, and contaminants from construction materials, tools, and equipment from leaving the Site.

Operations Plan

Operation of a typical industrial facility would be subject to Code Chapter 17.50 – *Performance Standards*. Pursuant to Code Section 17.50.040 – *Locations where determinations are made for enforcement of performance standards* (1982), compliance with performance standards would generally be enforced within 500 feet of the Project Area. A general industrial would be anticipated to operate between 7:00am and 7:00pm up to six (6) days per week; however, specific hours of operation would be dependent on the use proposed and would be subject to approval by the City. Typical operational activities would be anticipated to include employee trips to the typical industrial facility, operation of heavy equipment within and outside of structures, heavy truck traffic to/from the facility for materials transfers, and use of machinery within structures.

Daily operations of the Project would be consistent with the existing operations of the existing log yard and would include: the storage and sale of non-retail logs; log and lumber trucks transporting logs to and from the Site; log clean-up (including periodic chainsaw work to logs to cut into shorter lengths, flush knots (limb ends) and clean up and flush the ends of the logs to remove any unevenness, splinters, or other log defects); loading of bark and other byproducts using heavy equipment; lumber trailer staging; and site maintenance, including minor grading, resurfacing, and watering using heavy equipment. Log truck loading and unloading would be completed using two (2) Caterpillar 966 front end loaders, or equivalent; two (2) Caterpillar 568 Heel Boom Log Loader, or equivalent; and one (1) water truck. The proposed expanded log yard operation would be managed by the existing four (4) full-time staff, one (1) new full-time Log Procurement Manager, and one (1) seasonal employee generally from April 1 to November 30 (summer period). Operations would be managed in compliance with the City performance standard regulations provided in Section 17.50.050 of the Code – *Performance of standard regulations* (1982).

Existing and proposed dust control practices consist of watering the operating surfaces of the log yard at regular intervals during dry weather periods. Maintaining sufficient moisture content on ground surfaces effectively minimizes the quantity of airborne particulates created by heavy equipment and truck traffic. Operation of the Project shall comply with California Code of Regulations, Title 13, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment, and Rule-1-430 (Fugitive Dust Emissions) of Chapter IV (Prohibitions) of Regulation 1 (Air Pollution Control Rules) of the MCAQMD's Rules and Regulations (February 2011), which suppresses fugitive dust during construction and operation. This would limit the generation of fugitive dust at the Site, including the driveways, access roads, and the rest of the Site. To further limit the potential for dust generation during operation, the Applicant intends to prepare a Dust Control Plan for approval by the City.

The Project is not anticipated to significantly increase the truck trips to and from the log yard operations. The purpose of the Project is to increase operational efficiencies for the Applicant's operations. As observed at the existing log yard, the majority of log deliveries occur during the summer period, five (5) to six (6) days per week, generally between the hours of 6:00am and 5:00pm, with occasional peak delivery times from 5:30am to 7:00pm. At times during the summer and fall months, the operators work until 5:30 or 6:00pm to clean up the yard after the trucks have stopped coming in. During this period, logs are delivered to the Site on approximately 50 to 60 incoming log trucks per day, up to a maximum of 65 to 70 incoming trucks per day, on rare occasions. During this summer period, logs are transported from the Site on approximately 15 to 20 outbound lumber trucks per day, up to approximately 25 outbound lumber trucks per day, on rare occasions. Hours of operation between December 1 and March 30 (winter period) are generally from 7:00am to 4:00pm, up to five (5) days per week, with occasional needs to operate between 6:00am and 5:00pm to accommodate lumber truck scheduling for backhauls and log deliveries during mild weather windows in spring. Incoming log deliveries during the winter period are minimal, up to approximately 15 incoming log trucks per day, in isolated circumstances. Log deliveries during the winter period are dependent on weather at the source of logs and harvest permit and wet season logging restrictions. During this winter period, logs are transported from the Site on approximately 25 to 30 outbound lumber trucks per day. Additionally, bark hauling occurs intermittently throughout the year at rates of two (2) to five (5) loads per week. Trips associated with bark hauling are limited to normal operating hours described above. Bark loads are not significant enough to increase the daily truck averages over the incoming and outgoing load forecasts described. These forecasted truck trips and operating hours are consistent with the existing operation. With implementation of the proposed project, it is anticipated that truck trips per day to and from the expanded log yard would average towards the upper end of the ranges provided with more consistency. The existing log yard experiences truck trips within these ranges with less consistency. The majority of log trucks would access the Site from the north, via the Highway 101 offramp directly north of the Site; however, log trucks traveling from the coast via Highway 20, would access the Site from the south, via N Main Street.

Current operations produce varying amounts of bark that falls off logs during handling. This bark is cleaned up at the end of shift every day and placed into a pile located at the southeast end of the existing log yard. Bark accumulations generated vary throughout the year but generally do not exceed over one chip van load per day (or approximately 15 cubic yards per day) on average. The Applicant intends to prepare a Bark Management Plan as part of the Emergency Action Plan (EAP) described below. The Bark Management Plan would include details such as strategies to reduce the risk of bark piles catching on fire, and would be subject to approval by the Little Lake Fire District. The bark pile in the existing log yard is planned to remain in same location in southeast corner due to its higher elevation and distance away from the stormwater drainage system, distance from sensitive receptors including residences and the public school, its separation from regular log handling activities, and its preferred location for loading. Bark piles in the proposed log yard are planned to be located near the southeast corner of Quail Meadows. This location appears ideal being located at a higher elevation away from stormwater drainage, distance from wetland areas, distance from sensitive receptors, separation from regular log handling, and preferred location for loading bark trucks. Bark piles in the existing and new log yards would range in size but would generally be between 30 feet in length and width and 10 to 15 feet high. It is standard practice in the existing log yard operation and planned future operations to not build large inventories of accumulated bark, and rather maintain a steady and even truck flow of two (2) to five (5) loads per week to maintain low inventories.

The Applicant intends to prepare an EAP, to the satisfaction of the Little Lake Fire District, prior to operation of the expanded log yard. The EAP would describe plans and preparedness for emergency response and as noted above, would include a Bark Management Plan. The EAP would include a list of emergency contacts, access requirements, evacuation routes and procedures, employee training procedures, deck orientation

maps, adequate water supply, and on-site firefighting equipment. Firefighting equipment to keep on-site for use in emergencies would include but not be limited to a water truck, fire extinguishers, fire tools, and a portable foaming fire suppression system. The EAP would also include fire prevention and mitigation strategies, including identification of potential fire hazards, general housekeeping, and required training. Implementation of the EAP would provide employees with the ability to put out a 10-foot by 10-foot, or equivalent, spot fire should the need arise.

It should be noted that the existing log yard contains a mobile self-contained 1,000-gallon fuel tank, located near the main gate to the log yard. If needed on the Site in the future, it may be placed in the southwestern corner of the Site, near the Quail Meadows entrance; however, for the foreseeable future it is anticipated that the fuel tank would stay in its current location on the existing log yard. For reference, the possible location on the Site is shown on Figure 5: Site Plan. All other chemical storage is located within the two (2), 450-square-foot shipping containers in the southwest portion of the existing log yard. The approximate location of these shipping containers is shown on Figure 5: Site Plan.

Access, Circulation, and Parking

The Site is currently accessed from N Main Street via a paved driveway at the southwest corner of Quail Meadows. The existing log yard is accessed via Casteel Lane. The Applicant proposes to utilize both the Quail Meadows entrance and the Casteel Lane entrance at the existing log yard for accessing the Site. An additional unimproved driveway is located at the northwest corner of the Site. This driveway is intended for light administrative use only and not for industrial truck or equipment traffic and no improvements or modifications are proposed. As noted above, the Site contains various internal gravel access roads utilized for the previous development. These gravel access roads would be maintained, upgraded, and/or constructed, where needed, to facilitate on-site circulation and to connect the existing log yard and the Site. With the connection between the existing log and the Site, queuing log and lumber trucks would have sufficient space to queue on-site, off of publicly maintained roadways.

One (1) ADA parking space is currently under construction directly adjacent to the office on Quail Meadows. Additional graded and rocked parking areas are intended to be established adjacent to the southern property line of the Site, next to the office structure.

Utilities

Water

In a typical industrial facility, water sources and storage would be required for daily operation and in emergency situations. The water usage proposed under typical industrial facilities principally permitted within the MH zoning district that may be proposed in the future is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping logs wet during storage. Details on the specific locations, capacities, and dimensions of the ponds and/or other water storage facilities would be subject to grading and/or building permits through the City. Significant changes to existing water usage proposed for a future industrial facility would be reviewed by the City in conjunction with a planning or building permit application review. Significant changes to existing water usage proposed for a future industrial facility would be reviewed by the City in conjunction with a planning or building permit application review or through the Site Plan Review process described above.

Existing water sources include three (3) wells and four (4) 10,000-gallon water tanks within the Project Area and an additional well and water tank at the existing log yard that the Applicant proposes to integrate into the water supply system that would serve the Project. The Applicant intends to install up to three (3) additional wells and construct two (2) irrigation ponds within the Project Area to store water for use in the log-yard fire

hydrant system, when needed. The irrigation ponds are currently designed for volumes of 1.0 ac-ft and 0.85 ac-ft. Additionally, the existing office is connected to the City water system via a 2-inch connection. This connection would remain consistent with its current use for the office. The existing log yard has a 2-inch connection to the City water system, and it is assumed that this connection may be utilized for short-term irrigation in the event of a water system emergency such as well problems and/or mechanical failures. The Site is also served by a fire suppression connection that is overseen by the Little Lake Fire District and would only be utilized in the event of a fire-related emergency.

Under the Project, the Applicant proposes a recirculating log irrigation system for wetting the log decks. The proposed system would generally consist of up to two (2) holding ponds and series of return ditches to collect and transport the water back to the ponds. A pump station at the end of the ponds would charge an approximately 12-inch PVC manifold that would run to the ends of the log decks. From there a 2-inch poly line would be run across the top of the decks from one end to the other and a series of rainbird sprinkler heads would be installed at intervals needed for sufficient coverage. The increased water output from the rainbird sprinklers would cause ground saturation and overland flow, which would be captured by a series of drainage ditches to direct flow back to the ponds. To combat evaporation, the wells would be plumbed to the ponds to supply make-up water, as needed, to keep the ponds full and pumps primed. It is anticipated that this would require an average of up to 80,000 gallons per day (gpd), peak usage (accounting for evaporation and dust abatement uses), from July through October. During the months of May, June, and November, the estimated water usage would be approximately 40,000 gpd and little to no water would be anticipated to be required for the remainder of the year (December through April, which generally coincides with the rainy season). This would equate to approximately 41.5 ac-ft per year, as shown in Table 4, below.

Table 4. Estimated Average Water Usage by Month.*

Month	Gallons per day (gpd)	Gallons per month	Acre-feet per month
January	0	0	0
February	0	0	0
March	0	0	0
April	0	0	0
May	40,000	1.24 million	3.81
June	40,000	1.20 million	3.68
July	80,000	2.48 million	7.61
August	80,000	2.48 million	7.61
September	80,000	2.40 million	7.37
October	80,000	2.48 million	7.61
November	40,000	1.24 million	3.81
December	0	0	0
AVERAGE	*36,670*	*1.13 million*	*3.46*
TOTAL (per year)		**13.5 million gallons**	**41.5 ac-ft**

*Note: *The estimated water usage is based on average water use at the existing log yard and other facilities operated by the Applicant.*

The Applicant anticipates that the four (4) existing wells plus the up to three (3) proposed wells would be sufficient for meeting the needs of the current and expanded log yards, with the proposed ponds available for irrigation water storage and fire suppression needs. However, as noted above, the existing connection to the City water system would be maintained and/or upgraded, as needed, to serve as a back-up supply for irrigation needs when necessary in the event of emergency well problems and/or mechanical failures during

the dry months when water is needed on the log decks. A separate connection exists to serve fire suppression needs in the event of a fire emergency. The Applicant intends to have a self-sustaining water system through the use of on-site wells and wintertime collection and storage in the proposed ponds for use during the following summer. It is not anticipated that City water would be needed as an emergency backup water supply during the months of January through April and December when the need for log deck wetting is limited, and the ponds would most likely contain water. For the months of May through November, up to approximately 90,000 gpd (peak usage) may be necessary as an emergency backup water supply. This estimate is based on the recorded highest usage of City water during a water system emergency at the existing log yard. A 10-day period of water use in the event of a water system emergency is anticipated to be more than adequate to complete water system repairs or to allow for other unforeseen circumstances that would require the use of City water as a backup supply. Over a 10-day period, approximately 2.76 ac-ft (900,000 gallons) would be anticipated to be necessary. This estimate would allow for 10 days of makeup water to combat evaporation and four (4) water truck loads per day for dust abatement.

Four (4) City fire hydrants are located within the vicinity of the Site, with the closest hydrant located approximately 200 feet southwest of the existing office structure. The Applicant intends to install up to three (3) additional fire hydrants within the Project Area such that fire hydrants are available throughout the Project Area and that for the purposes of the Project, no log deck would be greater than 600 feet from a fire hydrant. In order to meet fire flow requirements of the Little Lake Fire District provided in a letter dated March 17, 2023 (see Appendix K), the Applicant proposes to install three (3) standard municipal Clow Valve Medallion Hydrants with a minimum flow capacity of 4,500 gpm at 20 pounds per square inch (psi). Once the system has been installed, a 6-hour flow test would be performed to demonstrate the hydrant flow rate at the required pressure. Additionally, a 100-kilowatt (kW) Cat Diesel generator is proposed to provide uninterrupted power to the fire pump in the event of a power outage.

Electricity and Natural Gas

Electricity and natural gas connections currently exist on-site. The Applicant anticipates upgrading the existing power supply to meet operational needs of the Project. Potential typical industrial facility operators would coordinate with PG&E at the time a project is proposed if additional electricity or natural gas connections or supplies are needed.

Telecommunications

Telecommunications services would be obtained by the Applicant and typical industrial facility operators if services are needed.

Stormwater

While the City does not operate a municipal separate storm sewer system (MS4) that would otherwise be subject to the Municipal Storm Water Program administered by the SWRCB, including typical requirements for Low Impact Development (LID) feature in site design, compliance with the CGP would help to ensure post-construction stormwater flows are properly managed in accordance with the Clean Water Act. Furthermore, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (IGP), administered by the SWRCB.

Post-construction stormwater would continue to infiltrate as the Project does not propose the introduction of impervious surfaces. However, stormwater would be collected in the two (2) ponds proposed at the Site for use as an emergency water supply and for irrigation needs.

Solid Waste

Waste generated by the Project or other typical industrial facilities would be hauled off-site to a licensed disposal facility or collected by the local waste hauling company, if needed.

Fire Protection

It is anticipated that the Site would contain 12 log decks: nine (9) on Quail Meadows and three (3) on APN: 108-040-18. These decks would be approximately 250 to 300 feet in length with a proposed height of 30 feet. As required by the Fire Marshal of the Little Lake Fire District, pursuant to the 2019 CFC, log decks at the existing log yard are a maximum of 300 feet by 500 feet (150,000 square feet), and the maximum deck height has been expanded from 20 feet to 30 feet with approval from the Fire Marshal and incorporation of sprinkled log decks. Additionally, the required 100-foot separation from other log decks and exposures is able to be expanded by using measures such as sprinkled log decks and other exceptions. The existing log yard currently contains a 100-foot driveway between the two large continuous decking areas and a 100-foot gap between the log decks and the property line shared with the houses to the west. The proposed Project would operate in accordance with the CFC and other applicable standards, including the log deck size and setback requirements described above. Additionally, as required by the Fire Marshal, all log decks shall maintain minimum 20-foot-wide vehicle access on at least three (3) sides of each log deck, and on-site hydrants and ponds shall remain accessible by vehicle to ensure Type 1 fire engines have unobstructed access to the Site. Furthermore, the Applicant would maintain a minimum water supply of 1,500 gpm for a 6-hour duration as required by Little Lake Fire District in a letter dated March 17, 2023 (see Appendix K). The pump system is designed to have the capacity to pump 4,500 gpm to on-site hydrants with a power supply backup for the electric pumps.

Lighting

Details on the location and proposed fixtures for future outdoor lighting of a typical industrial facility would be speculative at this time. However, it is assumed that exterior lighting would be required to illuminate exterior operational areas during working hours and for security purposes. While the location, number and design of the lighting fixtures would be determined in conjunction with building permit application(s) for potential future industrial uses, the lighting would comply with City standards, including the Site Plan Review requirements found in Code Chapter 17.70 – *Site Plan Review*, which requires that lighting be arranged so that light is deflected away from adjoining properties.

Outdoor lights for the proposed expanded log yard operation would be limited to downcast security lights located on or within 150 feet of the office and the Quail Meadows entrance. No additional lighting is planned or proposed at this time.

Noise

Noise generating-uses would be subject to the Noise Policies and Implementation Measures found in Volume I of the Willits General Plan 2020 (1992) and Code Chapter 17.50 – *Performance Standards*, which provides performance standard regulations that specify noise limits, distances for measurement of noise and vibration levels, and parameters for understanding the type, location, and character of noise and vibration sources. The City would evaluate future typical industrial uses for conformance with existing policies and regulations.

The operation of the Project would generate noise in the form of log and lumber trucks transporting logs to and from the Site, log remanufacturing, and site maintenance. As the proposed Project is an extension of the existing log yard, noise levels are anticipated to be consistent with the existing log yard.

III. PROJECT SETTING AND LOCATION

The approximately 21.25-acre Site is comprised of two (2) vacant parcels identified by Quail Meadows and APN: 108-040-18 located at the northern end of the Willits city limits. Surrounding uses include the GlenMark Self Storage adjacent to the west of the Site, the existing log yard adjacent to the south, railroad tracks within the Great Redwood Trail Agency (GRTA) right-of-way adjacent to the east, the Highway 101 bypass to the northeast, and residential structures on parcels with land use designations of R-L and M-G and zoning designations of R1 and ML to the southwest. Nearby uses include N Main Street (previously Highway 101) and commercial uses to the west, Willits High School to the south, industrial uses to the east, and undeveloped agricultural land to the northeast. The existing storage unit facility located adjacent to the west of the Site is currently the northernmost development within the Willits city limits. Views of the Site are obscured from N Main Street to the west due to dense vegetation and existing development, including the storage unit facility, from the railroad located within the GRTA right-of-way to the east due to thick vegetation along the property boundary, and from Highway 101 to the northeast due to thick vegetation and the distance from the highway. Refer to the Photo Log (Appendix B) for photos of existing site conditions from various directions.

A *Biological Resources Assessment* (BRA) was prepared by Clifton Environmental July 2022 to identify special-status plant and wildlife species and sensitive habitats (including wetlands) that have the potential to occur on or in the vicinity of the study area to determine if the proposed project could potentially affect these resources. Refer to the BRA (Appendix C). For the purposes of the BRA, the BRA Area (BRAA) was defined as the Site; however, it should be noted that the BRAA was mapped as approximately 21.84 acres, while Figure 5: Site Plan approximates the size of the Site as 21.25 acres. For the purposes of this IS, it is assumed that the BRAA is an overestimation of the Site size.

As provided in the BRA, Quail Meadows is a nearly level former agricultural field that was previously developed with an RV park. Based on review of aerial imagery, it appears the RV park ceased operation between 2011 and 2013. Quail Meadows contains three (3) primary structures: an approximately 1,500-square-foot office structure; an approximately 6,900-square-foot storage structure; and dilapidated tennis courts. The office structure was previously utilized as a manager's residence and RV park supporting facilities (bathrooms) when the RV park was operational. The office structure has existing connections to electricity (PG&E), water (City), and wastewater disposal (City). The overgrown RV parking stalls are surrounded by landscaping and other minor improvements associated with the previous RV park, such as graded access roads, light poles, and electric utility boxes. A windrow of cottonwood is located along the eastern edge of the parcel, adjacent to the tennis courts. Quail Meadows gently drains from the southwest to the northeast, is bounded on three (3) sides by constructed drainage ditches and is bisected by a fourth ditch. The drainage ditches contain riparian forest, scrub, and herbs. Upland areas are forested, primarily with landscaped trees, or are grassland. APN: 108-040-18 is undeveloped. The north/northwest portion of this parcel contains fill from previous development. The remainder of this parcel contains areas of meadow, wet meadow to the north and pockets of wet meadow in the south, riparian woodland and oak woodland to the east, and various ditches. The ephemeral and intermittent ditches throughout the Site drain into an unnamed tributary to Mill Creek, east of the Site, which is mapped as a Water of the U.S. The unnamed tributary to Mill Creek flows under the Highway 101 bypass into Mill Creek approximately 0.3 miles north of the Site.

The BRA identifies the biological communities at the Site as meadow, wet meadow/seasonal wetland, oak woodland, riparian woodland, and ditch/water. See Table 5, below for the approximate acreages of each biological community.

Table 5. Biological Communities at the Site.

Mapped Community Type	Acres
Meadow	6.78
Wetland	0.97
Oak Woodland	1.26
Riparian Woodland	1.96
Ditch/Water	0.39
Landscaped Woodland	3.51
Disturbed/Fill Scrub	4.51
Paved/Disturbed/Barren	2.46
Total	**21.84**

Source: BRA by Clifton Environmental, July 2022

The most prominent biological community at the Site is meadow, at approximately 7.7 acres. The meadow and wet meadow biological communities run throughout the center of the BRAA and to the road along the northern border of the Site. A small population of sensitive community blue wildrye prairie habitat is located in the meadow. The landscaped woodland occupies approximately 3.5 acres within the Site and sits in the southern half of the Site. The valley oak woodland is primarily located in the northeast portion of the Site Valley oak riparian woodland is located along drainages within the Site. As noted above, other communities include landscaped woodland, disturbed fill/scrub, and paved/disturbed/barren.

Three special-status plants - Baker's meadow foam (*Limnanthes bakeri*, State Rare/CNPS 1B.1), Davy's semaphore grass (*Plueropogon californicus var. davyi*, CNPS 4.3) and North Coast semaphore grass (*Plueropogon hooverianus*, State Threatened/CNPS 1B.1) were identified within the emergent wetland habitat at the northern end of the Site and several special status plant communities (described in Section 4.0 of the BRA) were identified in the northern portion of the Site.

Victor Hollister, Registered Professional Forester (RPF No. 3180) surveyed 367 trees 5 inches in diameter at breast height (DBH) or greater at the Site. Tree species observed include American sycamore (*Platinus occidentalis*), apple (*Malus domesticate*), Austrian pine (*Pinus nigra*), bigtooth aspen (*Populus tremula*), black poplar (*Populus nigra*), black willow *(Salix nigra*), California black oak (*Quercus kelloggii*), Chinese juniper (*Juniperus chinensis*), Lombardy poplar (*Populus nigra*), London plane tree (*Plananus hispanica*), non-native maple (*Acer spp.*), olive (*Olea europaea*), Oregon ash (*Fraxinus latifolia*), Oregon white oak (*Quercus garryana*), ornamental cypress (*Cupressus spp.*), ponderosa pine (*Pinus ponderosa*), sweet gum (*Liquidambar styracifula*), valley oak (*Quercus lobata*), and walnut (*Juglans spp.*). Of the 367 trees surveyed, 206 were found to be mature trees (considered to be 12 inches or greater DBH), as provided in Table 6, below.

Table 6. Inventory of Mature Trees Observed On-Site.

Tree Type	Mature Tree Size Ranges (DBH)		
	≥12 to ≤18 inches	>18 inches	TOTAL
California black oak	1	1	*2*
Valley oak	0	1	*1*

Tree Type	Mature Tree Size Ranges (DBH)		
	≥12 to ≤18 inches	>18 inches	TOTAL
Oregon white oak	31	26	*57*
Bigtooth aspen	7	10	*17*
Austrian pine	1	1	*2*
Non-native maple	18	8	*26*
Chinese juniper	1	0	*1*
London Plane Tree	0	1	*1*
Ponderosa pine	1	1	*2*
Walnut	1	0	*1*
Oregon ash	0	1	*1*
Ornamental Cypress	6	24	*30*
American sycamore	5	1	6
Black willow	14	1	*15*
Black poplar	16	28	*44*
TOTAL	**102**	**104**	***206***

Source: Tree Survey by North Fork Lumber Company, April 2023 (RPF No. 3180).

IV. ENVIRONMENTAL EFFECTS

An environmental checklist follows this section and addresses all potential adverse effects resulting from the proposed Project. No significant adverse effects are expected from any of the proposed activities.

V. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a **"Potentially Significant Impact""** or "**Potentially Significant Unless Mitigation Incorporated**" as indicated by the checklists on the following pages.

	Aesthetics		Agriculture and Forestry Resources		Air Quality
X	Biological Resources	X	Cultural Resources		Energy
X	Geology and Soils		Greenhouse Gas Emissions		Hazards and Hazardous Materials
	Hydrology and Water Quality		Land Use and Planning		Mineral Resources
X	Noise		Population and Housing		Public Services
	Recreation		Transportation	X	Tribal Cultural Resources
	Utilities and Service Systems		Wildfire	X	Mandatory Findings of Significance

An explanation for all checklist responses is included, and all answers take into account the whole action involved and the following types of impacts: off-site and on-site; cumulative and project-level; indirect and direct; and construction and operational. The explanation of each issue identifies (a) the threshold of significance, if any, used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance. The mitigation measures recommended for the Project are included in Appendix D.

In the checklist the following definitions are used:

"**Potentially Significant Impact**" means there is substantial evidence that an effect may be significant.

"**Less than Significant Impact with Mitigation Incorporated**" means the incorporation of one or more mitigation measures can reduce the effect from potentially significant to a less than significant level.
"**Less Than Significant Impact"** means that the effect is less than significant, and no mitigation is necessary to reduce the impact to a lesser level.
"**No Impact"** means that the effect does not apply to the proposed Project, or clearly will not impact nor be impacted by the proposed Project.

DETERMINATION: (To be completed by the Lead Agency on the basis of this initial evaluation)

☐	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
☒	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
☐	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
☐	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
☐	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Dusty Duley
Signature

5/22/2025
Date

Dusty Duley, Community Development Director
Name and Title

I. **AESTHETICS**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

The Site has a land use designation of C-G, and Quail Meadows and APN: 108-040-18 have zoning designations of C2 and C1, respectively. The proposed Project involves a GPA and Rezone to change the land use and zoning designations of the Project Area to M-G and MH, respectively (see Figures 3 and 4). Quail Meadows is a nearly level former agricultural field that was previously developed with an RV park. Quail Meadows contains three (3) primary structures: a 1,500-square-foot office structure; an approximately 6,900-square-foot storage structure; and dilapidated tennis courts. The overgrown RV parking stalls are surrounded by landscaping and other minor improvements associated with the previous RV park.

Surrounding uses include the GlenMark Self Storage adjacent to the west of the Site, the existing log yard adjacent to the south, railroad tracks within the Great Redwood Trail Agency (GRTA) right-of-way adjacent to the east, the Highway 101 bypass to the northeast, and residential structures on parcels with a land use designation of M-G and zoning designation of ML to the southwest. Nearby uses include N Main Street (previously Highway 101) and commercial uses to the west, Willits High School to the south, industrial uses to the east, and undeveloped agricultural land to the northeast. The Site is visible from N Main Street, located west of the Site, when looking down the Quail Meadows entrance; however, views of the Site are generally obscured from N Main Street to the west due to dense vegetation and existing development, including the storage unit facility. Views of the Site are obscured from Highway 101 to the northeast due to thick vegetation and the distance from the highway. Although the existing storage structure at the Site is visible from the railroad located within the GRTA right-of-way to the east, views are generally obscured due to thick vegetation along the property boundary. Photos of the views of the Site from the railroad located within the GRTA right-of-way are shown in Appendix B.

Improvements proposed for the Project generally include vegetation removal, grading, and reuse or removal of existing structures. Vegetation removal and grading activities would facilitate the construction of rocked log storage areas, internal access roads, and access points between the existing log yard and the Site, parking near the office, and two (2) water storage ponds. The proposed improvements for the Project are shown in Figure 5.

Development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such

as water tanks and/or ponds to serve as back-up water supplies and for fire suppression needs; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures.

Neither the Site nor the surrounding properties possess significant scenic aspects that might be impacted by the proposed use of the Site. According to the Resource Management Element of the County of Mendocino General Plan (2020), there are no officially designated State Scenic Highways in Mendocino County, although there are two designated State Scenic Byways through forests, which include the North Central Coast Heritage Corridor on State Route 1 and the Tahoe-Pacific Heritage Corridor encompassing sections of State Route 20 and Highway 101. While not officially designated as State Scenic Highways, Highway 20 through Mendocino County is eligible for designation and Highway 128, which passes through Yolo, Napa, Sonoma, and Mendocino Counties and is 140 miles long, was recently made eligible for designation under Assembly Bill (AB) 998 signed by Governor Gavin Newsom in July 2019. However, Highways 20 and 128 are not in the vicinity of the Site.

I.a-b) Neither the Project nor other typical industrial facilities would have a significant effect on the aesthetics of the surrounding area or scenic vistas. While the Site is located along Highway 101, according to the California Department of Transportation (Caltrans) State Scenic Highway Program (2023), this portion of the highway is not designated as a scenic highway nor eligible for such status. Since the Site is not a designated scenic vista and is not located in the vicinity of a designated scenic vista or state scenic highway, neither Project nor other typical industrial facilities would impact a scenic vista or damage scenic resources or views along a state scenic highway. No impact would occur.

I.c) Construction of the proposed Project or other typical industrial facilities may temporarily alter the visual character of the Site with equipment, construction materials, and workers. However, the changes to these views during construction would be minor, temporary, and would generally only be visible to the public in the immediate vicinity of the active portion of construction.

Although the Project and other typical industrial facilities would slightly modify the existing visual character of the Site and its surroundings, they would not substantially degrade the existing visual characteristics or quality of public views of the Site and its surroundings or conflict with other regulations governing scenic quality. There are no designated scenic vistas in the vicinity of the Site nor any significant viewsheds. As discussed above, public views of the Site are limited. The Site is visible from N Main Street, located west of the Site, when looking down the Quail Meadows entrance; however, views of the Site are generally obscured from N Main Street to the west due to dense vegetation and existing development, including the storage unit facility. Views of the Site are obscured from Highway 101 to the northeast due to thick vegetation and the distance from the highway. The existing storage structure at the Site is visible from the railroad located within the GRTA right-of-way to the east; however, views are generally obscured due to thick vegetation along the property boundary. Although the Site may be partially visible when looking down the Quail Meadows entrance and from portions of the railroad, the visual character of the Site would not be substantially degraded, as the existing log yard adjacent to the south is an industrial use. Therefore, the Project and other typical industrial facilities would be consistent with surrounding uses, and views would be of a similar nature. A less than significant impact would occur.

I.d) The Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. New lighting is proposed in the form of outdoor security lights located on or within 150 feet of the office and the Quail Meadows entrance. All outdoor lighting would be limited to downcast security lights. Additionally, no aspects of the Project involve materials that would produce glare.

Access to the Site would be limited to typical business hours for operations of a similar nature, 7:00 a.m. to 7:00 p.m. Monday through Saturday, unless alternative hours of operation are approved by the City. The Project would be anticipated to operate between 6:00am and 5:00pm, with occasional peak deliveries as early as 5:30 a.m. and as late as 7:00pm. Therefore, the Project would have a less than significant impact on day or nighttime views due to light and glare.

Other typical industrial facilities would also not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Should additional industrial facilities be introduced to the Site, the location, number, and design of associated lighting fixtures would be determined in conjunction with building permit application(s) and would be required to comply with City standards, including the Site Plan Review requirements found in Code Chapter 17.70 – *Site Plan Review*, which requires that lighting is arranged so that light is deflected away from adjoining properties. Therefore, other typical industrial facilities would have a less than significant impact on day or nighttime views due to light and glare.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less than Significant Impact** on Aesthetics.

II. AGRICULTURE AND FORESTRY RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g), timberland (as defined by PRC section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) 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 forestland to non-forest use?	☐	☐	☐	☒

DISCUSSION

The Site is neither designated nor zoned for agricultural use or forest land. The Site has a land use designation of C-G, and Quail Meadows and APN: 108-040-18 have zoning designations of C2 and C1, respectively. The proposed Project involves a GPA and Rezone to change the existing land use and zoning designations of the Site to M-G and MH, respectively (see Figures 3 and 4). Additionally, the Applicant requests a BLA to retain an approximately 2.2-acre portion of APN: 108-040-18 as C-G and C1 land use and zoning designations, respectively. No land use or zoning changes are proposed to this portion of APN: 108-040-18.

The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) has defined Important Farmlands based upon several factors, including the physical and chemical characteristics of the land and the suitability of the land for producing crops. Important Farmlands are afforded special protection due to their importance to agricultural production.

California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) shows that the Site is characterized as 'Grazing Land' and 'Urban and Built-up Land' and therefore does not categorize the Site as having any type of Important Farmland [DOC, 2016 (a)].

II.a) The Site would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the FMMP, to non-agricultural uses. As noted above, the Site is designated as "Urban and Built-Up Land" [DOC, 2016 (a)] and is not currently designated or zoned for agricultural use under the City of Willits General Plan (1992) or City Code. No impact would occur.

II.b) As previously discussed, Quail Meadows has a zoning designation of C2, and APN 108-040-18 has a zoning designation of C1 under the City Code. Neither parcel is currently under a Williamson Act contract. Therefore, the proposed Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

II.c) The Site is neither designated nor zoned as forest land or timberland. No impact would occur.

II.d) As discussed above, the Site is currently zoned C2 and C1 under the City Code, is partially developed with remnants of an RV park on Quail Meadows and is surrounded by development including the existing log yard, a self-storage facility, the Highway 101 bypass, and residential uses. As the Site is not forest land nor located in close proximity to forest land, neither the proposed Project nor other typical industrial facilities would result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

II.e) The proposed Project would not trigger other changes in the existing environment, on or off-site, which are not discussed herein. While the proposed Project would facilitate use of the Site as a log yard, the Site would receive harvested logs that would otherwise be stored at an alternative location. Therefore, the proposed Project does not involve other changes in the existing environment that could result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur.

Other typical industrial facilities would not be anticipated to trigger other changes in the existing environment, on or off-site, which could result in the conversion of farmland, to non-agricultural use or conversion of forestland to non-forest use. As the Site is not farmland or forest land, as described in Section II.a-d (Agriculture and Forestry Resources), industrial facilities would not impact farmland or forest land on-site. Upon review of the uses principally and conditionally permitted in the MH district in Table 2, none of the allowed uses would be anticipated to result in off-site conversion of farmland or forest land. No impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Agricultural and Forestry Resources.

III. AIR QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

DISCUSSION: Air pollution control in the State of California is based on federal, state, and local laws and regulations. According to the 2005 Mendocino County Air Quality Management District (MCAQMD) Particulate Matter Attainment Plan (PM Attainment Plan) (pg. 5), the United States Environmental Protection Agency (EPA), California Air Resources Board (CARB), and regional clean air agencies all regulate air quality. The EPA and the CARB have set thresholds for each of the criteria pollutants, which include ozone (O_3), carbon monoxide (CO), oxides of nitrogen (NO_x), lead (Lb), sulfur dioxide (SO_2), particulate matter less than 10 microns in size (PM_{10}), and particulate matter less than 2.5 microns in size ($PM_{2.5}$). The standards set by the CARB are generally more stringent than those set by the EPA and the CARB has set additional standards for visibility-reducing particles (of any size), sulfates, and hydrogen sulfide (H_2S). These standards are based on observable short-term (acute) health effects (MCAQMD, 2005).

The Site is located within the North Coast Air Basin (NCAB) and is subject to the requirements of the MCAQMD. The MCAQMD is responsible for monitoring and enforcing the state and federal Clean Air Acts as well as local air quality protection regulations in Mendocino County. The entire NCAB is currently designated as "non-attainment," or in excess of allowable limits, for the state 24-hour allowable limits for breathable PM_{10}, and as "attainment," or within allowable limits, with respect to the balance of the criteria pollutants. The MCAQMD has been determined to be in "attainment," or within allowable limits, for all federal and state ambient air quality standards, except for the state annual average PM_{10} standard and the 24-hour PM_{10} standard. The California Clean Air Act does not require attainment plans or transportation conformity for air quality districts (Districts) that exceed the PM_{10} standard, but only requires that the Districts make reasonable efforts toward coming into attainment, defined as a five percent reduction in emissions per year, until the standard is attained. Although not required for coming into attainment for the state standard, the MCAQMD adopted the PM Attainment Plan in 2005. The PM Attainment Plan includes a description of local air quality, the sources of local particulate matter (PM) emissions, and recommended control measures to reduce future PM_{10} levels. While PM_{10} levels have dropped over the last 20 years, due to changing industrial base, enhanced regulations, and increased enforcement by the MCAQMD, the MCAQMD still exceeds the State PM_{10} level each year. The majority of these exceedances result from wildfires, residential wood burning, unpaved roads, and construction activities (MCAQMD, 2005).

Improvements proposed for the Project generally include vegetation removal, grading, and reuse or removal of existing structures. Vegetation removal and grading activities would facilitate the construction of rocked log storage areas, internal access roads, and access points between the existing log yard and the Site, parking near the office, and up to two (2) water storage ponds.

Emissions from construction of the Project would be comprised of direct and indirect emissions. Direct temporary emissions during construction, including exhaust and fugitive dust, would result from operation of construction equipment. Indirect emissions would be produced during operation by log trucks, lumber trucks, and other vehicles, including employees traveling to and from the Site.

Development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such as water tanks and/or ponds to serve as back-up water supplies and for fire suppression needs; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures.

Operation of a typical industrial facility would be subject to Code Chapter 17.50 – *Performance Standards*. Pursuant to Code Section 17.50.040 – *Locations where determinations are made for enforcement of performance standards* (1982), compliance with performance standards would generally be enforced within five hundred (500) feet of the Project Area. Operations would be anticipated to generally occur between 7:00am and 7:00pm up to six (6) days per week. Typical operational activities would be anticipated to include employee trips to the typical industrial facility, operation of heavy equipment within and outside of structures, heavy truck traffic to/from the facility for materials transfers, and use of machinery within structures.

A Focused Transportation Impact Study for the Sanhedrin Timber Company Entitlements Project (Focused Traffic Study) was prepared by W-Trans on November 29, 2023 (Appendix E), to assess the potential transportation related impacts associated with the proposed Project and other typical industrial facilities. According to the Focused Traffic Study, the Project is intended to increase operational efficiencies for the Applicant by reducing the number of truck trips between Eureka and Willits. The Project is not expected to increase trips on peak days (W-Trans, 2023).

The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows that trip generation for light industrial uses are substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023).

III.a-b) Neither the Project nor other typical industrial facilities would conflict with or obstruct implementation of any air quality plan or result in a cumulatively considerable net increase of PM_{10}, the only criteria pollutant for which the Site region is in non-attainment. As noted above, the MCAQMD is in "non-attainment" for PM_{10} (MCAQMD, 2005). Therefore, any use or activity that generates unnecessary airborne particulate matter may be of concern to MCAQMD and has the potential to create significant Project-specific and cumulative effects to air quality. MCAQMD has advised that generally an activity that individually complies with the state and local standards for air quality emissions would not result in a cumulatively considerable net increase in the countywide PM_{10} emissions.

While Project construction would generate temporary emissions, construction activities would be managed in accordance with the Rules and Regulations of the MCAQMD (February 2011) and the Applicant would obtain air quality permits from the MCAQMD, as needed. The contractor would maintain all construction equipment in good working order and would control exhaust emissions from construction equipment in accordance with California Code of Regulations, Title 13, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment and is enforced by the CARB. In addition, the contractor would

comply with Rule-1-430 (Fugitive Dust Emissions) of Chapter IV (Prohibitions) of Regulation 1 (Air Pollution Control Rules) of the MCAQMD's Rules and Regulations (February 2011), which requires the suppression of fugitive dust during construction and operation. Furthermore, the Project would be subject to current and future regulations adopted by MCAQMD, including the PM Attainment Plan (2005), and compliance with these regulations would ensure the Project would not result in a substantial increase of PM_{10} within the vicinity of the Site.

Additionally, Project operations would not result in a substantial increase of PM_{10}, as the overall Project Vehicle Miles Traveled (VMT) is expected to be reduced. Additional employees may be expected to increase the VMT associated with the operation of the Project. However, according to the Focused Traffic Study, the Project is intended to increase operational efficiencies for the Applicant by reducing the number of truck trips between Eureka and Willits (W-Trans, 2023). Therefore, the Project is not expected to increase VMT.

Construction of other typical industrial facilities would not conflict with or obstruct implementation of any air quality plan or result in a cumulatively considerable net increase in PM_{10}. Construction of typical industrial facilities would be required to obtain air quality permits from the MCAQMD, as needed, and would be required to comply with the abovementioned regulations to limit idling and suppress fugitive dust.

Operation of typical industrial facilities would not be anticipated to result in a substantial increase of PM_{10}. The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows that trip generation for light industrial uses is substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023). The proposed Rezone is for MH, heavy industrial, rather than light industrial. However, commercial uses tend to generate a higher number of trips, as commercial uses are often utilized by the public. Light and heavy industrial uses are not utilized by the public to the same level as commercial uses. Based on a review of the uses permitted in C1, C2, and MH in Table 2 of this IS, it appears that uses permitted in C1 and C2 tend to involve more interaction with the public than uses permitted in MH. Based on the substantially lower trip generation of light industrial uses than typical commercial uses and the nature of public utilization of commercial uses, it is reasonable to anticipate that other typical industrial facilities permitted by the GPA and Rezone would not result in a higher trip generation than would be anticipated with the existing zoning designations of C1 and C2. Other emissions generated by typical industrial facilities, aside from transportation emissions, would not be significant, as the Applicant would obtain air quality permits from the MCAQMD, as needed.

As construction of the Project would comply with State and local standards for air quality emissions, and overall Project VMT is expected to be reduced by Project operations, the Project would not result in a cumulatively considerable net increase in the countywide PM_{10} emissions. As other typical industrial facilities would also comply with State and local standards for air quality emissions, would not result in additional trip generation than would be anticipated in the existing zoning designations of C1 and C2, and would obtain air quality permits from the MCAQMD, as needed, a less than significant impact would occur.

III.c-d) The Project would not expose sensitive receptors to substantial pollutant concentrations, nor create objectionable odors affecting a substantial number of people. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants, and include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). The nearest locations of potential sensitive receptors to the Site include residential dwellings southwest of the Site on land

with a land use designation of M-G and zoning designation of ML and Willits High School approximately 600 feet south of the Site.

The proposed Project would be anticipated to create exhaust and fugitive dust during construction or operation of the Project. Due to the close proximity of sensitive receptors to the Site, the Project shall comply with California Code of Regulations, Title 13, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment, and Rule-1-430 (Fugitive Dust Emissions) of Chapter IV (Prohibitions) of Regulation 1 (Air Pollution Control Rules) of the MCAQMD's Rules and Regulations (February 2011), which suppresses fugitive dust during construction and operation and would maintain all construction equipment in good working order such that exhaust and fugitive dust emissions are minimized. Additionally, existing and proposed dust control practices consist of watering the operating surfaces of the log yard at regular intervals during dry weather periods. Maintaining sufficient moisture content on ground surfaces effectively minimizes the quantity of airborne particulates created by heavy equipment and truck traffic. The Applicant will prepare a Dust Control Plan for approval by the City. By complying with these regulations and implementing these dust control practices, potential impacts to sensitive receptors would be reduced to less than significant. Waste generated by the Project would be hauled off-site to a licensed disposal facility, and as such, waste storage piles would not generate fugitive dust. Additionally, the overall Project VMT is expected to decrease. A less than significant impact would occur.

Other typical industrial facilities would not be anticipated to create exhaust and fugitive dust during construction or operation. Future projects would be required to comply with the abovementioned regulations to limit idling and suppress fugitive dust. Additionally, based on the substantially lower trip generation of light industrial uses than typical commercial uses and the nature of public utilization of commercial uses, it is reasonable to anticipate that other typical industrial facilities permitted by the GPA and Rezone would not result in a higher trip generation than would be anticipated with the existing zoning designations of C1 and C2. As such, vehicle emissions during operations would not be anticipated to exceed what would be allowed under the existing zoning designations of C1 and C2. A less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Air Quality.

IV. **BIOLOGICAL RESOURCES**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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 California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐
d) 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?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

The following environmental setting is generally based on the BRA dated September 27, 2022, and prepared by Clifton Environmental LLC (see Appendix C) to document biological species and determine to what extent the proposed Project may affect special status species and natural resources (2022). For the purposes of the BRA, the BRAA was defined as the Site.

The findings of the BRA are based on both research and field surveys. A list from the U.S. Fish and Wildlife Service's (USFWS) Critical Habitat Portal was obtained in 2020 and updated on April 22, 2022, to identify federal-listed, candidate, or proposed species that potentially occur in or could be affected by the Project. The California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) online searches were queried for the Willits 7.5' USGS quad and the eight surrounding quads to determine likely and known occurrences of special status species on or near the Site. Fieldwork for the BRA included botanical surveys conducted on April 16, May 22, and June 6, 2021, and May 7, May 13, and May 31, 2022. A routine-level preliminary wetland delineation of the Site was conducted on April 3, 2021, and April 30, May 5, May 7, May 10, and May 13, 2022, by Estelle Clifton (Clifton, 2022).

The BRAA is a nearly level former agricultural field, part of which was formerly developed as an RV park. There are multiple ditches and riparian habitat adjoining and within the BRAA. While undisturbed natural communities are present, considerable anthropogenic disturbance has occurred in the BRAA as evidenced

by recreational buildings and structures, paved, rocked, and seasonal roads, disturbance vegetation, berms near drainages, and the ditch structures present. The biological communities present in the Site include meadow, wet meadow (wetlands), oak woodland, riparian woodland, and ditch/water (Clifton, 2022).

The BRA identified several natural communities of special concern by CDFW, including Blue Wildrye Prairie, Valley Oak Woodland, and Oak Riparian Woodland. Blue Wildrye Prairie is ranked as an "inexact" or "uncertain" natural community of special concern, and occurs in three patches across the property, totaling approximately 0.2 acres. While Valley Oak Woodland is considered a common natural community in the area, it is considered a natural community of special concern by CDFW. Approximately 1.3 acres of Valley Oak Woodland was observed at the Site. Valley Oak Riparian Woodland, also a natural community of special concern by CDFW, approximately 2 acres was observed at the Site, primarily along drainages (Clifton, 2022).

Aquatic resources on-site were determined in the BRA by a combination of background materials and a routine-level preliminary wetland jurisdiction. Six (6) seasonal wetlands, totaling approximately 1 acre, exist within the BRAA that may be considered jurisdictional features regulated under Section 401 and Section 404 of the Clean Water Act (CWA). Additionally, the BRA identified seven (7) drainage ditches. Ditch 1 is an intermittent water mapped as a Relatively Permanent Water. Ditch 2 is an intermittent drainage containing wetlands. Ditch 3 is an ephemeral and sparsely vegetated drainage that runs through the center of the southern portion of the Site. It is believed to be the original channel for Ditch 2. Ditch 4 is ephemeral with a wetland vegetation and appears to have been dredged along the parcel line at the center of the Site. Ditch 5 is intermittent water surrounded by wetlands containing rare plants. Ditch 6 is an intermittent stream that shows less signs of alteration than other drainages in the Site. Ditch 7 is an intermittent drainage ditch located at the north edge of the existing log yard. Aquatic habitats within the Site were not found to be suitable for Northern California steelhead, Chinook salmon, and coho salmon, as the Highway 101 by-pass culvert may be an impassable barrier for fish. In addition, the ditches within and adjacent to the Site appear to be low-quality habitat, due to the low gradient flows creating brackish water and soil substrate (Clifton, 2022).

Special status plants and animals, legally protected under the California and federal Endangered Species Acts (CESA and ESA) or other regulations, and species that are considered rare by the scientific community, were evaluated for their potential for occurrence within the BRAA. Special status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the ESA or CESA; CDFW Species of Special Concern; USFWS Birds of Conservation Concern; CDFW special status invertebrates; and those with California Rare Plant Rank (CRPR) 1A (Plants Presumed Extinct in California), CRPR 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), or CRPR 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere), as indicated by the CNPS Inventory. In addition to regulations for special status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under this legislation, destroying active nests, eggs, and young is illegal. The MBTA generally prohibits the take of migratory birds, and their nests and roosting bats are protected under CDFW regulations (Clifton, 2022).

Table 1 of the BRA contains regional species and habitats of concern, along with the potential for each species to occur within the BRAA, with data received from USFWS, CNDDB, and CNPS records. Thirty-four (34) special status plant species were identified during Project scoping, although nineteen (19) were found not to have potential suitable habitat present on-site. Three (3) special status plant species were identified on-site during the field surveys, including: Baker's meadowfoam (*Limnanthes bakeri*), North Coast semaphore grass (*Pleuropogon hooverianus*), and Davy's sephamore grass (*Pleuropogon californicus var. davyi*). Additionally, during Project scoping, twenty-three (23) special status wildlife species were identified and reviewed to determine if suitable habitat is present within or directly adjacent to the Site (see BRA, Table 1).

Of these 23 species, three (3) were found to potentially have suitable habitat within the Site, and one (1) was observed during field surveys. White-tailed kites (*Elanus leucurus*) were observed at the Site. While yellow warbler (*Dendroica petechia brewsteri*) and American badger (*Taxidea taxus*) were not identified on-site, suitable habitat for each species exists at the Site (Clifton, 2022).

Victor Hollister, RPF No. 3180, surveyed 367 trees 5 inches or greater DBH at the Site. Tree species observed include American sycamore (*Platinus occidentalis*), apple (*Malus domesticate*), Austrian pine (*Pinus nigra*), bigtooth aspen (*Populus tremula*), black poplar (*Populus nigra*), black willow (*Salix nigra*), California black oak (*Quercus kelloggii*), Chinese juniper (*Juniperus chinensis*), Lombardy poplar (*Populus nigra*), London plane tree (*Plananus hispanica*), non-native maple (*Acer spp*.), olive (*Olea europaea*), Oregon ash (*Fraxinus latifolia*), Oregon white oak (*Quercus garryana*), ornamental cypress (*Cupressus spp.),* ponderosa pine (*Pinus ponderosa*), sweet gum (*Liquidambar styracifula*), valley oak (*Quercus lobata*), and walnut (*Juglans spp*.). Pursuant to a Tree Survey completed by Victor Hollister, RPF No. 3180, in April 2023 (see Appendix A), the Project involves the removal of 116 mature trees to facilitate grading and site development for the log yard, as shown in Table 3 of this IS. While the log yard is one of various uses that would be allowed in the Project Area upon approval of the GPA and Rezone, for the purposes of this IS, it is assumed that the tree removal proposed is representative of the tree removal required for development of a typical industrial facility at the Site, as trees would be removed in the center of the Project Area and generally retained along the eastern property boundary.

Although the design of future projects at the Site that would be allowed by the GPA and Rezone are unknown, development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such as water tanks and/or ponds to serve as back-up water supplies and for emergency situations; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures.

IV.a) Three (3) special status plant species and three (3) special status animal species were either observed on-site or identified as having the potential to occur on-site. Each special status species is described in further detail below:

Special Status Plant Species

Baker's meadowfoam (*Limnanthes bakeri*) is listed as a State Rare species that is seriously endangered in California. Approximately eight (8) square feet of Baker's meadowfoam was located near a road at the Site. However, the Project is not proposing use of the road, and no maintenance or alterations are proposed near the Baker's meadowfoam. Therefore, Baker's meadowfoam would not be impacted by the proposed Project (Clifton, 2022). However, as described in Mitigation Measure BIO-1, temporary fencing during construction would ensure that construction activities do not unintentionally encroach upon Baker's Meadowfoam.

North Coast semaphore grass (*Pleuropogon hooverianus*) is listed as a State Threatened species that is seriously endangered in California. A large population of North Coast semaphore grass was located during the field surveys near a drainage ditch. Additionally, Davy's semaphore grass (*Pleuropogon californicus var. davyi*) is listed as a State Candidate Threatened species that has limited distribution in California and was located within a wetland area during the field surveys. While the Project would not directly impact either species, the BRA recommends marking the limits of listed species and sensitive habitat with temporary fencing to prevent impacts to the North Coast semaphore grass and Davy's semaphore grass populations

(Clifton, 2022). Temporary fencing during construction would ensure that construction activities do not unintentionally encroach upon listed species. This has been included as Mitigation Measure BIO-1.

As the design of future projects is unknown, Mitigation Measure BIO-1 would be implemented during construction of other typical industrial facilities at the Site, as they occur, to ensure listed plant species are not impacted.

Operation of the Project or other typical industrial facilities may impact Baker's meadowfoam, North Coast Semaphore grass, and Davy's semaphore grass if employees are unaware of the locations of these listed plant species. Mitigation Measure BIO-2 would require that a barrier be installed around the limits of Baker's meadowfoam, North Coast Semaphore grass, and Davy's semaphore grass. This would prevent unintended encroachment during operations and ensure operations do not impact listed species.

Special Status Wildlife Species

White-tailed kites (*Elanus leucurus*) are classified as Fully Protected under the CESA. White-tailed kites are known to inhabit open grasslands, meadows, marshes, foothills, and valley margins adjacent to deciduous woodlands in California lowlands west of the Sierra Nevada range, and nest January through August. The meadow and woodland plant communities of the Site provide both hunting and nesting habitat. White-tailed kites were observed at the Site during the field surveys. Project construction has the potential to impact white-tailed kite nesting habitat in the Valley Oak Woodland and Valley Oak Riparian Woodland in the form of vegetation disturbance and tree removal. To minimize impacts to white-tailed kites, the BRA recommends a nesting survey be conducted if vegetation disturbance occurs during its nesting season and buffers maintained around any active nests identified during the survey. This has been included as Mitigation Measure BIO-3. This would ensure that white-tailed kites nesting at the Site are not impacted by vegetation disturbance and tree removal. Mitigation Measure BIO-3 would also apply during construction of other typical industrial facilities that may occur at the Site to reduce impacts of potential construction and vegetation removal.

Yellow warbler (*Dendroica petechia brewsteri*) is classified as a Species of Special Concern by CDFW and a Bird of Conservation Concern by USFWS. Yellow warblers breed from April to late July and are known to frequent open- to medium-density woodlands and forests with a heavy brush understory during their breeding period. Deciduous riparian areas with cottonwood, alder, willow, and other miscellaneous small trees and shrubs are ideal breading habitat. Although no yellow warblers were identified within the BRA, the Valley Oak Riparian Woodland could potentially serve as habitat for this species during breeding season. Project construction has the potential to impact yellow warbler nesting habitat. To minimize potential impacts to yellow warblers, the BRA recommends a nesting survey be conducted if vegetation disturbance occurs during its nesting season and buffers maintained around any active nests identified during the survey. This has been included as Mitigation Measure BIO-3. This would ensure that yellow warblers nesting at the Site are not impacted by vegetation disturbance and tree removal. Mitigation Measure Bio-3 would also apply during construction of other typical industrial facilities that may occur at the Site to reduce impacts of potential construction and vegetation removal.

American badger (*Taxidea taxus*) is classified as a Species of Special Concern by CDFW. They are most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils, and mate in late summer or early autumn. While the Site may contain suitable habitat, no American badgers were observed on-site during field surveys, and there is a low likelihood that the species would use the Site as habitat. To minimize potential impacts to American badgers, if an American badger den is encountered during construction, works shall halt immediately in the vicinity of the den, and a qualified biologist shall

evaluate the potential den site. If the hole is determined to be a potential American badger den, CDFW shall be notified, and an appropriate buffer shall be established around the den. This has been included as Mitigation Measure BIO-4. This would ensure that occupied maternity dens are avoided. Additionally, the implementation of passive den exclusion measures on occupied non-maternity dens would allow American badgers to move elsewhere prior to disturbance activities. Mitigation Measure Bio-4 would also apply during construction of other typical industrial facilities that may occur at the Site to reduce potential disturbance of American badgers.

Due to the high number of sensitive species and habitat within the Site, Mitigation Measure BIO-5, which requires construction personnel for the Project or other typical industrial facilities to undergo training by a qualified biologist prior to construction would be incorporated. With the incorporation of Mitigation Measures BIO-1 through BIO-5, a less than significant impact would occur.

IV.b) The BRA identified several natural communities of special concern by CDFW, including Blue Wildrye Prairie, Valley Oak Woodland, and Oak Riparian Woodland. Each natural community is described in further detail below:

While Valley Oak Woodland is considered a common natural community in the area, it is considered a natural community of special concern by CDFW. Approximately 1.3 acres of Valley Oak Woodland was observed at the Site (Clifton, 2022). Valley Oak Riparian Woodland, also a natural community of special concern by CDFW, approximately 2 acres was observed at the Site, primarily along drainages (Clifton, 2022). Project construction would generally avoid permanent impacts to Valley Oak Woodland and Valley Oak Riparian Woodland communities. However, seven (7) mature oak trees (considered to be 12 inches or greater DBH) throughout the Site would require removal. See Table 3 of this IS for a summary of the approximate size ranges in DBH of the of the seven (7) mature oaks proposed for removal. To offset the removal of mature oak trees, the Applicant shall offset the removal of mature oak trees through one or more of the oak woodland mitigation alternatives in PRC §21083.4, which may include conserving oak woodlands through the use of conservation easements, planting an appropriate number of trees, contributing funds to the Oak Woodlands Conservation Fund, or other mitigation measures developed by the City, if any. If the Applicant proposes to plant trees as all or part of mitigation, the Applicant shall prepare an Oak Mitigation and Monitoring Plan (MMP) that includes mitigation ratios for replanted trees, description and size of the area for replanting, planting techniques, maintenance and monitoring activities and schedule, and remediation measures. Mitigation for oak tree removal consistent with PRC §21083.4 has been included as Mitigation Measure BIO-6. This would ensure that oak tree removal is appropriately mitigation for and that if on-site mitigation is proposed, oak trees are replaced and maintained. Construction of other typical industrial facilities would have the potential to require the removal of oak trees. As such, Mitigation Measure BIO-6 would also apply during construction of other typical industrial facilities that may occur at the Site.

Blue Wildrye Prairie is ranked as an "inexact" or "uncertain" natural community of special concern and occurs in three (3) patches across the property, totaling approximately 0.2 acre. Project construction, including construction of the proposed northern water storage pond and a water pipeline, would result in the permanent loss of Blue Wildrye Prairie (Clifton, 2022). Mitigation Measure BIO-7 would be incorporated to require that portions of the Site be revegetated with a native seed mix that includes Blue wildrye (*Elymus glaucus*) at a minimum ratio of 2.6 to 1. Construction of other typical industrial facilities would also have the potential to impact Blue Wildrye Prairie. As such, Mitigation Measure BIO-7 would also apply during construction of other typical industrial facilities that may occur at the Site. Mitigation Measure BIO-7 would ensure that Blue Wildrye Prairie is revegetated and maintained to compensate for areas of disturbed Blue Wildrye Prairie.

Operation of the Project or other typical industrial facilities may impact Blue Wildrye Prairie if employees are unaware of the locations of this sensitive habitat. Mitigation Measure BIO-2 would require that a barrier be installed around the limits of Blue Wildrye Prairie to prevent unintended encroachment during operations. This would avoid impacts to Blue Wildrye Prairie.

Incorporation of Mitigation Measures BIO-1 and BIO-2, marking the limits of listed species and sensitive habitat with temporary fencing during construction and a barrier during operation, would ensure that construction and operation do not impact natural communities of special concern beyond those permitted by construction entitlements. Additionally, to mitigate the permanent loss of mature oak trees and Blue Wildrye Prairie, the Applicant shall mitigate removed mature oak trees pursuant to PRC §21083.4 and revegetate with native grasses that include blue wildrye, respectively. These mitigation measures have been included as Mitigation Measures BIO-6 and BIO-7.

Implementation of Mitigation Measures BIO-1, BIO-2, BIO-6, and BIO-7 would enhance existing on-site habitat for sensitive natural communities. With mitigation incorporated, a less than significant impact would occur.

IV.c) Six (6) seasonal wetlands were observed at the Site that may be considered jurisdictional features regulated under Section 401 and Section 404 of the CWA. The proposed Project would impact seasonal wetlands. Construction-related impacts are estimated to cause temporary impacts to 0.01 acre of seasonal wetlands and result in the permanent loss of approximately 0.02 acre of seasonal wetlands. Additionally, Ditch 2 and 4 would be impacted by fill, construction of new truck road drainage crossings, minor road reconstruction impacts, and pipeline construction. A total of 0.01 acre of Ditch would be temporarily disturbed due to Project construction and an estimated 0.06 acre would be permanently impacted (Clifton, 2022). As the design of future projects is unknown, construction of other typical industrial facilities may have the potential to impact wetlands.

Due to the proposed impacts to potentially jurisdictional waters, a Section 404 CWA permit through the U.S. Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification (WQC) from the North Coast Regional Water Quality Control Board (NCRWQCB) shall be obtained from the respective agencies, as required by Mitigation Measure BIO-8 below prior to the issuance of grading permits for construction activities within or adjacent to these resources. This would ensure that any impacts to wetlands are compensated for to the satisfaction of permitting agencies. Mitigation Measure BIO-8 would be required for both the Project and other typical industrial facilities. Additionally, Mitigation Measure BIO-1, marking the limits of listed species and sensitive habitats with temporary fencing, would ensure that construction does not impact seasonal wetland beyond those permitted by construction entitlements. Through implementation of Mitigation Measure BIO-2, installing barriers around the limits of listed species and sensitive habitats to protect them from unintended encroachment, impacts to wetlands would be avoided during operation of the Project and other typical industrial facilities. With mitigation incorporated, a less than significant impact would occur.

IV.d) The Project and other typical industrial facilities would not be anticipated to substantially interfere 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. Although the Project and other typical industrial facilities would involve new development at the Site, wildlife movement would continue to be unimpeded on the undeveloped land north, east, and west of the Site. Additionally, although habitat on and adjacent to the Site provides potential nesting habitat for white-tailed kites and yellow warblers, Mitigation Measure BIO-3, which requires pre-construction nesting bird surveys if construction is to occur within the nesting seasons for these species, would ensure that white tailed kites and yellow warblers nesting

at the Site are not impacted by vegetation disturbance and tree removal, reduce the potential impact to these species to a less than significant level. With mitigation incorporated, a less than significant impact would occur.

IV.e) The proposed Project and other typical industrial facilities would not conflict with any local policies or ordinances protecting biological resources. Although natural communities of special concern and habitat for special status species may be present on-site (Clifton, 2022), Mitigation Measures BIO-1 through BIO-8 would reduce potential impacts to less than significant. With mitigation incorporated, a less than significant impact would occur.

IV.f) There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that apply to the Site. No impact would occur.

MITIGATION MEASURES

BIO-1: Prior to the start of construction, areas of the Site associated with listed species and sensitive habitats and that are not proposed to be impacted shall be identified and designated as Environmentally Sensitive Areas (ESAs) using flagging, high-visibility orange fencing, and/or silt fencing. This applies specifically to areas with Baker's meadowfoam, North Coast semaphore grass, Davy's semaphore grass, Blue Wildrye Prairie, Valley Oak Woodland, Valley Oak Riparian Woodland, and wetlands. ESAs shall be shown on design plans or maps for the proposed project, to be provided to construction personnel. The ESA flagging/fencing shall remain in place throughout the duration of construction activities to prevent the encroachment of construction equipment/personnel into sensitive areas. To the extent feasible, construction activities shall be located outside of any designated ESA.

BIO-2: Barriers shall be installed around the limits of listed species and sensitive habitats that may be impacted by unintended encroachment during operation of the proposed project and that are not easily identified, including Baker's meadowfoam, North Coast semaphore grass, Davy's semaphore grass, Blue Wildrye Prairie, and wetlands. These barriers shall be installed in a way that would be clearly identified by employees but would not interfere with wildlife movement.

BIO-3: Construction activities for the proposed project shall be conducted, if possible, outside of the nesting season for white-tailed kites or yellow warblers (January 15 to August 15 for white-tailed kites and March 15 to August 15 for yellow warblers) to avoid direct effects to these species. If construction activities begin during the nesting season, a qualified biologist shall conduct a pre-construction survey for active nests in suitable nesting habitat within 500 feet of the construction area no more than seven (7) days prior to the initiation of construction. If no active nests are identified during the pre-construction survey, no further mitigation is necessary. If at any time during the nesting season construction stops for a period of seven (7) days or longer, a supplemental pre-construction survey shall be conducted prior to construction resuming.

If active nests are found within the construction footprint or immediately adjacent to construction activities within the project area, the biologist shall establish a species-appropriate buffer or exclusion zone around the nest (approximately 500 feet for white-tailed kites and 100 feet for yellow warblers) and/or operational restrictions within the buffer in consultation with the California Department of Fish and Wildlife (CDFW). Construction activities shall avoid nest buffers until the qualified biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. The qualified biologist may modify these buffers, in consultation with CDFW, depending upon the species, nest location, and existing visual buffers.

If construction activity is required within the established buffer, the qualified biologist shall be consulted prior to beginning construction activities within this area. If the qualified biologist determines that the activity would impact the nest, the qualified biologist shall have the authority to stop work. If the qualified biologist determines that the activity would not disturb the nest, construction may continue under supervision of the qualified biologist or designee.

BIO-4: In the unlikely event that an American badger den (evidenced by a large mound of dirt piled outside an excavated den) is encountered during construction of the proposed project, construction work shall halt in the vicinity of the den, a qualified biologist shall evaluate the potential den site, and CDFW shall be notified if the hole is determined to be a potential American badger den. A 100-foot no-work buffer shall be established around occupied maternity dens throughout the puprearing season (February 15 through July 1) and a 15-foot no-work buffer around occupied dens during other times of the year. If non-maternity dens are found and cannot be avoided during construction activities, they shall be monitored by a qualified biologist for badger activity. If the qualified biologist determines that dens may be occupied, passive den exclusion measures shall be implemented for three (3) to five (5) days to discourage the use of these dens prior to disturbance activities during construction.

BIO-5: Before construction activities begin, a qualified biologist shall conduct an education program for all construction personnel. The training shall include a description of special status species, including State-listed species and associated habitats with potential to occur in the study area; an explanation of the status of these species and their protection under the California Endangered Species Act; the measures to conserve listed species and their habitats as they relate to the work being done; and Environmentally Sensitive Areas (ESAs) to be avoided during construction. A fact sheet conveying this information will be prepared and distributed to all construction crews. Upon completion of the program, personnel shall sign a form stating that they attended the program and understand the mitigation measures.

BIO-6: The project proponent shall offset the removal of mature oak trees, defined as trees greater than 12 inches in diameter at DBH, through one or more of the oak woodland mitigation alternatives in PRC §21083.4, which may include conserving oak woodlands through the use of conservation easements, planting an appropriate number of trees, contributing funds to the Oak Woodlands Conservation Fund, or other mitigation measures developed by the City, if any.

Prior to the issuance of a building and/or grading permit by the City and the start of construction, an Oak Mitigation and Monitoring Plan (Oak MMP) shall be prepared by a certified arborist, registered professional forester, botanist, or landscape architect. The Oak MMP shall be prepared to satisfy the standards of PRC §21083.4 and shall include the following elements: selected mitigation alternatives pursuant to PRC §21083.4; a map showing the location of all oak trees 5 inches or more DBH; oak tree protection measures for oak trees to be retained with 20 feet of the construction area; and details related to on-site mitigation, proposed. For on-site mitigation, the following information shall be provided: proposed mitigation ratio; description and size of the area for replanting; planting techniques; maintenance and monitoring activities and schedule; irrigation requirements; success criteria; reporting plan and schedule; and remediation measures. The Oak MMP shall be submitted for review and approval by the City's Community Development Director or his/her designee.

BIO-7: To compensate for permanent impacts to the Blue Wildrye Prairie community during construction of the proposed project, portions of the Site shall be revegetated with a native seed mix that includes Blue wildrye (*Elymus glaucus*). Revegetation shall occur at a minimum ratio of 2.6 to 1, or as otherwise required by

CDFW, to compensate for permanent impacts. Revegetation shall occur within the meadow and wetland communities on-site, to the extent feasible, and in areas that are temporarily disturbed during construction.

- Commercially available native grasses shall be used to revegetate. These grasses include but are not limited to: Blue wildrye (*Elymus glaucus*), California brome (*Bromus sitchensis var. carinatus*), California fescue (*Festuca californica*), Pine bluegrass (*Poa secunda*), and California oatgrass (*Danthonia californica*).
- A native grass seed blend such as Holdfast Native Blend from LeBallister's can be purchased and used as a viable option for revegetation plans. This mix consists of California brome, Blue wild rye (*Elymus glaucus*), three weeks fescue (*Festuca microstachys*), California poppy (*Eschscholzia californica*), and California native lupines (*Lupinus spp.*). This seed mix conforms to the standard practice of using grasses, legumes, and wildflowers in combination for erosion control and revegetation plans.
- A qualified botanist or landscape architect shall advise the field crew on seeding rate and dispersal technique. Broadcast seeding is an effective way to reclaim bare areas and should be done just prior to the autumn rains. If insufficient rain is in the forecast when seeding can occur, irrigation must be used to gently water in the seeds for the first season.

BIO-8: Due to the proposed impacts to on-site wetlands and drainage ditches, the project proponent shall obtain a Section 404 CWA permit through USACE for impacts to waters of the United States and a Section 401 WQC from the NCRWQCB, if deemed necessary by these resource agencies. If required, these permits shall be obtained prior to issuance of grading permits for construction activities in or adjacent to the on-site wetlands and drainage ditches, as determined through consultation with the USACE and NCRWQCB.

The project proponent shall ensure that the design of the proposed project would not result in a loss of functions and values of waters of the United States or State through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined by the resource agencies. The project proponent shall design the proposed project to limit the obstruction of and human intrusion into the riparian area of the on-site wetlands and drainage ditches, to the extent feasible. If it is determined, through obtaining an Approved Jurisdictional Determination through the USACE, that the aquatic resource features at the Site are not jurisdictional under the CWA, then the Section 404 CWA permit and Section 401 WQC may not be required.

Compensatory mitigation may consist of:

1. Providing on-site compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity in a location at or adjacent to the impact site;
2. Providing off-site compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity at another location, usually within the same watershed as the permitted impact;
3. Obtaining credits from a mitigation bank; and/or
4. Making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities. The project proponent retains responsibility for the implementation and success of the mitigation project.

Evidence of compliance with this mitigation measure shall be provided to the City's Community Development Department prior to initiating construction activities in or adjacent to the on-site wetlands and drainage ditches.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact with Mitigation Incorporated** on Biological Resources.

V. **CULTURAL RESOURCES**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

DISCUSSION

According to the Development Element of the Mendocino County General Plan (2020), ten (10) Native American tribes historically had territory in what is now Mendocino County. Native American tribes known to inhabit Mendocino County concentrated mainly along the coast and along major rivers and streams, while some tribes seasonally occupied mountainous areas and redwood groves. The first permanent non-native settlers came to Mendocino County in the middle of the 16th century, exploring and establishing small outposts. It was almost 300 years before the first permanent non-Spanish settlements in Mendocino County were established in April of 1852 on the coast north of Big River. As European-American settlement expanded in Mendocino County, most of the tribes known to inhabit the land were restricted to reservations and rancherias. During the 19th century, other tribes from the interior of California were forced to settle on the Round Valley Reservation in the northeastern portion of Mendocino County (County of Mendocino, 2020). Settlement in the vicinity of the City began in the mid-1880s (City of Willits, 1992, pg. III-27).

Various County and City policies exist related to the protection and preservation of cultural and historical resources, including but not limited to: Development Element of the Mendocino County General Plan (2020), pages 3-94 through 3-95; Chapter 22.12 of the Mendocino County Code (1991); the City of Willits General Plan Revision EIR (1992), page III-27; and Chapter 17.48 of the City Code (1991). Specifically, within the City of Willits, mitigation measures 4.931 and 4.932 of the City of Willits General Plan Revision EIR (1992) and Chapter 17.48 – *Historical Resources* of the City Code (2021) include provisions for the protection, enhancement, perpetuation or use of places, buildings, structures, and other objects having a special character or special historical or aesthetic interest or value to the City. Several historical resources have been identified in the County and within, or in close proximity to, the City, many of which have been placed on various federal and state historic registries; however, no historical sites or buildings have been designated by the County or the City and none are with the current vicinity of the Site.

Cultural Resources Inventories (Cultural Studies) were completed for Quail Meadows and APN 108-040-18 by Browning Cultural Resources, Inc. (BCR) in August 2020 and March 2021, respectively. Please note that due to the confidential nature of Cultural Studies, copies of the Cultural Studies are not provided as appendices to the Initial Study.

As noted in the Cultural Studies performed for the two parcels, BCR's investigations included pre-field research and a records search obtained from the Northwest Information Center (NWIC), as well as reviewing internal records and data within a 0.25-mile buffer around the Area of Potential Impacts (API). The inventory also included background research, examining the ethnographic and historic use of the Project vicinity, and an intensive pedestrian survey of the entire API on both parcels (which included the entirety of the parcels) (BCR, 2020 and 2021).

As noted in the Cultural Studies, as a result of the pre-field research, eight (8) resources were identified within 0.25-miles of the Site; however, none are located within the API (BCR, 2020 and 2021). Although no resources were identified within the API, one (1) isolated artifact (a Franciscan chert flake) was observed near the western edge of Quail Meadows (BCR, 2020) and two (2) isolated artifacts (two Franciscan chert flakes) were observed near the northwest corner of the parcel identified by APN 108-040-18 (BCR, 2021). Additionally, "a buried site sensitivity analysis suggests that the potential for buried prehistoric resources in the vicinity is high" (BCR, 2020 and 2021). As such, proper protocol is provided in the Cultural Studies in the event of inadvertent discovery of archaeological resources, including remains (see Mitigation Measures CUL-1 through CUL-3, below).

In addition, outreach and correspondence with the Native American Heritage Commission (NAHC) occurred during preparation of the August 2020 Cultural Study. In July 2020, a Sacred Lands File (SLF) Search was requested from the NAHC. On July 3, 2020, the NAHC provided a response that indicated the results of the SLF Search were negative. The NAHC additionally provided a list of Native American tribes that may have knowledge of cultural resources in the Project area. On December 14, 2022, in compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, the City of Willits sent consultation letters to the Tribal Historic Preservation Officer (THPO) or appropriate representative for each of the following 15 Native American tribes: Coyote Valley Band or Pomo Indians, Guidiville Indian Rancheria, Hopland Band of Pomo Indians, Cahto Tribe, Manchester Band of Pomo Indians of the Manchester Rancheria, Middletown Rancheria of Pomo Indians, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Redwood Valley or Little River Band of Pomo Indians, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, Yokayo Tribe, and Torres Martinez Desert Cahuilla Indians. Two Native American tribes, the Manchester Band of Pomo Indians of the Manchester Rancheria and the Sherwood Valley Rancheria of Pomo, responded to request additional information. No Native American tribes responded with concerns regarding the proposed Project. Copies of the NWIC response letter and the NAHC Native American Contacts List are included in Appendix F.

V.a) The Project and other typical industrial facilities are not anticipated to have a significant impact on historical resources. No historical resources are identified at or near the Site, per Figure 10-1 of the City of Willits General Plan (City of Willits, 1992).

The property identified by APN: 108-040-18 has been utilized as pastureland and does not contain any development (BCR, 2021). However, Quail Meadows is noted to contain existing development, which are proposed to be demolished and hauled off-site to appropriate waste disposal facilities (BCR, 2020). Although Quail Meadows contains existing development proposed for demolition, the Cultural Studies note the structures are "modern" (BCR, 2020) and are therefore not historically significant nor eligible for listing on the California Register of Historic Resources (CRHR) or National Register of Historic Places (NRHP). As a result, no impact would occur.

V.b-c) The Project and other typical industrial facilities are not anticipated to cause a substantial adverse change in the significance of an archaeological resource or disturb any human remains. According to the Cultural Studies (BCR, 2020 and 2021), eight (8) resources are known within 0.25-miles of the Site; however, none are located within the API. Further, although the Cultural Studies note that there is a high potential for buried prehistoric resources in the vicinity, the Cultural Studies conclude the Project would not have a significant impact on cultural resources, provided the prescribed measures in the Cultural Studies are implemented in the event of inadvertent discovery of resources. Such measures include stopping ground-disturbing activity; notifying a qualified archaeologist; assessing of the significance and extent of the

resource; subsequent recordation based upon the results of the assessment; and following the procedures identified in CHSC 7050.5 and PRC 5097.98, should human remains be encountered (BCR, 2020 and 2021), which have been incorporated as Mitigation Measures CUL-1 through CUL-3, below. The Project, and development of other typical industrial facilities, would be required to comply with Measures CUL-1 through CUL-3. With mitigation incorporated, a less than significant impact would occur.

MITIGATION MEASURES

CUL-1: In the event archaeological resources or cultural resources, including human remains, are inadvertently unearthed or discovered during construction, the contractor shall immediately halt all grading/land-clearing activities and contact a qualified archaeologist. Project personnel shall not collect the potential resources. All activity in the vicinity of the resources shall cease until a qualified archaeologist can evaluate it. If the qualified archaeologist determines that the resources may be significant, they shall notify the City's Community Development Department and develop an appropriate treatment plan for the resources. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources. In considering any suggested mitigation proposed by the archaeologist, and Native American representative where applicable, the City's Community Development Department will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being carried out.

CUL-2: If human remains are encountered on-site, all work must stop in the immediate vicinity of the discovered remains and the Mendocino County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the NAHC shall be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains can be provided.

CUL-3: Any identified cultural resources shall be recorded on DPR 523 historic resource recordation forms by a qualified archaeologist, available online from the Office of Historic Preservation's website: http://ohp.parks.ca.gov/default.asp?page_id=1069.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact with Mitigation Incorporated** on Cultural Resources.

VI. **ENERGY**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

DISCUSSION

On October 7, 2015, Governor Edmund G. Brown, Jr. signed into law Senate Bill (SB) 350, known as the Clean Energy and Pollution Reduction Act of 2015, which sets ambitious annual targets for energy efficiency and renewable electricity aimed at reducing greenhouse gas (GHG) emissions. According to the Final Commission Report of the California Energy Commission (CEC), dated October 2017, SB 350 requires the CEC to establish annual energy efficiency targets that will achieve a cumulative doubling of statewide energy efficiency savings and demand reductions in electricity and natural gas final end uses by January 1, 2030. This mandate is one of the primary measures to help the state achieve its long-term climate goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. The proposed SB 350 doubling target for electricity increases from 7,286 gigawatt hours (GWh) in 2015 up to 82,870 GWh in 2029. For natural gas, the proposed SB 350 doubling target increases from 42 million therms (MM) in 2015 up to 1,174 MM in 2029 (CEC, 2017).

Improvements proposed for the Project generally include vegetation removal, grading, and reuse or removal of existing structures. Vegetation removal and grading activities would facilitate the construction of rocked log storage areas, internal access roads, and access points between the existing log yard and the Site, parking near the office, and two (2) water storage ponds. Daily operations would be consistent with the existing operations of the existing log yard and would include: the storage and sale of non-retail logs; log and lumber trucks transporting logs to and from the Site; log clean-up (including periodic chainsaw work to logs to cut into shorter lengths, flush knots (limb ends) and clean up and flush the ends of the logs to remove any unevenness, splinters, or other log defects); loading of bark and other byproducts; lumber trailer staging; and site maintenance, including minor grading, resurfacing, and watering.

Development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such as water tanks and/or ponds to serve as back-up water supplies and for fire suppression needs; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures. Operation of a typical industrial facility would be subject to Code Chapter 17.50 – *Performance Standards*. Pursuant to Code Section 17.50.040 – *Locations where determinations are made for enforcement of performance standards* (1982), compliance with performance standards would generally be enforced within five hundred (500) feet of the Project Area. Operations would be anticipated to generally occur between 7:00am and 7:00pm up to six (6) days per week. Typical operational activities would be anticipated to include employee trips to the typical industrial facility, operation of heavy equipment within and outside of structures, heavy truck traffic to/from the facility for materials transfers, and use of machinery within structures.

VI.a) The proposed Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during Project construction or operation. The consumption of energy would occur during construction through the use of

fossil fuels and electricity for construction equipment and vehicles. Construction would be temporary in nature. The use of general construction equipment would be required during construction activities. The contractor would keep all construction equipment in good working order and would comply with California Code of Regulations, Title 13, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment and is enforced by the CARB. In addition, the contractor would comply with Rule-1-430 (Fugitive Dust Emissions) of Chapter IV (Prohibitions) of Regulation 1 (Air Pollution Control Rules) of the MCAQMD's Rules and Regulations (February 2011), which suppresses fugitive dust during construction and operation and would maintain all construction equipment in good working order such that exhaust and fugitive dust emissions are minimized. Therefore, it is anticipated that the construction phase of the Project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction of other typical industrial facilities would also be temporary in nature and would be required to comply with the abovementioned regulations, and as such, would also not result in wasteful, inefficient, and unnecessary consumption of energy.

Operation of the Project and other typical industrial facilities would not require a significant increase in energy above the current usage for operation of the existing log yard due to wasteful, inefficient, or unnecessary consumption of energy. Although the office, which was not previously utilized, would increase energy usage at the Site, the office and any other development to occur at the Site for the Project or other typical industrial uses would be subject to Part 6 (California Energy Code) of Title 24 of the California Code of Regulations, which contains energy conservation standards applicable to residential and non-residential buildings throughout California to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC, 2021). A less than significant impact would occur.

VI.b) The proposed Project and other typical industrial facilities would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. As noted above, the Project and other industrial facilities would comply with Part 6 (California Energy Code) of Title 24 of the California Code of Regulations, which contains energy conservation standards applicable to residential and non-residential buildings throughout California to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC, 2021). Therefore, a less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Energy.

VII. GEOLOGY AND SOILS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

DISCUSSION

The Site is relatively flat and at an elevation of approximately 1,350 feet above sea level. The City of Willits and the general region experiences cool winters and hot summers, with occasional snow each year due to the mountains to the west. The City of Willits is located in the western portion of Little Lake Valley. Little Lake Valley is characterized by the coast range province known as Mendocino Highlands. The Mendocino Highlands are known by discontinuous and independent ridges and isolated valleys with a general north-northwest trend, sub parallel to the coastline farther west.

As noted in the Public Review Draft 2019 Safety Element of the City of Willits General Plan [2019 (a)], seismic and geologic hazards in and around the City include surface fault rupture, seismic shaking, liquefaction, and landslides. The City is located within a seismically active region and in close proximity to active faults. These faults include the Maacama fault, considered an active fault by the California Geological Survey (CGS), which runs through the center of the City, and the San Andreas Fault Zone and the Bartlett Springs Fault, which run through the surrounding Mendocino County region to the east of the City [City of Willits, 2019 (a)]. As shown on the Alquist-Priolo Special Study Zones map of the Public Review Draft 2019 Safety Element of the City of Willits General Plan [2019 (a)], Figure S-2, there are no fault lines located at the Site, and the Site is not within the Alquist-Priolo Special Study Zone. However, according to the Faulting and Seismicity map, Figure S-1, the Site is located within an area of very high earthquake shaking potential [City of Willits, 2019 (a)]. The

Site is located in the California Coast Ranges Geomorphic Province, a seismically active and geologically complex province due to historic and ongoing tectonic deformation that is characterized by northwest trending faults and topographic and geologic features (DOC, 2002). As evidenced by the flat topography of the Site and surrounding area, the Site is not in an area subject to landslides. According to the Earthquake Zones of Required Investigation [2016 (b)] and the Fault Activity Map of California [2015 (a)] of the Department of Conservation (DOC), the Maacama fault is located approximately 0.5 mile west of the Site.

Soil types in the City vary from well drained to poorly drained, including clays, silty, sand, and gravel. According to the Natural Resources Conservation Service (NRCS, 2019), APN: 108-040-18 is comprised of 96.9 percent of Soil Unit #115 — Cole silty clay loam, 0 to 1 percent slopes, and 3.1 percent of Soil Unit #128 — Gielow sandy loam, located on the northwest corner of the parcel. Quail Meadows is comprised of 98 percent of Soil Unit #115 and 0.2 percent of Soil Unit #210—Urban land, located within the southwest portion of the parcel.

VII.a.i.) As noted above, the City is located within a seismically active region and in close proximity to active faults including the Maacama fault, , which runs through the center of the City and is considered an active fault by the CGS, and the San Andreas Fault Zone and the Bartlett Springs Fault, which run through the surrounding Mendocino County region to the east of the City [City of Willits, 2019 (a)]. As shown on the Alquist-Priolo Special Study Zones map of the Public Review Draft 2019 Safety Element of the City of Willits General Plan [2019 (a)], Figure S-2, there are no fault lines located at the Site, and the Site is not within the Alquist-Priolo Special Study Zone. However, according to the Faulting and Seismicity map, Figure S-1, the Site is located within an area of very high earthquake shaking potential [City of Willits, 2019 (a)]. According to the Earthquake Zones of Required Investigation [2016 (b)] and the Fault Activity Map of California [2015 (a)] of the Department of Conservation (DOC), the Maacama fault is located approximately 0.5 mile west of the Site.

As the Site is not located in an Alquist-Priolo Special Study Zone, neither the Project nor other typical industrial facilities would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to the rupture of a known earthquake fault and a less than significant impact would occur.

VII.a.ii) As noted above, there are no mapped faults or Alquist-Priolo Special Study Zones traversing the Site. However, since the Site is situated within a seismically active region and given the proximity of significant active faults to the Site, the Site will likely experience strong ground shaking during the economic life span of any development on the Site. Improvements at the Site due to the Project would include grading, vegetation removal, and removal of the storage units and tennis courts. Improvements would also include installation of twelve (12) log storage decks, two (2) ponds, on-site parking, internal access roads, and drainage ditches. As required by the Fire Marshal of the Little Lake Fire District, pursuant to the 2019 CFC, the log decks at the existing log yard are a maximum of 300 feet by 500 feet (150,000 square feet). The maximum deck height has been expanded from 20 feet to 30 feet with approval from the Fire Marshall and incorporation of sprinkled log decks. Site design of other typical industrial facilities is unknown at this time. However, construction of the proposed Project and other typical industrial facilities at the Site would be subject to the requirements of the latest version of the California Building Code (CBC). As such, a less than significant impact would occur.

VII.a.iii) According to the Public Review Draft 2019 Safety Element of the City of Willits General Plan, liquefaction occurs when intense vibrations from an earthquake cause saturated soil to lose stability and act more like a liquid than a solid. Additionally, areas near the City where groundwater is shallower than 50 feet may be prone to liquefaction; however, no historic impacts associated with liquefaction have occurred within the City [City of Willits, 2019 (a)].

As shown in Table 4 of this IS, the Project would require an average of up to 80,000 gpd of water, at peak use, to wet the log decks using the proposed recirculated log irrigation system. The increase of water output from the rainbird sprinklers would cause ground saturation and overland flow; however, the proposed drainage ditches would direct water flow back to the holding ponds to minimize ground saturation and prevent stagnant water. As such, the Project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to seismic-related ground failure, including liquefaction. A less than significant impact would occur.

Water usage proposed under other typical industrial facilities that may be proposed in the future is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping logs wet during storage. Details on the specific locations, capacities, and dimensions of the ponds and/or other water storage facilities would be subject to grading and/or building permits through the City. As such, it is not anticipated that other typical industrial facilities would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to seismic-related ground failure, including liquefaction. A less than significant impact would occur.

VII.a.iv) As shown on the Landslide Susceptibility Classes figure, Figure S-3a, of the Public Review Draft 2019 Safety Element of the City of Willits General Plan, landslides present risk to portions of the City of Willits, mainly along the southern and western portion of the City. However, the Site is located within the northern portion of the City, and the majority of the Site is characterized as "low landslide susceptibility" [City of Willits, 2019 (a)]. Furthermore, the Site is relatively flat (approximately 1 percent slope) and is located at an elevation between 1,342 and 1,349 feet above mean sea level. Given the relatively low slopes, both on and adjacent to the Site, the Project and other typical industrial facilities would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death due to landslides and no impact would occur.

VII.b) The Site is relatively flat, with approximately 1 percent slope, generally draining from the southwest to the northwest. The proposed Project involves minimal grading and drainage since the Site is primarily flat. While the proposed grading would have the potential to temporarily create erosion and loss of topsoil, the Project is proposed in an area that has been previously disturbed for the prior use as an RV park, and standard BMPs, such as straw bales, fiber rolls, and/or silt fences, would be employed to limit the potential for erosion resulting from construction and to avoid runoff into sensitive habitat areas. In addition, construction would occur during the dry season [typically May 30 through October 15] when rainfall and runoff potential would be low. Upon completion of construction, all disturbed soil would be stabilized, and bare soil vegetated, as needed, with native vegetation and/or native seed mixes for soil stabilization as soon as feasible.

Furthermore, due to the size of the Site and the nature of industrial uses, it can be assumed that construction activities of other typical industrial facilities would cause disturbance to greater than 1 acre of land and would therefore be required to comply with the CGP, which would ensure that BMPs would be implemented in accordance with a project-specific SWPPP to reduce the risk of soil erosion and loss of topsoil. The Project would also be required to comply with the CGP. As a result, the proposed Project and other typical industrial uses would not result in substantial soil erosion or the loss of topsoil, and a less than significant impact would occur.

VII.c) A landslide can occur when masses of rock, earth, or debris move down a slope and can be accompanied by heavy rains or following a drought, earthquakes, or volcanic eruptions. Majority of the Site is characterized as "low landslide susceptibility," according to Figure S-3a, Landslide Susceptibility Classes,

per the Public Review Draft 2019 Safety Element of the City of Willits General Plan. The eastern portion of the Site may be subject to flooding as it is within the 100-year flood hazard zone, according to Figure S-4, FEMA Flood Zones [City of Willits, 2019 (a)]. Additionally, although the Site is not located within a mapped Alquist-Priolo Special Study Zone, the Site is located within a seismically active region and would likely experience ground shaking during the economic lifespan of the Project. However, given the relatively low slopes, both on and adjacent to the Site, neither the Project nor other typical industrial facilities would directly or indirectly cause potential substantial adverse effects. As such, a less than significant impact would occur.

VII.d) Expansive soils generally consist of cohesive fine-grained clay soils and represent a significant structural hazard to buildings constructed on them as they have a tendency to undergo volume changes (shrink or swell) with changes in moisture content. According to NRCS (2019), as previously discussed, APN: 108-040-18 is comprised of 96.9 percent of Soil Unit #115 — Cole silty clay loam, 0 to 1 percent slopes, and 3.1 percent of Soil Unit #128 — Gielow sandy loam, located on the northwest corner of the parcel. Quail Meadows is comprised of 98 percent of Soil Unit #115 and 0.2 percent of Soil Unit #210—Urban land, located on the southwest portion of the parcel. No known expansive soils are located at the Site. The increased water output from the rainbird sprinklers would cause ground saturation and overland flow but would be captured by a series of drainage ditches to direct flow back to the holding ponds. The subsurface soils are unlikely to be affected by the proposed increased water output and, therefore, a less than significant impact would occur.

The water usage proposed under other typical industrial facilities that may be proposed in the future is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping logs wet during storage. Additionally, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (IGP), administered by the SWRCB. As increased water output from the Project would not be anticipated to affect subsurface soils in a way that would cause substantial direct or indirect risks to life or property, other typical industrial facilities would also have a less than significant impact.

VII.e) A sewage pumping station exists near the office structure. Sewer lines run to the pumping station from the office and old infrastructure from the previous RV park. The sewage pumping station connects to the main line, which is serviced by the City of Willits. Additionally, a recirculating log irrigation system is anticipated to be utilized to wet the log decks. The proposed system would utilize the 1.0 ac-ft and 0.85 ac-ft holding ponds and series of return ditches to collect and transport the water back to the holding ponds rather than disposing the water into the sewer system. As such, no impact would occur.

Other typical industrial facilities would have the potential to increase wastewater generation at the Site. However, details on Site development for a typical industrial facility, including wastewater improvements, would be subject to grading and/or building permits through the City. As such, a less than significant impact would occur.

VII.f) The potential exists for unique paleontological resources or unique geological features to be encountered at the Site during ground-disturbing construction activities, including excavation for grading and installation of the irrigation pond; however, the potential is low as the Site has been previously disturbed for former uses, including an RV park. In the event that any archaeological or paleontological resources are discovered during Site preparation or other earth-disturbing construction activities, either for the Project or other typical industrial uses, the contractor would immediately halt all work and contact the City's

Community Development Department and a qualified paleontologist, as required by Mitigation Measure GEO-1. With Mitigation Measure GEO-1 incorporated, a less than significant impact would occur.

MITIGATION MEASURES

GEO-1: In the event that paleontological resources, including individual fossils or assemblages of fossils, are encountered during construction activities all ground disturbing activities shall halt, and the City's Community Development Department shall be contacted. Additionally, a qualified paleontologist shall be procured to evaluate the discovery and make treatment recommendations.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact With Mitigation Incorporated** on Geology and Soils.

VIII. **GREENHOUSE GAS EMISSIONS**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions (GHG), either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

DISCUSSION

The Global Warming Solutions Act of 2006, also known as Assembly Bill (AB) 32, is a State law that establishes a comprehensive program to reduce GHG emissions from all sources throughout the State. AB 32 requires the State to reduce its total GHG emissions to 1990 levels by 2020, a reduction of approximately 15 percent below emissions expected under a "business as usual" scenario. Pursuant to the AB 32 Scoping Plan (last reviewed in 2018), the CARB must adopt regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. The following major GHGs and groups of GHGs being emitted into the atmosphere are included under AB 32: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The 2020 GHG emissions statewide limit set by AB 32, equal to the 1990 level, is 431 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). In addition, in 2016, SB 32 was signed into law to codify the reduction target to reduce GHG emissions to 40 percent below the 1990 levels by 2030 (CARB, 2018).

The CARB, in its *California Greenhouse Gas Emissions for 2000 to 2017* (California GHG Emission Inventory), 2019 edition, states that GHG emissions within the State of California have followed a declining trend since 2007. In 2017, statewide GHG emissions were 424 $MMTCO_2e$, 5 $MMTCO_2e$ lower than 2016 levels and lower than the 2020 statewide GHG limit of 431 $MMTCO_2e$. The transportation sector remains the largest source of GHG emissions in the State, accounting for 41 percent of the State's GHG emissions in 2017 (CARB, 2019).

The Site is located within the NCAB and is subject to the requirements of the MCAQMD. The MCAQMD is responsible for monitoring and enforcing federal, state, and local air quality standards in the Mendocino County. As noted in the Resource Management Element of the Mendocino County General Plan (2020), due to the rural nature of Mendocino County, the amount of GHG generated by human activities (primarily the burning of fossil fuels for vehicles, heating, and other uses) is small as compared to other, more urban counties and miniscule in statewide or global terms. However, GHG emissions in Mendocino County are higher per capita due to the distances involved in traveling around the county.

Improvements proposed for the Project generally include vegetation removal, grading, and reuse or removal of existing structures. Vegetation removal and grading activities would facilitate the construction of rocked log storage areas, internal access roads, and access points between the existing log yard and the Site, parking near the office, and two (2) water storage ponds. The Site would be leveled and surfaced with compacted base rock, sufficient to withstand log storage and truck traffic. Gravel access roads would be maintained, upgraded, and/or constructed, as needed, to facilitate on-site circulation and to connect the existing log yard and the Site. General construction equipment would be utilized during and would be maintained in working condition throughout Project construction. One (1) new employee is anticipated to be required to serve the Project, supporting four (4) full-time staff and one (1) seasonal employee at the existing log yard.

Development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such as water tanks and/or ponds to serve as back-up water supplies and for fire suppression needs; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures. Operation of a typical industrial facility would be subject to Code Chapter 17.50 – *Performance Standards*. Pursuant to Code Section 17.50.040 – *Locations where determinations are made for enforcement of performance standards* (1982), compliance with performance standards would generally be enforced within five hundred (500) feet of the Project Area. Operations would be anticipated to generally occur between 7:00am and 7:00pm up to six (6) days per week. Typical operational activities would be anticipated to include employee trips to the typical industrial facility, operation of heavy equipment within and outside of structures, heavy truck traffic to/from the facility for materials transfers, and use of machinery within structures.

A Focused Traffic Study was prepared by W-Trans on November 29, 2023 (Appendix E), to assess the potential transportation related impacts associated with the proposed Project and other typical industrial facilities. According to the Focused Traffic Study, the Project is intended to increase operational efficiencies for the Applicant by reducing the number of truck trips between Eureka and Willits. The Project is not expected to increase trips on peak days (W-Trans, 2023).

The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows that trip generation for light industrial uses are substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023).

VIII.a) The Project and other typical industrial facilities would not generate GHG emissions either directly or indirectly, that may have a significant impact on the environment, as construction would not generate significant amounts of GHG emissions above the baseline conditions. A limited amount of GHG emissions would be anticipated to occur during construction activities; however, it is anticipated that construction would be temporary and would not result in wasteful, inefficient, and unnecessary consumption of energy. To reduce the potential for GHG emissions during construction, the contractor would keep all construction equipment in good working order and comply with California Code of Regulations, Title 13, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling (adopted 2005), which limits idling from both on-road and off-road diesel-powered equipment and is enforced by the CARB.

Once construction is complete, Project operations would not generate an increase in GHG emissions from the Site, as the overall Project VMT is expected to be reduced. The Project is expected to reduce heavy-truck trips between Eureka and Willits, which would lower the overall VMT due to the Project. Additionally, operation of the Project would not require a significant increase in energy above the current usage for operation of the existing log yard. Although the office structure, which has not been utilized for regulation operations since operation of the RV park, would increase energy usage at the Site, the office and any other development to occur at the Site in the future would be subject to Part 6 (California Energy Code) of Title 24 of the California Code of Regulations, which contains energy conservation standards applicable to residential and non-residential buildings throughout California to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC, 2021).

Operation of other typical industrial facilities would not generate a significant increase in GHG emissions from the Site. The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows

that trip generation for light industrial uses are substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023). The proposed Rezone is for MH, heavy industrial, rather than light industrial. However, commercial uses tend to generate a higher number of trips, as commercial uses are often utilized by the public. Light and heavy industrial uses are not utilized by the public to the same level as commercial uses. Based on a review of the uses permitted in C1, C2, and MH in Table 2 of this IS, it appears that uses permitted in C1 and C2 tend to involve more interaction with the public than uses permitted in MH. Based on the substantially lower trip generation of light industrial uses than typical commercial uses and the nature of public utilization of commercial uses, it is reasonable to anticipate that other typical industrial facilities permitted by the GPA and Rezone would result in lower trip generation than would be anticipated with the existing zoning designation of C1 and C2. Furthermore, other typical industrial development at the Site would be subject to Part 6 (California Energy Code) of Title 24 of the California Code of Regulations, which contains energy conservation standards applicable to residential and non-residential buildings throughout California to ensure new and existing buildings achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC, 2021).

As the Project and other typical industrial facilities would only generate minimal GHG emissions during construction, would not result in wasteful, inefficient, and unnecessary consumption of energy, and would not be anticipated to increase VMT during operation, a less than significant impact would occur.

VIII.b) The proposed Project and other typical industrial facilities would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Action Item RM-50.2 in the Resource Management Element of the Mendocino County General Plan (2020) requires the County to "create a greenhouse gas reduction plan for the unincorporated areas of the county that sets specific reduction strategies and targets to meet." Although the County has not yet prepared and adopted this plan, a significant amount of GHG emissions is not anticipated under the Project or other typical industrial facilities, as described above. In addition, the proposed Project and other typical industrial facilities would not conflict with local, MCAQMD, State, or federal regulations pertaining to GHG emissions, since the proposed Project and other typical industrial facilities would have a negligible impact on the current GHG emissions from the Site. A less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Greenhouse Gas Emissions.

IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) 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?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) 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, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) 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, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☒	☐	☐

DISCUSSION

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or has characteristics defined as hazardous by a federal, state, or local agency. Chemical and physical properties such as toxicity, ignitability, corrosiveness, and reactivity cause a substance to be considered hazardous. These properties are defined in the California Code of Regulations, Title 22, Article 3: *Characteristics of Hazardous Waste* (effective July 1, 1991). A "hazardous waste" includes any hazardous material that is discarded, abandoned, or will be recycled. The criteria that render a material hazardous also cause a waste to be classified as hazardous, according to the California Health and Safety Code, Chapter 6.5, Section 25117 (effective January 1, 1997).

Mendocino County has adopted numerous plans related to hazard management and mitigation including, but not limited to: Community Wildfire Protection Plan (2005), Hazardous Waste Management Plan, Emergency Operations Plan, and Multi-Jurisdictional Hazard Mitigation Plan (2021), in which the City is a participant (County of Mendocino, 2020). In addition, in October 2019, the City released a Public Review Draft of the 2019 Safety Element of the City of Willits General Plan to identify safety risks the City faces and develop goals, policies, and implementation programs to better address the issues.

GeoTracker is an online database that provides state-wide data of authorized or unauthorized discharges of waste to land, or unauthorized releases of hazardous substances from underground storage tanks. This

system consists of a relational database, on-line compliance reporting features, a geographical information system (GIS) interface, and other features that are utilized by the SWRCB, regional boards, local agencies, regulated industry, and the public to input, manage, or access compliance and regulatory tracking data. Additionally, EnviroStor, managed by the Department of Toxic Substances Control (DTSC), is an online database for tracking cleanup, permitting, enforcement, and investigation efforts at hazardous waste sites with known or suspected contamination. Both these databases were queried, and three (3) sites were listed within the general vicinity of the Site, approximately 15 feet west, 514 feet west, and 525 feet north of the Site. All three (3) sites were caused by leaking underground storage tanks and the clean-up of all three sites was completed in 1996, 1997, and 2008, respectively. However, no active sites were listed at the Site. See Appendix G for maps depicting the Site in relation to active sites on these databases.

The Project, as well as other typical industrial facilities, would require the transport, use, storage, and disposal of small quantities of hazardous materials common for construction, equipment, site maintenance, and operation, such as gasoline, diesel fuel, hydraulic fluids, oils, lubricants, and cleaning solvents and supplies. However, all hazardous materials would be utilized and disposed of in accordance with all applicable federal and state regulations. The existing log yard contains a mobile self-contained 1,000-gallon fuel tank, located near the main gate to the log yard. If needed on the Site in the future, it may be placed in the southwestern corner of the Site, near the Quail Meadows entrance; however, for the foreseeable future it is anticipated that the fuel tank would stay in its current location on the existing log yard. For reference, the possible location on the Site is shown on Figure 5: Site Plan. All other chemical storage is located within the two (2), 450-square-foot shipping containers in the southwest portion of the existing log yard. The approximate location of these shipping containers is shown on Figure 5: Site Plan.

IX.a-b) In Mendocino County, the transport, storage, and use of hazardous materials is regulated by the Office of Hazardous Materials Safety of the United States Department of Transportation (USDOT), Title 49 of the Code of Federal Regulation (CFR), Resource Conservation Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Occupational Safety and Health Administration (OSHA),Title 13 of the California Code of Regulations (CCR) California Health and Safety Code Sections 25100 et seq., California Division of Safety and Health (DOSH), and Mendocino County Environmental Health. Chapter 6.95 of the California Health and Safety Code requires businesses that handle more than a specified amount of hazardous materials on-site to submit a Hazardous Materials Business Plan (HMBP) to firefighters, health officials, planners, public safety officers, health care providers, regulatory agencies, and other interested persons. The HMBP must include an inventory of hazardous materials handled, facility floor plans showing where hazardous materials are stored, an emergency response plan, and provisions for employee safety and emergency response training.

The proposed Project would not cause the transport, use, emission, or disposal of significant amounts of hazardous materials, nor 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. During the construction phase, small quantities of hazardous materials common to equipment maintenance and operation, such as gasoline, diesel fuel, hydraulic fluids, oils, and lubricants, may be required. Once constructed, the Project would be anticipated to utilize small quantities of hazardous materials for operations, such as fuels, lubricants, solvents, and chemicals used for routine log yard operations. Equipment used for the operation of the Project would include but not be limited to two (2) Caterpillar 966 front end loaders, or equivalent, two (2) Caterpillar 568 Heel Boom Log Loader, or equivalent, and one (1) water truck. As described above, a mobile self-contained 1,000-gallon fuel tank, maybe relocated from near the main gate to the existing log yard to the southwestern corner of the Site; however, for the foreseeable future it is anticipated that the fuel tank would stay in its current location on the existing

log yard. All other chemical storage is located within the two (2), 450-square-foot shipping containers in the southwest portion of the existing log yard. The types and quantities of materials to be used are not expected to pose a significant risk to the public and/or environment and would be managed in accordance with the abovementioned federal, state, and local regulations.

Operation of other typical industrial facilities may require transport, use, emission, or disposal of various hazardous materials. However, if a future typical industrial facility at the Site requires more hazardous materials than the amount specified in Chapter 6.95 of the California Health and Safety Code, preparation of a HMBP would be required. Since the transport, use, and storage of any hazardous materials at the Site for the Project or other typical industrial facilities would be required to be conducted in accordance with federal, state, and local regulations, a less than significant impact would occur.

IX.c) The Site is located approximately 600 feet (0.11 mile) north of Willits High School. The Project would be anticipated to utilize small quantities of hazardous materials for operations, such as fuels, lubricants, solvents, and chemicals used for routine log yard operations. As described above, a mobile self-contained 1,000-gallon fuel tank, maybe relocated from near the main gate to the existing log yard to the southwestern corner of the Site; however, for the foreseeable future it is anticipated that the fuel tank would stay in its current location on the existing log yard. If the fuel tank were to be relocated, it would be moved further from Willits High School. The fuel tank and other hazardous materials utilized for the Project or other typical industrial facilities would be managed in accordance with the abovementioned federal, state, and local regulations. As such, the quantity or application of hazardous materials would not be expected to impact Willits High School, and a less than significant impact would occur.

IX.d) Review of the SWRCB's GeoTracker and DTSC's EnviroStor databases indicates that the Site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. As discussed above, any hazardous materials to be used on-site would be utilized, stored, transported, and disposed of in accordance with federal, state, and local regulations. No impact would occur.

IX.e) The nearest airport to the Site is the Ells Field (Willits Municipal Airport), located approximately 1.88 miles northwest of the Site at its closest point. According to the Mendocino County Airport Comprehensive Land Use Plan (ACLUP, 1996), the Site is not located within the compatibility boundary of the Ells Field (Willits Municipal Airport) (County of Mendocino, 1996). As such, a less than significant impact would occur.

IX.f.) There are no components of the Project that would impair or interfere with emergency response or evacuation. The proposed expansion of the existing log yard operation would be constructed in accordance with State and local standards, including safety and emergency access requirements. The proposed Project would comply with all requirements of the Little Lake Fire District, including a maximum log deck size of 300 feet by 500 feet, a 100-foot separation from other log decks and exposures, and maintaining vehicle access to all log decks, ponds, and on-site hydrants. Additionally, the maximum deck height has been expanded from 20 feet to 30 feet with approval from the Fire Marshall and incorporation of sprinkled log decks. Since the Site is designed for large logging trucks, it is anticipated that all types of vehicles, including emergency responders, would be able to adequately navigate the Site. As such, the proposed Project would not have a significant impact on emergency response or evacuation at the Site, and there are no components of the Project that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Other typical industrial facilities would not be anticipated to impair or interfere with emergency response or evacuation. Building permit applications for a typical industrial facility would be subject to review by the

Little Lake Fire District for compliance with the version of the CFC in place at the time of building permit application submittal, and conditions would be implemented to ensure the project does not impair or interfere with emergency response or evacuation. Typical conditions would be anticipated to be related to maintaining site access and circulation for emergency equipment, emergency water supply, property signage, flammable materials storage, and other conditions as required by the Fire Marshal in accordance with the current CFC at the time a project is proposed. Therefore, a less than significant impact would occur.

IX.g) As described above, the Site is located north of the City center on two (2) parcels that are not currently utilized and are predominately undeveloped. Both parcels are within the Local Responsibility Area (LRA). According to the California Department of Forestry and Fire Protection (CAL FIRE) LRA Fire Hazard Severity Zone Maps (2024), the majority of the Site is located within a "Moderate" fire hazard severity zone.

The proposed Project components may cause increased exposure of people or structures to a significant risk of loss, injury or death involving wildland fires. However, as required by the Fire Marshal of the Little Lake Fire District, pursuant to the 2019 CFC, the log decks at the existing log yard are a maximum of 300 feet by 500 feet (150,000 square feet), with an approved 30-foot deck height, and a similar design is proposed on the subject Site. The proposed Project would comply with all requirements of the Little Lake Fire District, including the maximum log deck size, a 100-foot separation from other log decks and exposures, and maintaining vehicle access to all log decks, ponds, and on-site hydrants. The Site contains four (4) existing wells in addition to the proposed irrigation ponds, which would be available for fire suppression needs. As required by Mitigation Measure HAZ-1, an EAP would be prepared prior to operation of the expanded log yard, which would include fire prevention, mitigation, and response strategies. The EAP would include, but not be limited to access requirements, evacuation routes and procedures, employee trainings, deck orientation maps, adequate water supply, on-site firefighting equipment, and fire prevention and mitigation. By complying with conditions of the Little Lake Fire District and Mitigation Measure HAZ-1, a less than significant impact would occur.

Other typical industrial facilities may also expose people or structures to a significant risk of loss, injury, or death involving wildland fires. However, building permit applications for a typical industrial facility would be subject to review by the Little Lake Fire District for compliance with the current version of the CFC at the time of building permit application submittal, and conditions would be implemented to ensure a project does not impair or interfere with emergency response or evacuation. Typical conditions would be anticipated to be related to maintaining site access and circulation for emergency equipment, emergency water supply, property signage, flammable materials storage, and other conditions as required by the Fire Marshal in accordance with the current CFC at the time a project is proposed. Additionally, Mitigation Measure HAZ-1 would require the preparation of an EAP, which would include fire prevention, mitigation, and response strategies. With mitigation incorporated, a less than significant impact would occur.

MITIGATION MEASURES

HAZ-1: Prior to operation of the project and future proposed projects, the project proponent shall prepare an EAP to the satisfaction of the Little Lake Fire District. The EAP shall describe plans and preparedness for emergency response. This includes a list of emergency contacts, access requirements, evacuation routes and procedures, employee trainings, deck orientation maps, adequate water supply, and on-site firefighting equipment. Firefighting equipment to keep on-site for use in emergencies may include but not be limited to a water truck, fire extinguishers, fire tools, and a portable foaming fire suppression system. The EAP shall also include fire prevention and mitigation strategies, including identification of potential fire hazards, general housekeeping, and required training. Implementation of the EAP shall provide employees with the ability to put out a 10-foot by 10-foot, or equivalent, spot fire should the need arise. For uses involving bark storage, a

Bark Management Plan shall be included as part of the EAP. The Bark Management Plan shall include general management techniques, strategies to reduce the risk of bark piles catching on fire, response protocols, and other details as required by the Little Lake Fire District.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Hazards or Hazardous Materials.

X. HYDROLOGY AND WATER QUALITY. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) Result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
iii) 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?	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

DISCUSSION

The National Pollutant Discharge Elimination System (NPDES) permit program of the EPA addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. Created in 1972 by the CWA, the NPDES permit program grants authority to state governments to perform a portion of the permitting, administrative, and enforcement aspects of the program. Within California, the NPDES permit program is administered by the SWRCB and the Regional Water Quality Control Boards. Construction projects that would disturb more than 1 acre of land, such as the proposed Project, would be subject to the requirements of the CGP, which requires operators of such construction sites to implement stormwater controls and develop a SWPPP identifying specific BMPs to be implemented to minimize the amount of sediment and other pollutants associated with construction sites from being discharged in stormwater runoff.

Construction within the City is subject to the 100% Draft City of Willits Design and Construction Standards (City Standards), updated November 12, 2011. The City Standards requires that contractors prepare and implement a program to control water pollution on construction projects that result in 1 acre or more of soil disturbance, in accordance with the CGP of the SWRCB, as described above.

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM) panel number 06045C1111G, effective September 1, 2022, the majority of the Site is designated as Zone X (unshaded), which is defined as an area of minimal flood hazard (Appendix H). However, the eastern portion of the Site is designated as Zone AE and Zone X (shaded). Zone AE, or the Special Flood Hazard Area (SFHA),

is defined as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year. The 1-percent annual chance flood is also referred to as the base flood or 100-year flood. The portion of the Site that is designated as Zone AE has a base flood elevation (BFE) of 1,342 feet to 1,349 feet. Zone X (shaded), or the moderate flood hazard area, is defined as the area that will be inundated by the flood event having a 0.2-percent chance of being equaled or exceeded in a given year. The 0.2-percent annual chance flood is also referred to as the 500-year flood.

The Site is located within the Little Lake Valley Groundwater Basin (Basin). The Little Lake Valley Groundwater Management Plan (LLVGMP) represents "the initial effort on the part of the City of Willits to develop a plan for sustainable management of groundwater in the Little Lake Valley" (LACO, 2020). The LLVGMP is a voluntary and non-regulatory document. The main source of groundwater recharge in the Basin is precipitation, and while groundwater levels in the Basin fluctuate in response to pumping and precipitation, long-term groundwater levels have been observed to be relatively flat to slowly recovering from heavy well pumping and drought. Furthermore, Chart 4-1 of the LLVGMP shows that groundwater levels in the Basin recover quickly from declines in groundwater levels due to heavy pumping and drought. The LLVGMP did not identify any overdraft issues in the Basin, and as such, did not recommend any mitigation or actions to manage overdraft conditions (LACO, 2020).

Six (6) seasonal wetlands, totaling approximately 1 acre, exist within the Site that may be considered jurisdictional features regulated under Section 401 and Section 404 of the CWA. Additionally, there are seven (7) drainage ditches at the Site, as described in Section IV (Biological Resources). The ephemeral and intermittent ditches throughout the Site drain into an unnamed tributary to Mill Creek, east of the Site, which is mapped as a Water of the U.S. The unnamed tributary to Mill Creek flows under the Highway 101 bypass into Mill Creek, approximately 0.3 miles north of the Site (Clifton, 2022).

Water sources and storage would be required for sprinkling log decks and emergency fire suppression. Existing water sources consist of three (3) wells on the Site, each of which provides an existing yield of 5 to 35 gallons per minute (gpm), and an additional well and water tank on the existing log yard. Four (4) City fire hydrants are located within the vicinity of the Site, with the closest hydrant located approximately 200 feet southwest of the existing office structure. The Applicant intends to install up to three (3) additional log-yard fire hydrants such that no log deck is greater than 600 feet from a City or log-yard fire hydrant. It is anticipated that the two (2) proposed irrigation ponds would store water for use in the log-yard fire hydrant system, when needed.

A recirculating log irrigation system is proposed for wetting the log decks. The proposed system would generally consist of up to two (2) holding ponds and series of return ditches to collect and transport the water back to the ponds. A pump station at the end of the ponds would charge an approximately 12-inch PVC manifold that would run to the ends of the log decks. From there a 2-inch poly line would be run across the top of the decks from one end to the other and a series of rainbird sprinkler heads would be installed at intervals needed for sufficient coverage. The increased water output from the rainbird sprinklers would cause ground saturation and overland flow, which would be captured by a series of drainage ditches to direct flow back to the ponds. To combat evaporation, the wells would be plumbed to the pond to supply make-up water, as needed, to keep the pond full and pumps primed. It is anticipated that an average of up to 80,000 gallons per day (gpd), peak usage (accounting for evaporation and dust abatement uses) could be required from July through October. During the months of May, June, and November, the estimated water usage would be approximately 40,000 gpd and little to no water would be anticipated to be required for the remainder of the year (December through April, which generally coincides with the rainy season). This would equate to approximately 41.5 acre-feet per year, as shown in Table 4 of this IS. The Applicant

anticipates that the four (4) existing wells plus the up to three (3) proposed wells would be sufficient for meeting the needs of the current and expanded log yards, with the proposed ponds available for irrigation water storage and fire suppression needs.

In a typical industrial facility, water sources and storage would be required for daily operation and emergency fire suppression. The water usage proposed under typical industrial facilities principally permitted within the MH zoning district that may be proposed in the future is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping logs wet during storage. Details on the specific locations, capacities, and dimensions of the ponds and/or other water storage facilities would be subject to grading and/or building permits through the City.

X.a) The proposed Project and other typical industrial facilities would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. As discussed above, construction activities associated with the Project and typical industrial facilities would be subject to the standards of the CGP, which requires the preparation of a SWPPP with BMPs designed to prevent, at a minimum, erosion resulting from construction activities and minimize the discharge of sediment and other pollutants associated with construction sites. Adherence to the post-construction requirements of the CGP would ensure that the proposed Project and other typical industrial facilities would comply with applicable water quality standards post-construction. Additionally, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the IGP, administered by the SWRCB.

Through proper implementation of appropriate BMPs and compliance with the aforementioned regulations, the proposed Project would not violate any water quality standards or waste discharge requirements, and a less than significant impact would occur.

X.b) As discussed above, the proposed Project is anticipated to use approximately 41.5 ac-ft annually, primarily between the months May through November. However, the Project is not expected to substantially decrease groundwater supplies or interfere with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Groundwater usage in the area is expected to be fairly low, as most water users in the area obtain water services through the City of Willits. Figure 3-6 of the LLVGMP shows that well density is low in the area surrounding the Site, as there were only 5 to 10 wells located in the section of Figure 3-6 that includes the Site as of 2020. Additionally, the LLVGMP found that the Basin recovers quickly from declines in groundwater levels and did not identify any overdraft issues in the Basin.

A Well Impact Report prepared by VESTRA Resources and dated October 5, 2023, determined that each of the three (3) proposed wells for the Project would have a drawdown of less than one foot at the nearest structure, nearest off-site well, and within a one-mile radius (Appendix I). Based on these results, the extraction of groundwater from the proposed wells and the nearby adjacent existing wells is not likely to interfere with the production and function of existing nearby wells and are not likely to cause subsidence that would adversely impact or damage nearby infrastructure. As such, water usage for the Project is not anticipated to substantially decrease groundwater supplies or interfere with groundwater recharge, and a less than significant impact would occur.

In a typical industrial facility, water sources and storage would be required for daily operation and emergency fire suppression. The water usage proposed under typical industrial facilities principally permitted

within the MH zoning district that may be proposed in the future is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping logs wet during storage. Details on the specific locations, capacities, and dimensions of the ponds and/or other water storage facilities would be subject to grading and/or building permits through the City. A less than significant impact would occur.

X.c.i) The Project and other typical industrial facilities would not alter the existing drainage pattern of the Site in a manner which would result in substantial erosion or siltation on- or off-site. Construction activities would be subject to the standards of the CGP, which requires the preparation of a SWPPP with BMPs designed to prevent, at a minimum, erosion resulting from construction activities and minimize the discharge of sediment and other pollutants associated with construction sites. Following construction, runoff and stormwater flows would be managed by adhering to the post-construction requirements of the CGP. Additionally, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the IGP, administered by the SWRCB. Through compliance with the CGP for both the proposed Project and other typical industrial facilities and the IGP for other typical industrial facilities, substantial erosion or siltation would not occur, and there would be a less than significant impact.

X.c.ii-iii) The Project would not substantially increase the rate or amount of surface runoff in a matter 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. Post-construction stormwater would continue to infiltrate as the Project does not propose the introduction of impervious surfaces. Additionally, as discussed above, the increased water output from the irrigation system is anticipated to cause ground saturation and overland flow, which would be captured by a series of drainage ditches to direct flow back to the holding pond. As such, although the proposed Project would alter the drainage pattern of the Site, it would not impact off-site runoff and would not result in on- or off-site flooding. A less than significant impact would occur.

Although other typical industrial facilities would have the potential to alter the drainage pattern of the Site, this would not be anticipated to result in on- or off-site flooding. Construction activities would be subject to the standards of the CGP, which requires the preparation of a SWPPP with BMPs designed to prevent, at a minimum, erosion resulting from construction activities and minimize the discharge of sediment and other pollutants associated with construction sites. Following construction, runoff and stormwater flows would be managed by adhering to the post-construction requirements of the CGP. Additionally, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the IGP, administered by the SWRCB. A less than significant impact would occur.

X.c.iv) As discussed above, the majority of the Site is designated as an area of minimal flood hazard (Zone X, unshaded). However, the eastern portion of the Site is designated as the 100-year flood (Zone AE) and the 500-year flood (Zone X, shaded). Part of the Project would be located within the 100-year flood and the 500-year flood, including the log decks on the eastern portion of Qual Meadows, drainage ditches, and water storage ponds. The proposed Project would not impede or redirect flood flows, as the Project would not introduce impervious surfaces and room would exist between log decks for flood water to flow in the event of a flooding event. A less than significant impact would occur.

If development of other typical industrial facilities should occur in the flood zone for future projects, future industrial facility operators would obtain a Flood Zone Development Permit from the City, as needed. A Flood Zone Development Permit would ensure that typical industrial facilities would be designed in a way that would not impede or redirect flood flows. A less than significant impact would occur.

X.d) While a portion of the Site is located in a flood hazard zone, as described above, it is not located in a tsunami or seiche zone, as it is not located near any large inland bodies of water and is approximately 25 miles east of the Pacific Ocean. Portions of the proposed Project are located within the flood zone, including some of the log decks, drainage ditches, and water storage ponds. Although portions of the proposed Project would be located within the flood zone, the Project would not risk the release of pollutants due to Project inundation. As the log decks would consist of untreated wood, and the ponds and drainage ditches would consist of irrigation water, these Project components would not pose a risk to release pollutants to the environment. A less than significant impact would occur.

If development of other typical industrial facilities should occur in the flood zone for future projects, future industrial facility operators would obtain a Flood Zone Development Permit from the City, as needed. A Flood Zone Development Permit would ensure that typical industrial facilities would be designed in a way that would not risk the release of pollutants due to inundation. A less than significant impact would occur.

X.e) As discussed above, the Project and other typical industrial facilities would be required to comply with the Statewide CGP and the City Standards, updated November 12, 2011, which would require preparation of a SWPPP, including identification and implementation of BMPs to be utilized to minimize the amount of sediments and other pollutants from being discharged in stormwater runoff. Additionally, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the IGP, administered by the SWRCB. Compliance with these regulations would facilitate the implementation of water quality control efforts at the local and state levels. There is currently no sustainable groundwater management plan for the Basin; however, the LLVGWMP was adopted by the City on August 26, 2020. As all impacts from the Project and other typical industrial facilities on hydrology and water quality are anticipated to be less than significant, they are not anticipated to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. A less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Hydrology and Water Quality.

XI. **LAND USE AND PLANNING**. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☒	☐
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

DISCUSSION

The Site has a land use designation of C-G per the Willits General Plan 2020 (1992). Quail Meadows has a zoning designation of C2, pursuant to Ordinance No. 90-13 adopted by the Willits City Council June 13, 1990, and APN: 108-040-18 has a zoning designation of C1 according to the City of Willits Zoning map dated May 2010. The Applicant requests a GPA and Rezone to change the existing land use and zoning designations of the Site to M-G and MH, respectively, to facilitate expansion of an existing log yard operation. See Figures 3 and 4: General Plan Amendment Figure and Rezone Figure, respectively. Additionally, the Applicant requests a BLA to retain an approximately 2.2-acre portion of APN: 108-040-18 along N Main Street for future commercial use. The approximately 2.2-acre parcel would maintain the C-G and C1 land use and zoning designations, respectively, and would not be included in the proposed GPA and Rezone (see Figures 3 and 4). See Figure 5: Site Plan for the approximate location of the proposed BLA.

Surrounding uses include the GlenMark Self Storage adjacent to the west of the Site, the existing log yard adjacent to the south, railroad tracks within the GRTA right-of-way adjacent to the east, the Highway 101 bypass to the northeast, and residential structures on parcels with a land use designations of M-G and R-L and zoning designation of Limited Industrial (ML) and R1 to the southwest. Nearby uses include N Main Street (previously Highway 101) and commercial uses to the west, Willits High School to the south, industrial uses to the east, and undeveloped agricultural land to the northeast. Table 7, below, provides additional information on the surrounding land use and zoning designations, as well as existing uses.

Table 7. Surrounding land use and zoning classifications

Direction	Land Use	Zoning	Existing Land Uses
Northeast	AG (Agricultural)	AG (Agricultural)	Highway 101 bypass, undeveloped agricultural land
East	Industrial-General (M-G)	Heavy Industrial (MH)	Railroad tracks, industrial uses
South	Industrial General (M-G); Public Service (PS)	Heavy Industrial; Public Facility (PF)	Existing log yard, Willits High School
Southwest	Industrial General (M-G); Residential – Low Density (R-L)	Limited Industrial (ML); Single-Family Residence (R1)	Residential structures
West	Commercial General (C-G)	Heavy Commercial (C2)	GlenMark Self Storage, N Main Street, commercial uses

XI.a) The proposed Project would not physically divide an established community as the Project would introduce industrial uses to the Site, which would be consistent with industrial uses to the east and south. Additionally, the proposed GPA and Rezone would be consistent with the surrounding land use and zoning designations to the east and south. As a result, a less than significant impact would occur.

XI.b) Neither the Project nor other typical industrial facilities would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. As discussed above, the Site has a land use designation of C-G, and Quail Meadows and APN: 108-040-18 have zoning designations of C2 and C1, respectively. The proposed GPA and Rezone would change the existing land use and zoning designations of the Site to M-G and MH, respectively. This GPA and Rezone would be consistent and compatible with surrounding land use and zoning designations, as land to the east and west of the Site has a land use designation and zoning designation of M-G and MH, respectively.

Since the proposed Project and other typical industrial facilities would be consistent and compatible with surrounding uses and the proposed land use and zoning designations are consistent with surrounding designations, a less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Land Use and Planning.

XII. MINERAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	☐	☐	☐	☒
b) 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?	☐	☐	☐	☒

DISCUSSION

According to the Mineral Land Classification Studies Index of the California Department of Conservation [DOC, 2015 (b)], the Site is not located in an area with known mineral resources. Additionally, there are no known mineral resources of significance on the Site. Furthermore, the Site is not utilized for Surface Mining and Reclamation Act (SMARA) activities.

XII.a-b) As discussed above, the Site does not contain mineral resources that are of value locally, to the region, or to residents of the City, County, or state. Additionally, the Site is not identified as a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Therefore, neither the Project nor other industrial facilities would interfere with materials extraction or otherwise cause a short-term or long-term decrease in the availability of mineral resources. No impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have **No Impact** on Mineral Resources.

XIII. NOISE. Would the project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

DISCUSSION

Noise is typically defined as unwanted sound. In any one location, the noise level will vary over time, from the lowest background or ambient noise level to temporary increases caused by traffic or other sources. State and federal standards have been established as guidelines for determining the compatibility of a particular use with its noise environment. The City of Willits relies principally on standards in its Noise Element of the City of Willits General Plan (1992), City Code (2021), the Development Element of the County of Mendocino General Plan (2020), the County of Mendocino Zoning Ordinance (1991), other County ordinances, and the Mendocino County Airport Comprehensive Land Use Plan (ACLUP, 1996) to evaluate noise-related impacts of development, depending on the location of proposed development.

APN: 108-040-18 is undeveloped, while Quail Meadows was previously a RV park which is now abandoned. Existing noise sources near the Site include local traffic on N Main Street to the west, activities at Willits High School to the south, and operations at the existing lumber yard to the south.

An Environmental Noise Assessment, dated March 11, 2024, was prepared by Bollard Acoustical Consultants, Inc. (BAC) to quantify the existing noise environment at the Site, identify potential noise impacts at existing nearby sensitive receptors resulting from the Project, and to develop appropriate noise mitigation measures where impacts are identified (Appendix J). The Environmental Noise Assessment concluded that existing ambient noise at the existing log yard and Site ranges from 52 A-weighted decibels (dBA) to 67 dBA, with daytime maximum noise levels ranging from 69 dBA to 77 dBA, and that the baseline vibration environment at sensitive receptors in the immediate vicinity of the Site is considered to be negligible. Noise measurements were taken in accordance with the performance standards in Chapter 17.50 – *Performance Standards* of the City Code (2021).

Sensitive noise receptors are generally defined as locations where people reside or where the presence of unwanted sound or vibration could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise and/or vibration can be disruptive to these activities. According to the Environmental Noise Assessment, sensitive noise receptors in the general vicinity of the Site include nearby residential uses to the west and Willits High School to the south. The locations of nearby sensitive noise receptors are shown on Figure 4 (Noise Measurement and Sensitive Receptor Locations) of the Environmental Noise Assessment.

The Environmental Noise Assessment compared noise impacts of the Project to a graduated scale for use in the assessment of project-related noise level increases developed by the Federal Interagency Commission on Noise (FICON). The FICON standards are considered conservative relative to thresholds used by other agencies in California. According to the FICON standards, an increase in 1.5 dB or more in areas with an existing ambient noise level of 65 dB or more would be considered significant. Additionally, pursuant to Policy 4.210 of the Willits General Plan (1992), the City seeks to maintain ambient noise levels of 55 dBA Community Noise Equivalent Level (CNEL) in existing residential areas, and pursuant to Policy 4.230, all sensitive land uses in areas with ambient noise levels in excess of 60 dBA shall require acceptable mitigation of noise impacts as a condition of approval.

Construction of the proposed Project would generate short-term noise from excavation, grading, drilling, earth movement, and vehicles traveling to and from the Site. Upon completion of construction, Project operations would generate noise in the form of log and lumber trucks transporting logs to and from the Site, log remanufacturing, and site maintenance. As the proposed Project is an extension of the existing log yard, noise levels are anticipated to be consistent with the existing log yard.

Operation of a typical industrial facility would be subject to Code Chapter 17.50 – *Performance Standards*. Pursuant to Code Section 17.50.040 – *Locations where determinations are made for enforcement of performance standards* (1982), compliance with performance standards would generally be enforced within five hundred (500) feet of the Project Area. Operations would be anticipated to generally occur between 7:00am and 7:00pm up to six (6) days per week. Typical operational activities would be anticipated to include employee trips to the typical industrial facility, operation of heavy equipment within and outside of structures, heavy truck traffic to/from the facility for materials transfers, and use of machinery within structures. The noise levels generated by other typical industrial facilities that may occur at the Site are unknown at this time but would have the potential to exceed noise generated by the Project. Noise generating-uses would be subject to the Noise Policies and Implementation Measures found in Volume I of the Willits General Plan 2020 (1992) and Code Chapter 17.50 – *Performance Standards*, which provides performance standard regulations that specify noise limits, distances for measurement of noise and vibration levels, and parameters for understanding the type, location, and character of noise and vibration sources. The City would evaluate future typical industrial uses for conformance with existing policies and regulations.

XIII. a-b) Implementation of the proposed Project would not be expected to generate noise in excess of what is common for such improvements nor would the Project result in excessive ground borne vibration or ground borne noise levels. During construction, temporary noise would be anticipated as a result of utilizing construction equipment for excavation, grading, drilling, earth movement, and vehicles traveling to and from the Site. However, these noise impacts would be temporary in nature, and Mitigation Measure NOI-1 would be incorporated and implemented throughout construction, such as limiting construction to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday, or as approved by the City, using quiet models of air compressors and other stationary noise sources where technology exists, and use of mufflers on all internal combustion engine-driven equipment. In addition, with the exception of minor nearby vibrations created from standard heavy equipment, there are no elements of the proposed Project that would create permanent ground borne vibrations or noise levels.

Once construction is complete, operational noise generated by the Project would include log and lumber trucks transporting logs to and from the site, log remanufacturing, and site maintenance. BAC conducted noise level measurements of logging truck loading operations at the existing log yard, concluding a maximum noise level of 75 dBA and an average noise level of 62 dBA at a reference distance of 100 feet from the loading operations. BAC utilized industry standard sound propagation algorithms to conclude that

the noise level at nearby sensitive noise receptors during loading operations would range from 32 dB to 50 dB day-night average sound level (DNL), well below the 55 dB to 60 dB range considered acceptable for residential development, pursuant to Policies 4.210 and 4.230 of the Willits General Plan (1992). The noise generated by the truck unloading operation is comparable to the noise generation of the truck loading operation, as the same equipment is utilized for the same duration of time. As the proposed Project is an extension of the existing log yard, noise levels are anticipated to be consistent with the existing log yard. BAC also predicts the noise level increase generated by the Project at the nearest sensitive receptor to range from 0.0 to 0.7 dBA, which is well below the FICON's threshold of significance of 1.5 dBA. Furthermore, as discussed above, BAC observed no significant sources of vibration and found that vibration levels at off-site locations were evaluated as being imperceptible during loading operations. Therefore, noise levels and vibration generated by the Project would be consistent with surrounding uses and local noise regulations, and a less than significant impact would occur.

Construction of other typical industrial facilities would also be required to comply with Mitigation Measure NOI-1 to ensure noise generated during construction would not create a substantial temporary increase in ambient noise levels. Noise generated by operation of other typical industrial facilities that may occur at the Site are unknown at this time but would have the potential to exceed noise generated by the Project. Noise generating-uses would be subject to the Noise Policies and Implementation Measures found in Volume I of the Willits General Plan 2020 (1992) and Code Chapter 17.50 – Performance Standards, which provides performance standard regulations that specify noise limits, distances for measurement of noise and vibration levels, and parameters for understanding the type, location, and character of noise and vibration sources. If proposed in the future, the City would evaluate development of a typical industrial use for conformance with existing policies and regulations. Mitigation Measure NOI-2 would require that a noise assessment be conducted for other future industrial uses at the Site to ensure noise levels would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Site in excess of standards established in the Willits General Plan (1992), City Code (2021), and other applicable noise standards.

XIII. c) The nearest airport to the Site is the Ells Field (Willits Municipal Airport), located approximately 1.88 miles northwest of the Site at its closest point. According to the ACLUP, the Site is not located within the compatibility boundary of the Ells Field (Willits Municipal Airport) (County of Mendocino, 1996). As such, a less than significant impact would occur.

MITIGATION MEASURES

NOI-1: To reduce the possibility of the construction noise becoming an annoyance to existing residences near the Site, exterior construction activity shall be confined to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday, or as approved by the City. Additionally, construction activities shall utilize quiet models of air compressors and other stationary noise sources where technology exists and use mufflers on all internal combustion engine-driven equipment.

NOI-2: To ensure future typical industrial facilities that would be allowed under the land use and zoning designations of M-G and MH do not generate noise in excess of standards established in the Willits General Plan (1992), City Code (2021), and other applicable noise standards, a noise assessment shall be conducted to analyze noise that may be generated by the project. If the noise assessment concludes that noise generated by the project would exceed standards established in the Willits General Plan (1992), City Code (2021), and other applicable noise standards, abatement measures shall be incorporated into the project design to reduce noise to below these standards.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact With Mitigation Incorporated** on Noise.

XIV. POPULATION AND HOUSING. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and/or businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

DISCUSSION

According to the 2019-2027 Housing Element of the City of Willits General Plan (2019), the population of Willits increased by more than 4 percent from 2010 to 2018, from 4,888 to 5,128 persons; however, the population growth is expected to slow over the next five years, decreasing to 2 percent county-wide. In 2016, Willits had 2,120 total housing units, 2,028 of which were occupied, with an average household size of approximately 2.52 persons in 2018. The City of Willits General Plan (1992) forecasted an ultimate build-out population in Willits of approximately 7,500 residents by 2020, which would result in an estimated 33 percent increase in water consumption and would require careful monitoring of the available water services due to the limited capacity of and impact of drought on the City's surface water supply.

XIV.a) The Project would not induce substantial population growth in Willits, as substantial population growth, which has not yet been realized, was projected in the City of Willits General Plan (1992). The proposed Project is an extension of the existing log yard. Employees needed to support the proposed and existing log yard would include existing four (4) full-time staff, one (1) new full-time Log Procurement Manager, and one (1) seasonal employee generally from April 1 to November 30 (summer period). As the Project would only require one (1) new full-time employee and one (1) new seasonal employee, who would likely be hired locally, the Project would not induce substantial population growth. A less than significant impact would occur.

Other typical industrial facilities would not induce substantial population growth. As single-family residences, supportive housing, and transitional housing are conditionally permitted uses in both the current zoning designations of C1 and C2 and the proposed zoning designation of MH, it is not anticipated that the GPA and Rezone would induce population growth by allowing new residential development. Typical industrial facilities may require additional employees at the Site. However, as employees would also be anticipated for typical facilities allowed under the current zoning designations of C1 and C2, and as employees could be hired locally, the GPA and Rezone would not be anticipated to induce a substantial unplanned population growth. A less than significant impact would occur.

XIX.b) As discussed above, the Project and other typical industrial facilities would not be anticipated to induce substantial population growth. Additionally, no existing housing units would be removed under the Project or other typical industrial facilities, as no housing units are located at the Site. As such, neither the Project nor other typical industrial facilities would displace any existing housing or residents. A less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Population and Housing.

XV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, 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:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?	☐	☒	☐	☐
b) Police protection?	☐	☐	☐	☒
c) Schools?	☐	☒	☐	☐
d) Parks?	☐	☐	☐	☒
e) Other public facilities?	☐	☐	☐	☒

DISCUSSION

As previously discussed, the Site has a land use designation of C-G, and Quail Meadows and APN: 108-040-18 have zoning designations of C2 and C1, respectively. The proposed Project involves a GPA and Rezone to change the existing land use and zoning designations of the Site to M-G and MH, respectively, similar to the existing log yard (see Figures 3 and 4). However, the Applicant requests a BLA to retain an approximately 2.2-acre portion of APN: 108-040-18 as C-G and C1 land use and zoning designations, respectively, and would not be included in the proposed GPA and Rezone. Upon completion of the Project, one (1) new full-time employee and one new (1) seasonal employee would be required to support the proposed improvements and expansion of the Site.

Fire protection services at the Site are provided by the Little Lake Fire District. The nearest fire station to the Site is located at 74 E. Commercial Street, Willits, approximately 0.5 mile south of the Site (Little Lake Fire District, 2023).

Police protection services are provided by the Willits Police Department. The police station is located at 125 E. Commercial Street #150, Willits, approximately 0.5 miles south of the Site [City of Willits, No Date (c)].

The City's public school system is made up of Willits Unified School District, which provides six (6) public schools including three (3) elementary, one middle, and two high schools (Willits Unified School District, 2023). The nearest school to the Site is Willits High School, located south of the existing log yard. Willits High School athletic facilities are located approximately 600 feet south of the Site, and classrooms are located approximately 950 feet south of the Site.

A description of parks and recreational facilities in the general vicinity of the Site is in Section XVI (Recreation), below.

XV.a) The Project would have the potential to increase fire protection above current levels at the Site. However, all development would be sited within the area that is currently served by the Little Lake Fire District. The proposed Project would be equipped with a fire suppression system in compliance with the Little Lake Fire District as described in their letter dated March 17, 2023 (Appendix K). The Project would be required to comply with all requirements of the Little Lake Fire District, including a maximum log deck size of 300 feet by 500 feet, a 100-foot separation from other log decks and exposures, and maintaining vehicle access to all

log decks, ponds, and on-site hydrants. The maximum deck height has been expanded from 20 feet to 30 feet with approval from the Fire Marshall and incorporation of sprinkled log decks. Furthermore, pursuant to Mitigation Measure HAZ-1, an EAP would be prepared prior to operation of the expanded log yard, which would include fire prevention, mitigation, and response strategies. The EAP would include, but not be limited to access requirements, evacuation routes and procedures, employee trainings, deck orientation maps, adequate water supply, on-site firefighting equipment, and fire prevention and mitigation. Through compliance with requirements from the Little Lake Fire District and the incorporation of Mitigation Measure HAZ-1, a less than significant impact would occur.

Other typical industrial facilities would also have the potential to increase fire protection above current levels at the Site. However, building permit applications for a typical industrial facility would be subject to review by the Little Lake Fire District for compliance with the current version of the CFC at the time of building permit application submittal, and conditions would be implemented to ensure a project does not significantly increase fire protection services at the Site. Typical conditions would be anticipated to be related to maintaining site access and circulation for emergency equipment, emergency water supply, property signage, flammable materials storage, and other conditions as required by the Fire Marshal in accordance with the current CFC at the time a project is proposed. Additionally, Mitigation Measure HAZ-1 would require preparation of an EAP, which would include fire prevention, mitigation, and response strategies. With mitigation incorporated, a less than significant impact would occur.

XV.b) There are no portions of either the proposed Project or other typical industrial facilities that would require additional police protection. As discussed in Section XIV (Population and Housing), neither the Project nor other typical industrial facilities would be anticipated to induce unplanned population growth. Therefore, there would be no impact on police protection.

XV.c) As discussed in Section XIV (Population and Housing), neither the Project nor other typical industrial facilities would be anticipated to induce unplanned population growth. Therefore, there are no portions of either the proposed Project or other typical industrial facilities that would require construction of a new school.

Willits High School is located immediately south of the existing log yard. Willits High School athletic facilities are located approximately 600 feet south of the Site, and classrooms are located approximately 950 feet south of the Site. However, Willits High School would not be impacted by the Project or other typical industrial facilities, as no unmitigated significant adverse impacts were identified in this IS, including but not limited to impacts related to air quality, noise, and hazards and hazardous materials. With Mitigation Measures HAZ-1, NOI-1, and NOI-2, there would be a less than significant impact on Willits High School.

XV.d-e) As discussed in Section XIV (Population and Housing), no residential units would be constructed, nor is the population expected to substantially increase as a result of the proposed Project or other typical industrial facilities. As the proposed Project and other typical industrial facilities would not substantially increase the population, it would not create a need for new or physically altered park facilities or other public facilities. Therefore, no adverse physical impacts would be associated with the construction of such facilities. No impact would occur.

MITIGATION MEASURES

Refer to Mitigation Measure HAZ-1 under Section IX (Hazards and Hazardous Materials) and Mitigation Measures NOI- and NOI-2 under Section XIII (Noise), above.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact With Mitigation Incorporated** on Public Services.

XVI. RECREATION. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

The Site is located in the vicinity (within 8 miles) of the following neighborhood and regional parks and recreational facilities:

- Recreation Grove, located approximately 0.9 miles southwest of the Site;
- Bud Snider City Park, located approximately 0.9 miles southwest of the Site;
- Willits Rodeo Grounds, located approximately 1 miles south of the Site;
- Frank Grasse Dog Park and Willits Skate Park, located approximately 1.1 miles south of the Site;
- Highway 20 Park, located approximately 1.2 miles southwest of the Site;
- Babcock Park, located approximately 1.3 miles southwest of the Site;
- Willits Municipal Swimming Pool, located approximately 2.6 miles west of the Site;
- Ohl Redwood Grove Park, located approximately 2.6 miles west of the Site;
- Little Darby Environmental Education Area and Nature Trail, located approximately 7.1 miles east of the Site; and
- Haehl Creek Trailhead, located approximately 2.5 miles southeast of the Site.

XVI. a-b) No residential units would be constructed, nor is the population expected to substantially increase, as a result of the proposed Project or other typical industrial facilities. There would not be an increase in the usage of or demand for neighborhood and regional parks or other recreational facilities. Therefore, neither the proposed Project nor other typical industrial facilities would result in the physical deterioration of parks or facilities, nor would they require the construction of new park or recreational facilities. No impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have **No Impact** on Recreation.

XVII. TRANSPORTATION. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

DISCUSSION

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law, initiating an update to the CEQA Guidelines to change how lead agencies evaluate transportation impacts under CEQA, with the goal to better measure the actual transportation-related environmental impacts of a given project. Traditionally, transportation impacts had been evaluated by using Level of Service (LOS) analysis. Starting July 1, 2020, lead agencies are required to analyze the transportation impacts of new projects using Vehicle Miles Traveled (VMT), instead of LOS. According to the *SB 743 Frequently Asked Questions* provided by the Governor's Office of Planning and Research (OPR), VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto the roads, the project may cause a significant transportation impact. Vehicle Miles Traveled (VMT) analysis is intended to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution, promoting the development of a multimodal transportation system, and providing clean, efficient access to destinations (OPR, 2020).

A Focused Traffic Study was prepared by W-Trans on November 29, 2023 (Appendix E), to assess the potential transportation related impacts associated with the proposed Project and other typical industrial facilities. Per the Focused Traffic Study, the study area consists of N Main Street, which generally runs north-south through the center of Willits. Along the Site frontage, N Main Street has a two-way left-turn lane, in addition to two (2) 11-foot travel lanes, and a posted speed limit of 35 miles per hour (mph) (W-Trans, 2023).

The Site is currently accessed from N Main Street via a paved driveway at the southwest corner of Quail Meadows. An additional unimproved driveway is located at the northwest corner of the Site. The existing log yard is accessed via Casteel Lane. The Applicant proposes to utilize both the Quail Meadows entrance and the Casteel Lane entrance at the existing log yard for accessing the Site. There is an existing two-way left-turn lane on N Main Street that is utilized for inbound traffic inbound at Casteel Lane. The northerly driveway on the Quail Meadow site is not served by this two-way left-turn (W-Trans, 2023). An additional unimproved driveway is located at the northwest corner of the Site. This driveway is intended for light administrative use only and not for industrial truck or equipment traffic and no improvements or modifications are proposed. As noted above, the Site contains various internal gravel access roads utilized for the previous development. These gravel access roads would be maintained, upgraded, and/or constructed, where needed, to facilitate on-site circulation and to connect the existing log yard and the Site.

As observed at the existing log yard, the majority of log deliveries occur during the summer period, five (5) to six (6) days per week, generally between the hours of 6:00am and 5:00pm, with occasional peak delivery

times from 5:30am to 7:00pm. At times during the summer and fall months, the operators work until 5:30pm or 6:00pm to clean up the yard after the trucks have stopped coming in. During this period, logs are delivered to the Site on approximately 50 to 60 incoming log trucks per day, up to a maximum of 65 to 70 incoming trucks per day, on rare occasions. During this summer period, logs are transported from the Site on approximately 15 to 20 outbound lumber trucks per day, up to approximately 25 outbound lumber trucks per day, on rare occasions. Hours of operation between December 1 and March 30 (winter period) are generally from 7:00am to 4:00pm, up to five (5) days per week, with occasional needs to operate between 6:00am and 5:00pm to accommodate lumber truck scheduling for backhauls and log deliveries during mild weather windows in spring. Incoming log deliveries during the winter period are minimal, up to approximately 15 incoming log trucks per day, in isolated circumstances. Log deliveries during the winter period are dependent on weather at the source of logs and harvest permit and wet season logging restrictions. During this winter period, logs are transported from the Site on approximately 25 to 30 outbound lumber trucks per day.

Additionally, bark hauling occurs intermittently throughout the year at rates of two (2) to five (5) loads per week. Trips associated with bark hauling are limited to normal operating hours described above. Bark loads are not significant enough to increase the daily truck averages over the incoming and outgoing load forecasts described. These forecasted truck trips and operating hours are consistent with the existing operation. With implementation of the proposed project, it is anticipated that truck trips per day to and from the expanded log yard would average towards the upper end of the ranges provided with more consistency. The existing log yard experiences truck trips within these ranges with less consistency. The majority of log trucks would access the Site from the north, via the Highway 101 offramp directly north of the Site; however, log trucks traveling from the coast via Highway 20, would access the Site from the south, via N Main Street.

According to the Focused Traffic Study (Appendix E), the existing log yard receives an average of 55 truckloads of logs daily for six (6) months of the year and approximately 10 loads the other six (6) months, for an annual average of 33 trucks entering the site daily. Given the nine-hour workday, a maximum of five (5) trucks during a single hour would be expected. As trucks require more space on the roadway and more time to make movements, the Focused Traffic Study assumed a vehicle equivalency of three passenger vehicles per truck, translating the five (5) inbound trucks to 15 inbound vehicle movements. An additional 2 trips were assumed for employees or other vehicles for a total of 17 inbound trips in an hour. Assuming that trucks would come from US 101, it is likely that the drivers would enter via the first driveway they encounter at Quail Meadows. Of the 17 total inbound trips, 15 were assumed to occur at APN: 108-040-11 (Quail Meadow) driveway. Based on counts at N Main Street and the Project's trip generation, the Focused Traffic Study determined that a left-turn pocket is not warranted (W-Trans, 2023).

The Focused Traffic Study determined that for the posted speed limit of 35 mph, 250 feet of sight distance is needed. From the Quail Meadows driveway, sight lines extend more than 300 feet in both directions. At the existing driveway at Casteel Lane, there are clear sight lines for more than 500 feet in either direction. Therefore, sight lines are adequate at both driveways (W-Trans, 2023).

The Project is intended to increase operational efficiencies for the Applicant by reducing the number of truck trips between Eureka and Willits. The Project is not expected to increase trips on peak days (W-Trans, 2023).

The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows that

trip generation for light industrial uses are substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023).

XVII.a) The proposed Project would not conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadways, bicycle lanes, and pedestrian paths. It is expected that Project construction would result in a slight increase in traffic to and from the Site, as construction workers arrive and leave the Site at the beginning and end of the day, in addition to minor interruption of traffic on adjacent streets, when heavy equipment necessary for Project construction is brought to and removed from the Site. However, once construction is complete, these temporary workers would no longer be required at the Site. Construction of other typical industrial facilities would be anticipated to be similar, as construction would be temporary.

Upon Project completion, daily operations would be consistent with the existing operations of the Casteel Lane log yard, which would include log and lumber trucks transporting logs to and from the Site, log bucking and remanufacturing, loading bark and other byproducts, lumber trailer staging, and site maintenance, including minor grading, resurfacing, and watering. One (1) new full-time employee and one (1) new seasonal employee would be required for Project operation, thereby resulting in a slight increase in traffic trips to and from the Site as employees arrive and leave the Site each day. However, the Focused Traffic Study concludes that the proposed Project would not be expected to generate a substantial number of new trips for employees or trucks. The proposed Project is not expected to significantly impact the capacity of the street system, LOS standards established by the City, or the overall effectiveness of the circulation system, nor substantially impact alternative transportation facilities, such as transit, bicycle, or pedestrian facilities, as the Project is an expansion of an existing operation and a substantial increase in traffic trips or use of alternative transportation facilities is not anticipated. A less than significant impact would occur.

Operation of other typical industrial facilities would not be anticipated to conflict with a plan, ordinance, or policy addressing the circulation system. The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows that trip generation for light industrial uses are substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023). The proposed Rezone is for MH, heavy industrial, rather than light industrial. However, commercial uses tend to generate a higher number of trips, as commercial uses are often utilized by the public. Light and heavy industrial uses are not utilized by the public to the same level as commercial uses. Based on a review of the uses permitted in C1, C2, and MH in Table 2 of this IS, it appears that uses permitted in C1 and C2 tend to involve more interaction with the public than uses permitted in MH. Based on the substantially lower trip generation of light industrial uses than typical commercial uses and the nature of public utilization of commercial uses, it is reasonable to anticipate that other typical industrial facilities permitted by the GPA and Rezone would result in lower trip generation than would be anticipated with the existing zoning designation of C1 and C2. A less than significant impact is anticipated.

XVII.b) The proposed Project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b), which states:

> "*(1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.*

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152."

The Project is a land use project and is not considered a transportation project under CEQA. The Site is approximately 2,600 feet (0.49 miles) from the nearest transit stop to the south. According to CEQA Guidelines Section15064.3, subdivision (b), a land use project at the Site would not be presumed to cause a less than significant transportation impact.

As of the date of this IS, the City of Willits has not established a threshold with regard to VMT impact significance consistent with CEQA Guidelines Section 15064.3, subdivision (b). However, as noted in the Focused Traffic Study, prepared by W-Trans on November 29, 2023, the Mendocino Council of Governments (MCOG) adopted Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study (Regional Baseline Study) in June 2020, which includes a recommended a methodology and thresholds for assessing VMT impacts within Mendocino County. As such, the MCOG methodology was utilized to assess the potential VMT related impacts of the proposed Project. Through this methodology, W-Trans determined that VMT analysis was not relevant as the *Regional Baseline Study* adopted by MCOG does not provide VMT thresholds associated with heavy-duty trucks (W-Trans, 2023).

Although specific VMT thresholds are not provided for heavy-duty trucks, the purpose of the Project is to increase operational efficiencies for the Applicant, which in turn is expected to reduce the number of truck trips between Eureka and Willits. This would be expected to result in a reduction in GHG emissions, which supports the overall intent of SB 743 (W-Trans, 2023). As a result, the Project would result in a less than significant impact.

Operation of other typical industrial facilities would not be anticipated to increase traffic beyond what would be allowed by the existing zoning of C1 and C2. The Focused Traffic Study used standard trip generation rates for various uses to analyze potential trip generation of other typical industrial facilities. Table 1 of the Focused Traffic Study (Appendix E) shows that trip generation for light industrial uses are substantially lower than those for typical commercial uses, such as office, retail, or service uses (W-Trans, 2023). The proposed Rezone is for MH, heavy industrial, rather than light industrial. However, commercial uses tend to generate a higher number of trips, as commercial uses are often utilized by the public. Light and heavy industrial uses are not utilized by the public to the same level as commercial uses. Based on a review of the uses permitted in C1, C2, and MH in Table 2 of this IS, it appears that uses permitted in C1 and C2 tend to involve more interaction with the public than uses permitted in MH. Based on the substantially lower trip generation of light industrial uses than typical commercial uses and the nature of public utilization of commercial uses, it is reasonable to anticipate that other typical industrial facilities permitted by the GPA and Rezone would result in lower trip generation than would be anticipated with the existing zoning designation of C1 and C2. A less than significant impact is anticipated.

XVII.c-d) The proposed Project is not anticipated to substantially increase hazards due to design features or incompatible uses or result in inadequate emergency access. As noted in the Focused Traffic Study, both existing driveways have adequate sight distance. For the posted speed limit of 35 mph, 250 feet of sight distance is needed. From the Quail Meadows driveway, sight lines extend more than 300 feet in both

directions. At the existing Casteel Lane driveway, there are clear sight lines for more than 500 feet in either direction. Additionally, the Focused Traffic Study concluded that no additional improvements, specifically a left-turn pocket at the Quail Meadow driveway on N Main Street, would be necessary. Furthermore, the Project's access and circulation were designed to account for feedback received from Caltrans. The proposed Project would comply with all requirements of the Little Lake Fire District, including a maximum log deck size of 300 feet by 500 feet, a 100-foot separation from other log decks and exposures, and maintaining vehicle access to all log decks, ponds, and on-site hydrants. Additionally, the maximum deck height has been expanded from 20 feet to 30 feet with approval from the Fire Marshall and incorporation of sprinkled log decks. The Site has been designed to accommodate large logging trucks, and, as a result, it is anticipated that all types of vehicles, including emergency vehicles, would be able to adequately navigate the Site (W-Trans, 2023). As such, a less than significant impact would occur.

Other typical industrial facilities would not be anticipated to substantially increase hazards due to design features or incompatible uses or result in inadequate emergency access. Building permit applications for a typical industrial facility would be subject to review by the Little Lake Fire District for compliance with the current version of the CFC in place at the time of building permit application submittal. Typical conditions would be anticipated to be related to maintaining site access and circulation for emergency equipment, emergency water supply, property signage, flammable materials storage, and other conditions as required by the Fire Marshal in accordance with the current CFC at the time a project is proposed. Compliance with conditions required by the Fire Marshall of the Little Lake Fire District would ensure that future uses of the Site are designed so that hazards at the Site are not substantially increased and so that the Site has adequate emergency access. A less than significant impact would occur.

MITIGATION MEASURES

No mitigation required.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Transportation.

XVIII. TRIBAL CULTURAL RESOURCES. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	☐	☒	☐	☐
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code §5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code §5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

DISCUSSION

According to Development Element of the Mendocino County General Plan (2020), ten (10) Native American tribes historically had territory in what is now Mendocino County. Native American tribes known to inhabit Mendocino County concentrated mainly along the coast and along major rivers and streams, while some tribes seasonally occupied mountainous areas and redwood groves. The entire southern third of Mendocino County was the home of groups of Central Pomo. To the north of the Central Pomo groups were the Northern Pomo, who controlled a strip of land extending from the coast to Clear Lake. The Coast Yuki claimed a portion of the coast from Fort Bragg north to an area slightly north of Rockport. They were linguistically related to a small group, called the Huchnom, living along the South Eel River north of Potter Valley. Both of these smaller groups were related to the Yuki, who were centered in Round Valley. At the far northern end of Mendocino County, several groups extended south from Humboldt County. Branscomb, Laytonville, and Cummings bounded the territory of the Cahto. The North Fork Wailaki was almost entirely in Mendocino County, along the North Fork of the Eel River. Other groups in this area included the Shelter Cove Sinkyone, the Eel River, and the Pitch Wailaki (County of Mendocino, 2020). The first permanent non-native settlers came to Mendocino County in the middle of the 16th century, exploring and establishing small outposts. It was almost 300 years before the first permanent non-Spanish settlements in Mendocino County were established in April of 1852 on the coast north of Big River. Settlement in the vicinity of the City began in the mid-1880s (City of Willits, 1992, pg. III-27). As European-American settlement expanded in Mendocino County, most of the tribes known to inhabit the land were restricted to reservations and rancherias. During the 19th century, other tribes from the interior of California were forced to settle on the Round Valley Reservation in the northeastern portion of Mendocino County (County of Mendocino, 2020).

Outreach and correspondence with the NAHC occurred during preparation of the August 2020 Cultural Study. In July 2020, a SLF Search was requested from the NAHC. On July 3, 2020, the NAHC provided a response that indicated the results of the SLF Search were negative. The NAHC additionally provided a list of

Native American tribes that may have knowledge of cultural resources in the Project area. On December 14, 2022, in compliance with Assembly Bill (AB) 52 and Senate Bill (SB) 18, the City of Willits sent consultation letters to the Tribal Historic Preservation Officer (THPO) or appropriate representative for each of the following 15 Native American tribes: Coyote Valley Band or Pomo Indians, Guidiville Indian Rancheria, Hopland Band of Pomo Indians, Cahto Tribe, Manchester Band of Pomo Indians of the Manchester Rancheria, Middletown Rancheria of Pomo Indians, Noyo River Indian Community, Pinoleville Pomo Nation, Potter Valley Tribe, Redwood Valley or Little River Band of Pomo Indians, Robinson Rancheria of Pomo Indians, Round Valley Reservation/Covelo Indian Community, Scotts Valley Band of Pomo, Sherwood Valley Rancheria of Pomo, Yokayo Tribe, and Torres Martinez Desert Cahuilla Indians. Two Native American tribes, the Manchester Band of Pomo Indians of the Manchester Rancheria and the Sherwood Valley Rancheria of Pomo, responded to request additional information. No Native American tribes responded with concerns regarding the proposed Project. Copies of the NWIC response letter and the NAHC Native American Contacts List are included in Appendix F.

a.i-ii) As discussed in Section V (Cultural Resources), above, no historical resources are identified at or near the Site, per Figure 10-1 of the City of Willits General Plan (1992), no responses were received from the Tribal consultation effort that expressed concerns regarding the proposed Project, and there are no known Tribal cultural resources at the Site. However, there is the possibility that a tribal cultural resource could be discovered inadvertently due to the ground-disturbing activities required during construction of the Project or other typical industrial facilities. The incorporation of Mitigation Measure CUL-1, which requires that the contractor of the Project or other typical industrial facilities implement standard protocol similar to Mendocino County's "Discovery Clause" during construction, and Mitigation Measure CUL-2, which establishes protocol in the event that human remains are encountered on-site, would ensure that any currently unknown tribal cultural resources that are discovered during construction are not adversely impacted. With mitigation incorporated, a less than significant impact would occur.

MITIGATION MEASURES

Refer to Mitigation Measures CUL-1 through CUL-3 under Section V (Cultural Resources), above.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact with Mitigation Incorporated** on Tribal Cultural Resources.

XVIX. UTILITIES AND SERVICE SYSTEMS. Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

DISCUSSION

The Site is comprised of two (2) parcels: Quail Meadows and APN: 108-040-18. While the Site is entirely privately-owned, the entirety of the Site is located within the City of Willits.

Water

The majority of water utilized for the Project would be from on-site wells, as the Applicant anticipates that the four (4) existing wells plus the up to three (3) proposed wells would be sufficient for meeting the needs of the current and expanded log yards, with the proposed ponds available for irrigation water storage and fire suppression needs. However, as noted above, the existing connection to the City water system would be maintained and/or upgraded, as needed, to serve as a back-up supply for irrigation needs, when necessary in the events of emergency well problems and/or mechanical failures during the dry months when water is needed on the log decks. A separate connection exists to serve fire suppression needs in the event of a fire emergency. The Applicant intends to have a self-sustaining water system through the use of on-site wells and wintertime collection and storage in the proposed ponds for use during the following summer. It is not anticipated that City water would be needed as an emergency backup water supply during the months of January through April and December when the need for log deck wetting is limited, and the ponds would likely contain water. For the months of May through November, up to approximately 90,000 gpd (peak usage) may be necessary as an emergency backup water supply. This estimate is based on the recorded highest usage of City water during an emergency at the existing log yard. A 10-day period of emergency water use is anticipated to be more than adequate to complete water system repairs or to allow for other unforeseen circumstances that would require the use of City water as a backup supply. Over a 10-day period, approximately 2.76 ac-ft (900,000 gallons) would be anticipated to be necessary. This estimate would allow for 10 days of makeup water to combat evaporation and four (4) water truck loads per day for dust

abatement. Water services for the Project are described in additional detail in Section X (Hydrology and Water Quality).

Wastewater

A sewage pumping station exists within close proximity to the office. Sewer lines run to the pumping station from the office and old infrastructure from the previous RV park. The sewage pumping station connects to the main line, which is serviced by the City of Willits. The City's NPDES Permit Number CA0023060 states that the City of Willits Wastewater Treatment Facility has the capacity to serve current and future wastewater demand through 2025 (NCRWQCB, 2021).

Electric and Natural Gas

Electricity and natural gas connections currently exist on-site. The Applicant anticipates upgrading the existing power supply to meet operational needs. Potential typical industrial facility operators would coordinate with PG&E at the time a project is proposed if additional electricity or natural gas connections or supplies are needed.

Telecommunications

Telecommunications services would be obtained by the Applicant and future industrial facility operators, if needed.

Stormwater

Under the Project, post-construction stormwater would continue to infiltrate as the Project does not propose the introduction of impervious surfaces. However, stormwater would be collected in the two (2) ponds proposed at the Site for use as an emergency water supply and for irrigation needs.

While the City does not operate a municipal separate storm sewer system (MS4) that would otherwise be subject to the Municipal Storm Water Program administered by the SWRCB, including typical requirements for Low Impact Development (LID) feature in site design, compliance with the CGP would help to ensure post-construction stormwater flows for the Project and other typical industrial facilities are properly managed in accordance with the Clean Water Act. Furthermore, industrial facilities such as manufacturers, landfills, mining, steam generating electricity, hazardous waste facilities, transportation with vehicle maintenance, larger sewage and wastewater plants, recycling facilities, and oil and gas facilities would also be subject to coverage under the Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (IGP), administered by the SWRCB.

Solid Waste

Waste generated by the Project and other typical industrial facilities would be hauled off-site to a licensed disposal facility or collected by the local waste hauling company, if needed.

XVIX.a) The proposed Project and other typical industrial facilities is not anticipated to require or result in the relocation or construction of new or expanded water services, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities that could cause significant environmental effects. Water would be supplied by existing wells, and water supply is expected to be adequate for the Project during normal years and drought years without substantially decreasing groundwater, as discussed in Section X (Hydrology and Water Quality). Water usage proposed under other typical industrial facilities is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping logs wet during storage. Wastewater services for the Project would not need to be expanded, and potential wastewater improvements for a typical industrial facility would be subject to

grading and/or building permits through the City. Under the Project, stormwater would continue to infiltrate as the Project does not involve the introduction of impervious surfaces. The Project and other typical industrial facilities would be required to comply with the CGP, and other typical industrial facilities would be required to comply with the IGP. Waste generated by the Project and other typical industrial facilities would be hauled off-site to a licensed disposal facility or collected by the local waste hauling company, if needed, and solid waste generation would not be in excess of local infrastructure, as any generation of solid waste would be typical for industrial uses. Furthermore, while the Applicant would upgrade existing power supply and obtain telecommunication services as needed, this would not be anticipated to result in significant environmental effects. A less than significant impact would occur.

XVIX.b) As discussed in Section X (Hydrology and Water Quality), the proposed Project is anticipated to utilize approximately 41.5 ac-ft annually, primarily between the months May through November. Groundwater usage in the area is expected to be fairly low, as most water users in the area obtain water services through the City of Willits. Figure 3-6 of the LLVGWMP shows that well density is low in the area surrounding the Site, as there were only 5-10 wells located in the section of Figure 3-6 that includes the Site as of 2020. The LLVGMP found that the Basin recovers quickly from declines in groundwater levels and did not identify any overdraft issues in the Basin.

A Well Impact Report prepared by VESTRA Resources and dated October 5, 2023, determined that each of the three (3) proposed wells for the Project would have a drawdown of less than one foot at the nearest structure, nearest off-site well, and within a one-mile radius (Appendix I). Based on these results, the extraction of groundwater from the proposed wells is not likely to interfere with the production and function of existing nearby wells and are not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

The majority of water utilized for the Project would be from on-site wells, as the Applicant anticipates that the four (4) existing wells plus the up to three (3) proposed wells would be sufficient for meeting the needs of the current and expanded log yards, with the proposed ponds available for irrigation water storage and fire suppression needs. However, as noted above, the existing connection to the City water system would be maintained and/or upgraded, as needed, to serve as a back-up supply for irrigation needs when necessary in the event of emergency well problems and/or mechanical failures. The Applicant intends have a self-sustaining water system through the use of on-site wells and wintertime collection and storage in the proposed ponds for use during the following summer. It is not anticipated that City water would be needed as an emergency backup water supply during the months of January through April and December when the need for log deck wetting is limited, and the ponds would most likely contain water. For the months of May through November, up to approximately 90,000 gpd (peak usage) may be necessary as an emergency backup water supply. This estimate is based on the recorded highest usage of City water during an emergency at the existing log yard. A 10-day period of emergency water use is anticipated to be more than adequate to complete water system repairs or to allow for other unforeseen circumstances that would require the use of City water as a backup supply. Over a 10-day period, approximately 2.76 ac-ft (900,000 gallons) would be anticipated to be necessary. This estimate would allow for 10 days of makeup water to combat evaporation and four (4) water truck loads per day for dust abatement. Water services for the Project are described in additional detail in Section X (Hydrology and Water Quality).

In a typical industrial facility, water sources and storage would be required for daily operation and emergency fire suppression. The water usage proposed under typical industrial is anticipated to be comparable to, and possibly less than, the Project due to the importance of water in the log yard for keeping

logs wet during storage. Details on the specific locations, capacities, and dimensions of the ponds and/or other water storage facilities would be subject to grading and/or building permits through the City.

As such, it is anticipated that there would be sufficient water supplies available to serve the Project and other typical industrial facilities during normal, dry, and multiple dry years. As such, a less than significant impact would occur.

XVIX.c) City of Willits Wastewater Treatment Facility has the capacity to serve current and future wastewater demand through 2025 (NCRWQCB, 2021). Due to the nature of the Project, the proposed Project would not require any expansion of wastewater services. Potential wastewater improvements for a typical industrial facility would be subject to grading and/or building permits through the City. A less than significant impact would occur.

XVIX.d-e) Construction and operation of the proposed Project and other typical industrial facilities is not expected to generate a significant amount of solid waste that would be in excess of local infrastructure. The generation of solid waste would be typical for industrial uses. Additionally, all solid waste generated during construction and operation would be disposed of in accordance with all federal, state, and local statutes and regulations. A less than significant impact would occur.

MITIGATION MEASURES
No mitigation required.

FINDINGS
The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact** on Utilities and Service Systems.

XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage challenges?	☐	☐	☒	☐

DISCUSSION

Mendocino County adopted several plans that include wildfire hazard management and mitigation including, but not limited to: Mendocino County Community Wildfire Protection Plan (2005), Emergency Operations Plan, and Multi-Jurisdictional Hazard Mitigation Plan (2021), in which the City is a participant. In addition, in October 2019, the City released a Public Review Draft of the 2019 Safety Element of the City of Willits General Plan to identify safety risks the City faces and develop goals, policies, and implementation programs to better address the issues. The 2020 Mendocino County Multi-Jurisdictional Hazard Mitigation Plan was approved by FEMA in February 2021. Based on information provided in the 2020 Multi-Jurisdictional Hazard Mitigation Plan, twenty-seven (27) wildfires occurred in Mendocino County between 2002 and 2018, some of which overlapped with neighboring counties, with each fire burning over 1,000 acres (2021).

As discussed under Section IX (Hazards and Hazardous Materials), above, both parcels are within the LRA. According to the CAL FIRE LRA Fire Hazard Severity Zone Maps (2024), the majority of the Site is located within a "Moderate" fire hazard severity zone. The area to the west of the Site is within the State Responsibility Area (SRA) and is mapped as a "Moderate" fire hazard severity zone. The Site is within the service boundaries of the Little Lake Fire District, which provides fire protection and emergency medical services to the City of Willits. The nearest fire station to the Site is located approximately 0.5 miles south of the Site, at 74 East Commercial Street in Willits.

Furthermore, as previously described under Section IX (Hazards and Hazardous Materials), in accordance with the 2019 CFC, the log decks at the existing log yard are a maximum of 300 feet by 500 feet (150,000 square feet). The maximum deck height has been expanded from 20 feet to 30 feet with approval from the Fire Marshall and incorporation of sprinkled log decks. It is anticipated that the expansion area would contain 12 log decks: nine (9) on Quail Meadows and three (3) on APN: 108-040-18. These decks would be approximately 250 to 300 feet in length with a proposed height of 30 feet. Additionally, water supplies available for fire suppression needs would include three (3) existing wells at the Site, one (1) existing well at the existing log yard, up to three (3) wells proposed at the Site, and the proposed irrigation ponds.

Based on correspondence received from Eric Alvarez, Fire Marshal/Division Chief of the Little Lake Fire District in March 2023 (see Appendix K), the Project would also be required to provide a minimum fire flow of 4,500

gpm at 20 pounds per square inch (psi) for approximately 6 hours. Additionally, it is noted that the type of hydrant required for the Project is a standard municipal hydrant with two (2) 2½-inch outlets and one (1) 4½-inch outlet, with spacing required to be 600 feet apart. Furthermore, it is noted that backup power to the fire pump is essential to ensure the fire pump would remain in proper working order for fire suppression efforts (2023).

Four (4) City fire hydrants are located within the vicinity of the Site, with the closest hydrant located approximately 200 feet southwest of the existing office structure. The Applicant intends to install additional log-yard fire hydrants such that no log deck is greater than 500 feet from a City or log-yard fire hydrant. It is anticipated that the proposed irrigation ponds would store water for use in the log-yard fire hydrant system, when needed. A log irrigation system with low flow sprinklers is anticipated to be utilized approximately 8 hours per day to wet the log decks. The Applicant anticipates that the four (4) existing wells would be sufficient for meeting the needs of the current and expanded log yards, with the proposed irrigation ponds available as a back-up supply.

Development of the Site for a typical industrial facility would generally include vegetation removal; grading for access roads, building pads, and parking areas; landscaping; installation of water storage facilities such as water tanks and/or ponds to serve as back-up water supplies and for fire suppression needs; reuse and/or removal of existing structures; infrastructure improvements related to water supply, wastewater, solid waste, and storm drainage; and in many cases, construction of new structures. Building permit applications for a typical industrial facility would be subject to review by the Little Lake Fire District for compliance with the current version of the CFC in place at the time of building permit application submittal. Typical conditions would be anticipated to be related to maintaining site access and circulation for emergency equipment, emergency water supply, property signage, flammable materials storage, and other conditions as required by the Fire Marshal in accordance with the current CFC at the time a project is proposed.

XX.a) There are no components of the Project that are likely to impact an adopted emergency response plan or emergency evacuation plan. The proposed Project and other typical industrial facilities would be required to meet State and local standards for defensible space and emergency access and provide hydrants in accordance with the requirements specified above. Additionally, Mitigation Measure HAZ-1 requires the preparation of an EAP for the Project and future projects, as they occur, to the satisfaction of the Little Lake Fire District. By meeting current standards and design requirements, incorporation of Mitigation Measure HAZ-1, and since sufficient fire protection services are available to serve the Site, a less than significant impact would occur.

XX.b) As noted above, the Site is relatively flat and is not located within a very high fire hazard severity zone. The proposed Project and other typical industrial facilities would be developed in accordance with the City Code and the latest CBC and CFC. There are no factors, such as steep slopes, prevailing winds, or the installation/maintenance of new infrastructure, which would exacerbate fire risk or expose future occupants of the Site to the uncontrolled spread of a wildfire, pollutant concentrations from a wildfire, post-fire slope instability, or post-fire flooding. Therefore, the Project and other typical industrial facilities would have a less than significant impact.

XX.c) The Site is currently and, under the Project, would continue to be served by electricity, natural gas, community wastewater, and solid waste service provided by local providers, in addition to on-site wells. The Site contains existing utility lines. Although electrical upgrades may be necessary for the Project, it is not anticipated that fire risk would be exacerbated or that temporary or ongoing impacts to the environment

would occur, as the relevant utility providers would be required to employ applicable BMPs to ensure potential impacts are minimized. A less than significant impact would occur.

Other typical industrial facilities would not be anticipated to require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Building permit applications for a typical industrial facility would be subject to review by the Little Lake Fire District for compliance with the current version of the CFC in place at the time of building permit application submittal to ensure that site design and improvements for future projects do not exacerbate fire risk.

XX.d) The proposed Project and other typical industrial facilities would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage challenges, as the Site is relatively flat. Additionally, as previously discussed, stormwater for the Project would be collected and retained on-site in the two (2) ponds proposed at the Site. Due to the size of the Site and the nature of industrial uses, it can be assumed that construction activities of other typical industrial facilities would cause disturbance to greater than 1 acre of land and would therefore be required to comply with the CGP, which would ensure that BMPs would be implemented in accordance with a project-specific SWPPP to reduce the risk of soil erosion and loss of topsoil. The Project would also be required to comply with the CGP. A less than significant impact would occur.

MITIGATION MEASURES

Refer to Mitigation Measure HAZ-1 under Section IX (Hazards and Hazardous Materials), above.

FINDINGS

The proposed Project and other typical industrial development would have a **Less Than Significant Impact With Mitigation Incorporated** on Wildfire.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).	☐	☐	☒	☐
c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

DISCUSSION

Certain mandatory findings of significance must be made to comply with CEQA Guidelines §15065. The proposed Project has been analyzed, and it has been determined that it would not:

- Substantially degrade environmental quality;
- Substantially reduce fish or wildlife habitat;
- Cause a fish or wildlife population to fall below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Reduce the numbers or range of a rare, threatened, or endangered species;
- Eliminate important examples of the major periods of California history or pre-history;
- Achieve short term goals to the disadvantage of long term goals;
- Have environmental effects that will directly or indirectly cause substantial adverse effects on human
- beings; or
- Have possible environmental effects that are individually limited but cumulatively considerable when viewed in connection with past, current, and reasonably anticipated future projects.

Potential environmental impacts would be related to the expansion of existing log yard operations to support local timber harvesting operations and increase log purchasing and storage capacity in the region and other typical industrial facilities that may occur due to the GPA and Rezone. The Applicant has identified the Site as an ideal location for an expanded log yard due to its location adjacent to a Highway 101 off-ramp, existing access roads to and within the Site, the surrounding uses and development, and the existing utility connections at the Site. As the Site is located at the northern end of the Willits city limits adjacent to a Highway 101 off-ramp, the Site would be easily accessed from the surrounding region, without increasing truck traffic through the City of Willits. Potential environmental impacts have been analyzed in this document and mitigation measures have been included in the document to ensure impacts would be held to a less than significant level.

XXI.a) The Project and other typical industrial facilities would not have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. There are no important examples of California Pre-history or history located on the Site. While portions of the Site are mapped as wetlands and contain sensitive species that may be impacted by the Project and other typical industrial facilities, mitigation has been applied to reduce any potential environmental impacts to levels that are less than significant.

XXI.b) No cumulative impacts have been identified as a result of the proposed Project. The Project is intended to facilitate expansion of the existing log yard to the south. Based on the analysis in this IS, it is anticipated that potential impacts from the Project and other typical industrial facilities would be less than significant and would not contribute to significant cumulative impacts. All potential impacts have been mitigated to less than significant levels.

Other projects in the general vicinity of the Site that may contribute to cumulative impacts include the City's Land Use Element Update to the City of Willits General Plan (1992). However, it is not anticipated that the Project and other typical industrial facilities would result in cumulative impacts, as impacts identified in this IS would be localized and mitigated to less than significant. Additionally, if the City's Land Use Element Update facilitates land use designations in the vicinity of the Site, development at the Site would be required to comply with applicable setbacks. There are no other known projects in the general vicinity of the Site that may cause a cumulative impact.

XXI.c) Based on the findings in this Initial Study and as mitigated and conditioned, the proposed Project and other typical industrial facilities would not have environmental effects that would cause substantial adverse effects on human beings either directly or indirectly. Potential environmental impacts associated with approval of the Project and other typical industrial facilities have been analyzed and as mitigated, all potential impacts can be reduced to a less-than-significant level.

MITIGATION MEASURES

Refer to Mitigation Measures BIO-1 through BIO-8 in Section IV (Biological Resources), CUL-1 through CUL-3 in Section V (Cultural Resources), GEO-1 in Section VII (Geology and Soils), HAZ-1 in Section IX (Hazards and Hazardous Materials), and NOI-1 and NOI-2 in Section XIII (Noise), above.

FINDINGS

The proposed Project and other typical industrial facilities would have a **Less Than Significant Impact with Mitigation Incorporated** on Mandatory Findings of Significance.

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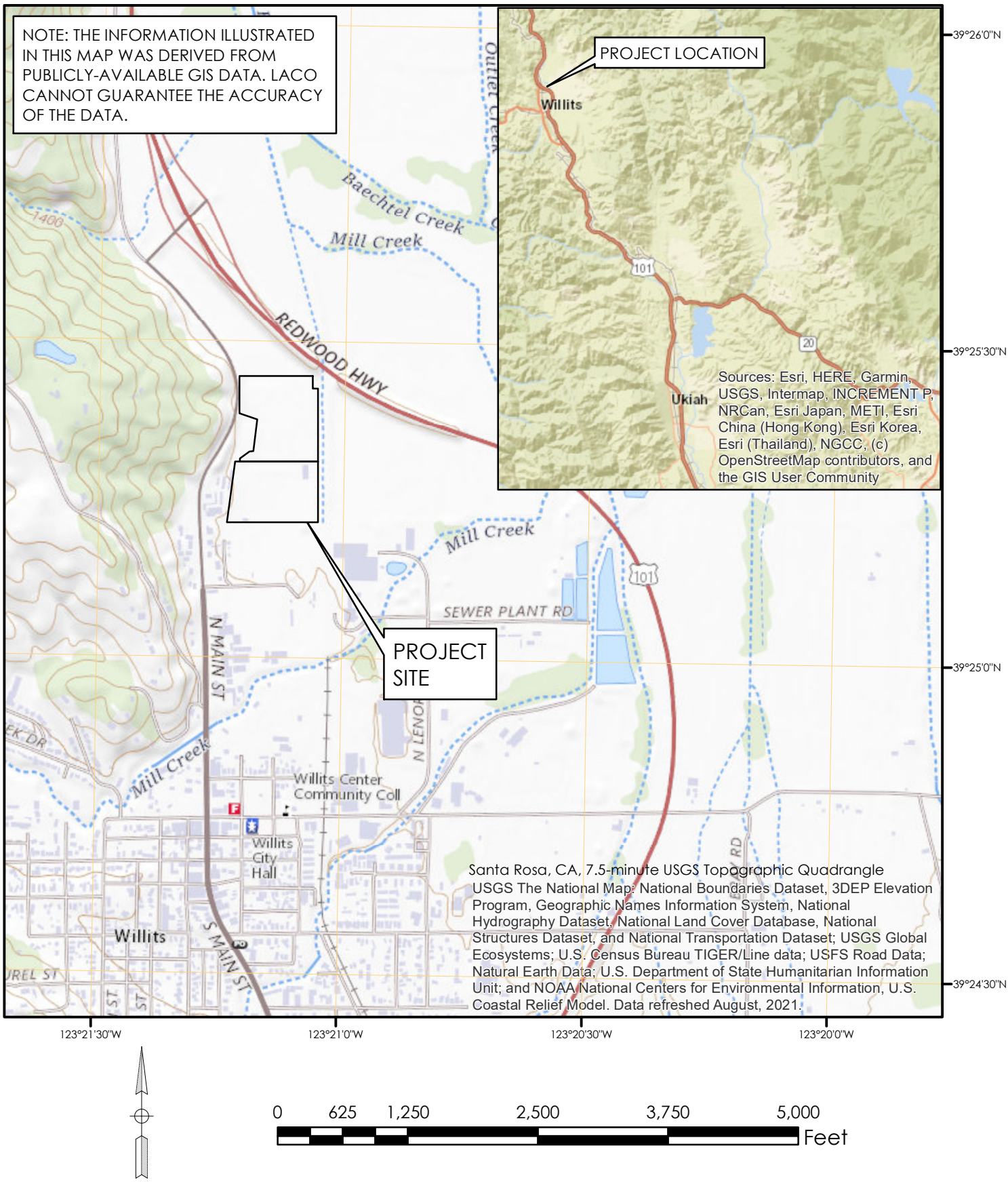
FIGURES

LACO Eureka | Ukiah | Santa Rosa | Chico 1-800-515-5054 www.lacoassocociates.com	PROJECT SANHEDRIN TIMBER ENTITLEMENTS	BY AAM	FIGURE 1
	CLIENT SANHEDRIN TIMBER COMPANY	CHECK RMD	
	LOCATION 23701 N HIGHWAY 101, WILLITS, CA	DATE 09/27/2022	JOB NO. 10226.00
	PROJECT LOCATION		



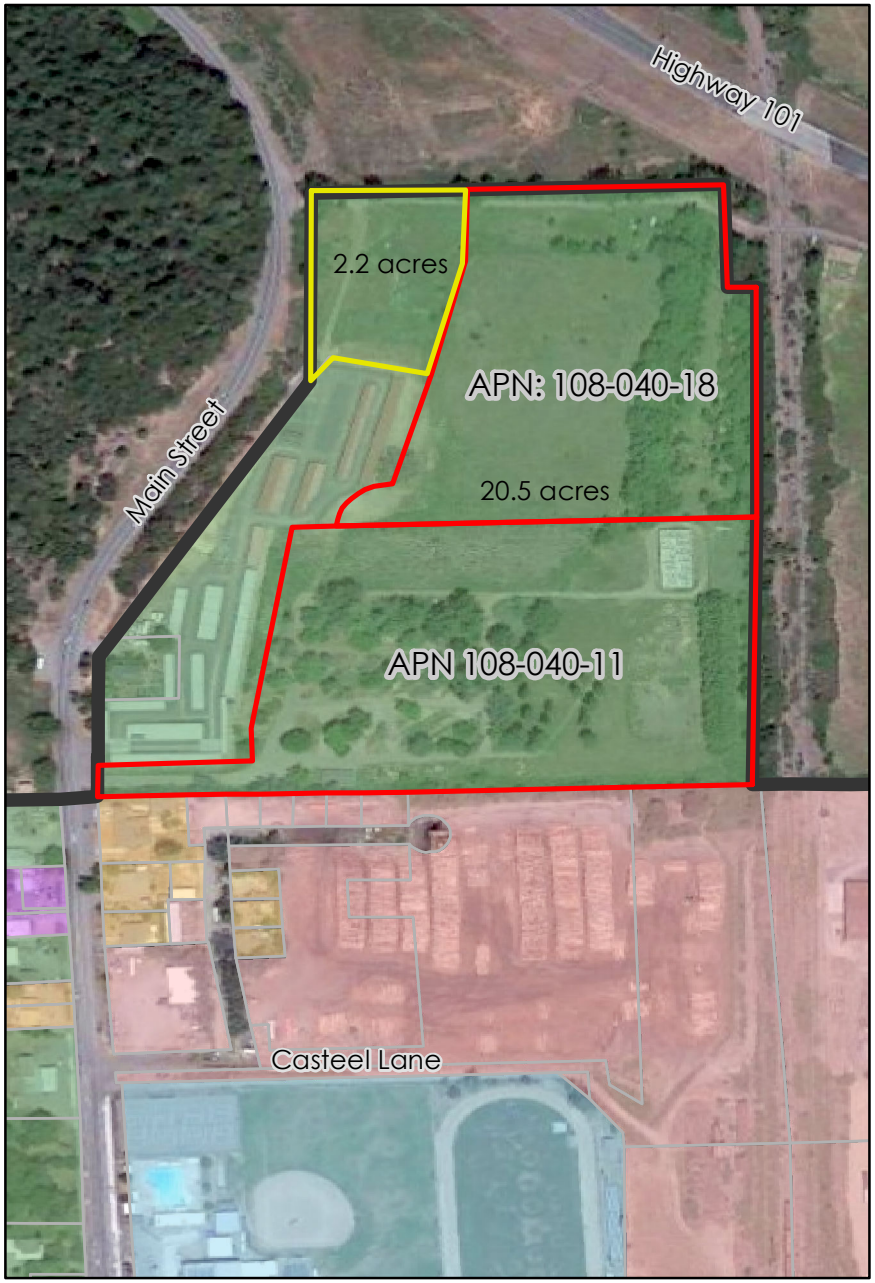
LACO EUREKA • UKIAH • SANTA ROSA 1-800-515-5054 www.lacoassociates.com	PROJECT	Sanhedrin Timber Entitlements	BY	AAM	FIGURE
	CLIENT	Sanhedrin Timber Company, LLC	CHECK	RMD	2
	LOCATION	23701 North Highway 101/Main Street	DATE	09/27/2022	JOB NO.
		Vicinity Map			10226.00

Railroad
Project Site
Parcel Boundaries
City Limits

0 200 400 800 Feet

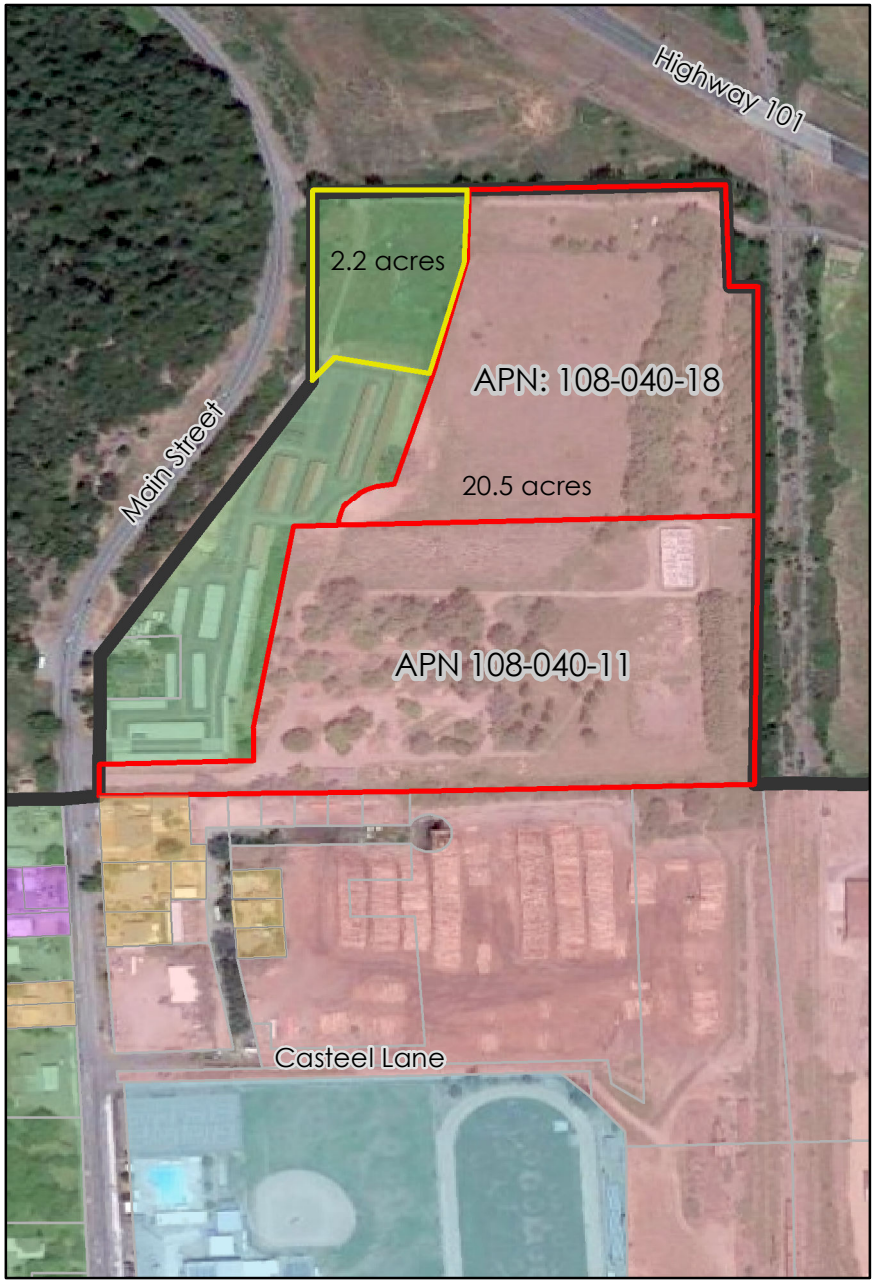
Note:
The information illustrated in this map was derived from publicly-available GIS data. LACO Associates cannot guarantee the accuracy of the data.

Sources: Google Earth, Mendocino County



Existing

- Project Area Not Proposed for GPA
- Project Area Proposed for GPA
- City Limits
- Parcel Boundaries
- Commercial General (C-G)
- Industrial General (M-G)
- Public Service (PS)
- Residential - Low Density (R-L)
- General Mixed Use



Proposed

Note:
The information illustrated in this map was derived from publicly-available GIS data. LACO Associates cannot guarantee the accuracy of the data.

0 200 400 800 Feet

Sources: Google Earth, Mendocino County

FIGURE	3
JOB NO.	10226.00
BY	AAM
CHECK	RMD
DATE	04/07/2025
PROJECT	Sanhedrin Timber Entitlements
CLIENT	Sanhedrin Timber Company
LOCATION	23701 N Highway 101, Willits, CA
	General Plan Amendment

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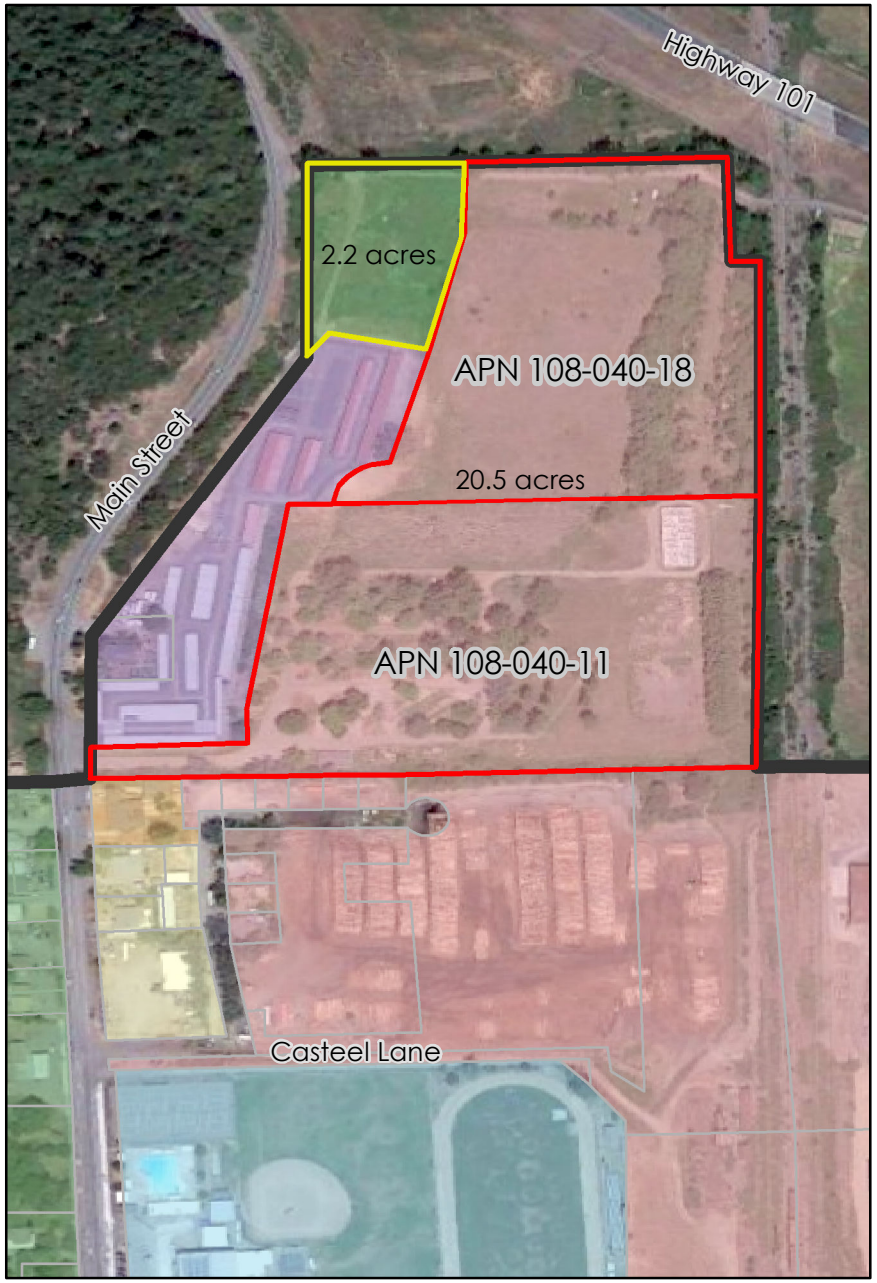
Existing



Proposed

- Project Area Not Proposed for Rezone
- Project Area Proposed for Rezone
- City Limits
- Parcel Boundaries
- Single-Family Residence (R1)
- Heavy Industrial (MH)
- Limited Industrial (ML)
- Heavy Commercial (C2)
- Community Commercial (C1)
- Public Facility (PF)

Note:
The information illustrated in this map was derived from publicly-available GIS data. LACO Associates cannot guarantee the accuracy of the data.

0 200 400 800 Feet

Sources: Google Earth, Mendocino County

FIGURE	4
JOB NO.	10226.00
BY	AAM
CHECK	RMD
DATE	04/07/25
PROJECT	Sanhedrin Timber Entitlements
CLIENT	Sanhedrin Timber Company
LOCATION	23701 N Highway 101, Willits, CA
	Rezone

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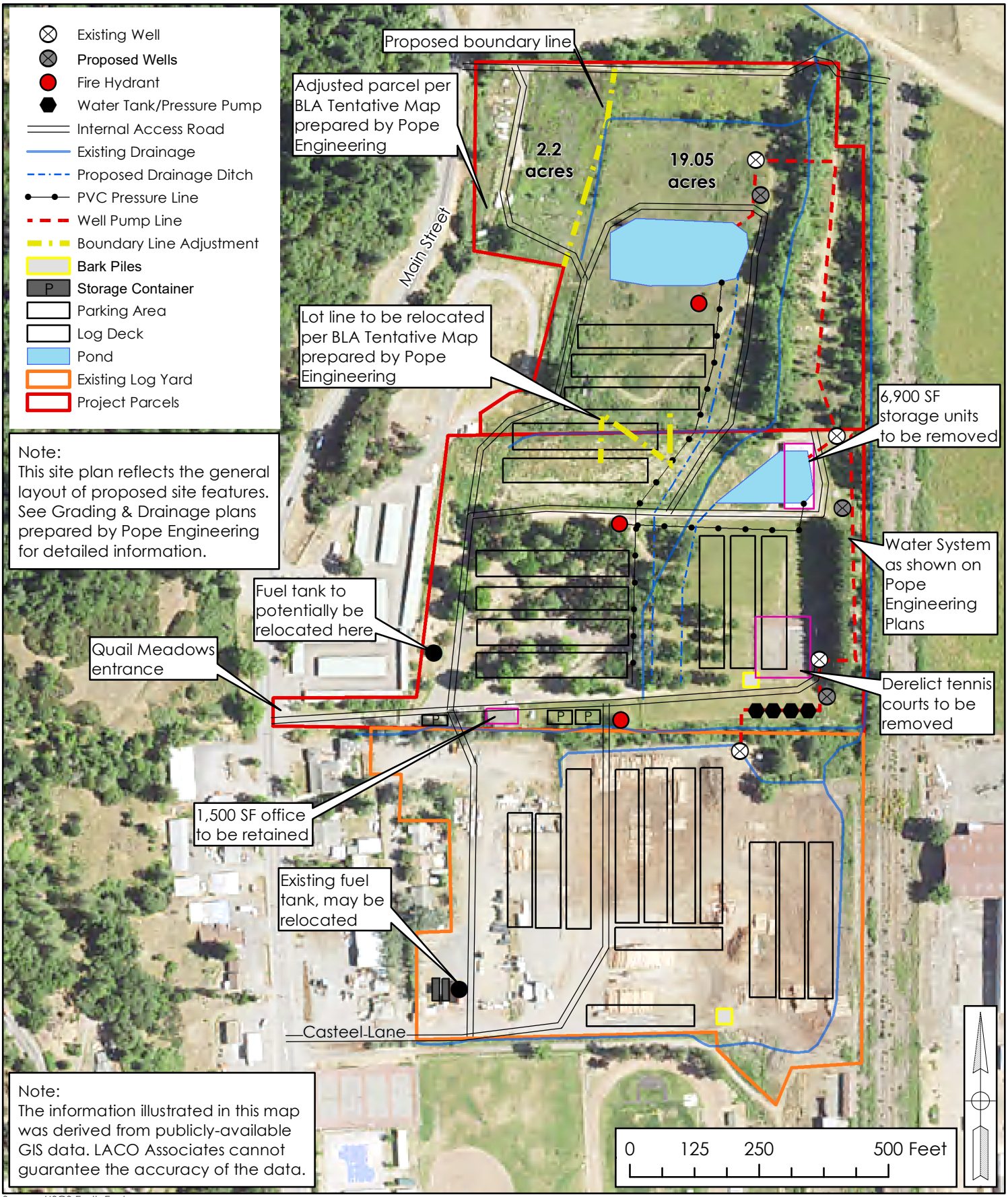
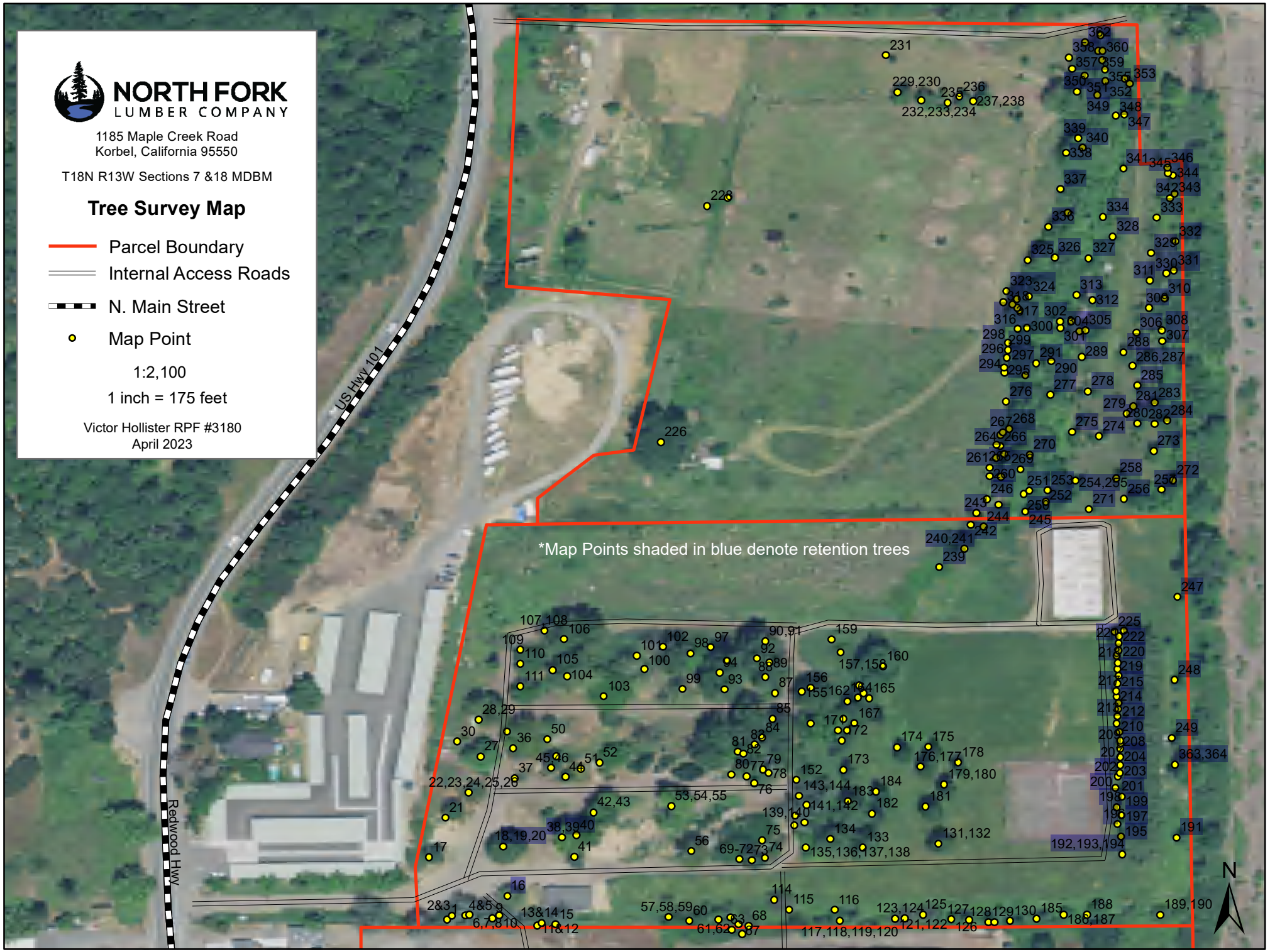
LACO www.lacoassociates.com	PROJECT Sanhedrin Timber Entitlements	BY AM	FIGURE 5
	CLIENT Sanhedrin Timber Company, LLC	CHECK RMD	
	LOCATION 23701 North Highway 101/Main Street	DATE 04/05/2024	JOB NO. 10226.00
	Site Plan		



Source: USGS Earth Explorer

APPENDIX A

Tree Survey


NORTH FORK
LUMBER COMPANY
1185 Maple Creek Road
Korbel, California 95550
T18N R13W Sections 7 &18 MDBM
Tree Survey Map
Parcel Boundary
Internal Access Roads
N. Main Street
Map Point
1:2,100
1 inch = 175 feet
Victor Hollister RPF #3180
April 2023
US Hwy 101
Redwood Hwy
*Map Points shaded in blue denote retention trees
N

Tree #	*Common Name*	*Scientific Name*	*DBH (in.)*	*Height (ft.)*	*Retained (Y/N)*
1	Bigtooth aspen	*Populus tremula*	17.6	47	No
2	Bigtooth aspen	*Populus tremula*	21.4	65	No
3	Bigtooth aspen	*Populus tremula*	14.5	41	No
4	Bigtooth aspen	*Populus tremula*	17.3	63	No
5	Bigtooth aspen	*Populus tremula*	11.5	38	No
6	Bigtooth aspen	*Populus tremula*	20.1	58	No
7	Bigtooth aspen	*Populus tremula*	16.5	66	No
8	Bigtooth aspen	*Populus tremula*	19.9	60	No
9	Bigtooth aspen	*Populus tremula*	26.2	60	No
10	Bigtooth aspen	*Populus tremula*	28.1	36	No
11	Black willow	*Salix nigra*	16.0	33	No
12	Black willow	*Salix nigra*	16.4	35	No
13	Black willow	*Salix nigra*	20.0	29	No
14	Black willow	*Salix nigra*	9.4	26	No
15	Bigtooth aspen	*Populus tremula*	29.3	54	No
16	London plane tree	*Plananus hispanica*	20.5	54	*Yes*
17	Austrian pine	*Pinus nigra*	30.0	41	No
18	Non-native maple	*Acer spp.*	16.0	66	*Yes*
19	Non-native maple	*Acer spp.*	17.6	65	*Yes*
20	Non-native maple	*Acer spp.*	19.0	66	*Yes*
21	California black oak	*Quercus kelloggii*	14.4	30	No
22	Chinese juniper	*Juniperus chinensis*	8.5	21	No
23	Chinese juniper	*Juniperus chinensis*	6.5	21	No
24	Chinese juniper	*Juniperus chinensis*	12.5	21	No
25	Chinese juniper	*Juniperus chinensis*	6.0	21	No
26	Chinese juniper	*Juniperus chinensis*	10.6	21	No
27	Non-native maple	*Acer spp.*	19.7	70	No
28	Non-native maple	*Acer spp.*	16.3	70	No

29	Non-native maple	*Acer spp.*	23.6	75	No
30	Austrian pine	*Pinus nigra*	13.6	23	No
31	Non-native maple	*Acer spp.*	14.0	58	No
32	Non-native maple	*Acer spp.*	15.5	54	No
33	Non-native maple	*Acer spp.*	7.0	20	No
34	Non-native maple	*Acer spp.*	16.4	60	No
35	Non-native maple	*Acer spp.*	12.8	56	No
36	Ponderosa pine	*Pinus ponderosa*	24.9	71	No
37	Olive	*Olea europaea*	7.8	12	No
38	Non-native maple	*Acer spp.*	18.5	81	*Yes*
39	Non-native maple	*Acer spp.*	14.0	74	*Yes*
40	Non-native maple	*Acer spp.*	24.3	82	*Yes*
41	Non-native maple	*Acer spp.*	14.3	48	No
42	Non-native maple	*Acer spp.*	16.4	51	No
43	Non-native maple	*Acer spp.*	17.5	58	No
44	Walnut	*Juglans spp.*	13.0	39	No
45	Lombardy poplar	*Populus nigra*	6.0	40	No
46	Lombardy poplar	*Populus nigra*	7.1	31	No
47	Lombardy poplar	*Populus nigra*	10.1	45	No
48	Lombardy poplar	*Populus nigra*	8.6	52	No
49	Lombardy poplar	*Populus nigra*	8.4	58	No
50	Ponderosa pine	*Pinus ponderosa*	14.5	42	No
51	Oregon ash	*Fraxinus latifolia*	22.0	38	No
52	American sycamore	*Platinus occidentalis*	17.9	70	No
53	Non-native maple	*Acer spp.*	17.3	69	No
54	Non-native maple	*Acer spp.*	9.1	52	No
55	Non-native maple	*Acer spp.*	16.2	68	No
56	Non-native maple	*Acer spp.*	28.2	73	No
57	Black willow	*Salix nigra*	11.8	33	No

58	Black willow	*Salix nigra*	9.0	31	No
59	Black willow	*Salix nigra*	9.7	25	No
60	Black willow	*Salix nigra*	13.0	41	No
61	Black willow	*Salix nigra*	16.7	41	No
62	Black willow	*Salix nigra*	8.4	35	No
63	Sweet gum	*Liquidambar styracifula*	7.3	37	No
64	Black willow	*Salix nigra*	8.2	32	No
65	Black willow	*Salix nigra*	10.6	32	No
66	Black willow	*Salix nigra*	8.6	31	No
67	Sweet gum	*Liquidambar styracifula*	11.1	44	No
68	Black willow	*Salix nigra*	14.0	40	No
69	Non-native maple	*Acer spp.*	6.0	36	No
70	Non-native maple	*Acer spp.*	8.2	39	No
71	Non-native maple	*Acer spp.*	8.7	37	No
72	Non-native maple	*Acer spp.*	6.5	33	No
73	Non-native maple	*Acer spp.*	19.0	57	No
74	Black willow	*Salix nigra*	10.1	36	No
75	Non-native maple	*Acer spp.*	11.9	40	No
76	Black poplar	*Populus nigra*	21.8	87	No
77	Black poplar	*Populus nigra*	24.2	88	No
78	Black poplar	*Populus nigra*	20.0	88	No
79	Black poplar	*Populus nigra*	22.3	89	No
80	Black poplar	*Populus nigra*	24.3	84	No
81	Black poplar	*Populus nigra*	25.4	82	No
82	Non-native maple	*Acer spp.*	8.6	37	No
83	Black poplar	*Populus nigra*	14.2	85	No
84	Black poplar	*Populus nigra*	21.6	88	No
85	Black poplar	*Populus nigra*	22.6	86	No
86	Black poplar	*Populus nigra*	24.9	83	No

87	Ponderosa pine	*Pinus ponderosa*	10.3	36	No
88	Black poplar	*Populus nigra*	28.1	92	No
89	Black poplar	*Populus nigra*	23.5	86	No
90	Black poplar	*Populus nigra*	22.7	79	No
91	Black poplar	*Populus nigra*	18.6	75	No
92	Austrian pine	*Pinus nigra*	10.0	41	No
93	Black poplar	*Populus nigra*	30.8	93	No
94	Black poplar	*Populus nigra*	16.1	51	No
95	Black poplar	*Populus nigra*	22.8	108	No
96	Black poplar	*Populus nigra*	19.8	102	No
97	Non-native maple	*Acer spp.*	15.5	45	No
98	Black poplar	*Populus nigra*	26.2	99	No
99	American sycamore	*Platinus occidentalis*	20.2	74	No
100	American sycamore	*Platinus occidentalis*	15.8	72	No
101	American sycamore	*Platinus occidentalis*	14.0	65	No
102	American sycamore	*Platinus occidentalis*	13.8	66	No
103	Non-native maple	*Acer spp.*	21.6	41	No
104	American sycamore	*Platinus occidentalis*	16.4	81	No
105	Black poplar	*Populus nigra*	19.9	92	No
106	Black poplar	*Populus nigra*	23.0	79	No
107	Black poplar	*Populus nigra*	22.7	84	No
108	Black poplar	*Populus nigra*	20.9	82	No
109	Non-native maple	*Acer spp.*	14.6	46	No
110	Non-native maple	*Acer spp.*	13.0	41	No
111	Non-native maple	*Acer spp.*	16.7	48	No
112	Sweet gum	*Liquidambar styracifula*	10.0	56	No
113	Sweet gum	*Liquidambar styracifula*	9.8	54	No
114	Black willow	*Salix nigra*	17.0	46	No
115	Black willow	*Salix nigra*	17.2	34	No

116	Apple tree	*Malus domesticata*	10.5	23	No
117	Black willow	*Salix nigra*	12.0	9	No
118	Black willow	*Salix nigra*	13.1	26	No
119	Black willow	*Salix nigra*	11.8	12	No
120	Black willow	*Salix nigra*	10.9	18	No
121	Black willow	*Salix nigra*	17.1	35	No
122	Black willow	*Salix nigra*	11.8	22	No
123	Black willow	*Salix nigra*	14.0	27	No
124	Black willow	*Salix nigra*	10.6	21	No
125	Black willow	*Salix nigra*	18.0	32	No
126	Oregon ash	*Fraxinus latifolia*	9.1	33	No
127	California black oak	*Quercus kelloggii*	10.6	40	No
128	California black oak	*Quercus kelloggii*	10.9	44	No
129	Black willow	*Salix nigra*	9.8	28	No
130	Black willow	*Salix nigra*	6.6	32	No
131	Black poplar	*Populus nigra*	11.6	17	No
132	Black poplar	*Populus nigra*	19.5	84	No
133	Black poplar	*Populus nigra*	31.0	93	No
134	Black poplar	*Populus nigra*	28.3	90	No
135	Non-native maple	*Acer spp.*	6.7	42	No
136	Non-native maple	*Acer spp.*	7.4	43	No
137	Non-native maple	*Acer spp.*	7.7	42	No
138	Non-native maple	*Acer spp.*	7.0	35	No
139	Non-native maple	*Acer spp.*	12.0	56	No
140	Non-native maple	*Acer spp.*	8.3	50	No
141	Non-native maple	*Acer spp.*	6.7	42	No
142	Non-native maple	*Acer spp.*	6.5	40	No
143	Non-native maple	*Acer spp.*	8.7	40	No
144	Non-native maple	*Acer spp.*	8.5	43	No

145	Bigtooth aspen	*Populus tremula*	20.3	57	No
146	Bigtooth aspen	*Populus tremula*	16.1	52	No
147	Bigtooth aspen	*Populus tremula*	23.9	56	No
148	Bigtooth aspen	*Populus tremula*	23.2	60	No
149	Bigtooth aspen	*Populus tremula*	15.7	50	No
150	Bigtooth aspen	*Populus tremula*	20.1	55	No
151	Bigtooth aspen	*Populus tremula*	14.0	45	No
152	Sweet gum	*Liquidambar styracifula*	10.9	61	No
153	Black poplar	*Populus nigra*	15.8	81	No
154	Black poplar	*Populus nigra*	13.6	72	No
155	Black poplar	*Populus nigra*	21.4	87	No
156	Black poplar	*Populus nigra*	18.3	87	No
157	Black willow	*Salix nigra*	6.0	20	No
158	Black willow	*Salix nigra*	11.6	37	No
159	Black willow	*Salix nigra*	6.4	31	No
160	California black oak	*Quercus kelloggii*	34.6	66	No
161	Black poplar	*Populus nigra*	14.9	70	No
162	Black poplar	*Populus nigra*	18.9	70	No
163	Black poplar	*Populus nigra*	10.0	52	No
164	Black poplar	*Populus nigra*	11.5	59	No
165	Black poplar	*Populus nigra*	11.5	61	No
166	Non-native maple	*Acer spp.*	9.9	73	No
167	Black poplar	*Populus nigra*	13.7	72	No
168	Non-native maple	*Acer spp.*	7.2	42	No
169	Non-native maple	*Acer spp.*	9.5	58	No
170	Non-native maple	*Acer spp.*	6.2	48	No
171	Black poplar	*Populus nigra*	11.9	70	No
172	Black poplar	*Populus nigra*	17.0	70	No
173	Black poplar	*Populus nigra*	16.9	66	No

174	Black poplar	*Populus nigra*	17.2	76	No
175	Black poplar	*Populus nigra*	14.8	70	No
176	Black poplar	*Populus nigra*	11.5	64	No
177	Black poplar	*Populus nigra*	11.6	66	No
178	Black poplar	*Populus nigra*	16.6	72	No
179	Black poplar	*Populus nigra*	13.9	74	No
180	Black poplar	*Populus nigra*	15.0	70	No
181	Black poplar	*Populus nigra*	17.1	73	No
182	Black poplar	*Populus nigra*	13.8	75	No
183	Black poplar	*Populus nigra*	14.6	71	No
184	Black poplar	*Populus nigra*	23.8	84	No
185	Black willow	*Salix nigra*	12.7	34	No
186	Black willow	*Salix nigra*	9.5	34	No
187	Black willow	*Salix nigra*	10.1	40	No
188	Black willow	*Salix nigra*	13.8	40	No
189	Black willow	*Salix nigra*	10.2	32	No
190	Black willow	*Salix nigra*	7.6	30	No
191	California black oak	*Quercus kelloggii*	8.4	62	*Yes*
192	ornamental Cypress	*Cupressus spp.*	14.5	52	*Yes*
193	ornamental Cypress	*Cupressus spp.*	11.2	41	*Yes*
194	ornamental Cypress	*Cupressus spp.*	17.5	50	*Yes*
195	ornamental Cypress	*Cupressus spp.*	23.8	70	*Yes*
196	ornamental Cypress	*Cupressus spp.*	18.9	71	*Yes*
197	ornamental Cypress	*Cupressus spp.*	21.3	70	*Yes*
198	ornamental Cypress	*Cupressus spp.*	18.1	75	*Yes*
199	ornamental Cypress	*Cupressus spp.*	19.4	73	*Yes*
200	ornamental Cypress	*Cupressus spp.*	19.9	74	*Yes*
201	ornamental Cypress	*Cupressus spp.*	19.7	68	*Yes*
202	ornamental Cypress	*Cupressus spp.*	19.0	77	*Yes*

203	ornamental Cypress	*Cupressus spp.*	17.3	73	*Yes*
204	ornamental Cypress	*Cupressus spp.*	24.1	71	*Yes*
205	ornamental Cypress	*Cupressus spp.*	10.3	51	*Yes*
205.1	ornamental Cypress	*Cupressus spp.*	13.7	70	*Yes*
205.2	ornamental Cypress	*Cupressus spp.*	11.5	68	*Yes*
206	ornamental Cypress	*Cupressus spp.*	21.7	75	*Yes*
207	ornamental Cypress	*Cupressus spp.*	19.2	75	*Yes*
208	ornamental Cypress	*Cupressus spp.*	23.6	77	*Yes*
209	ornamental Cypress	*Cupressus spp.*	18.7	74	*Yes*
210	ornamental Cypress	*Cupressus spp.*	22.4	75	*Yes*
211	ornamental Cypress	*Cupressus spp.*	20.0	74	*Yes*
212	ornamental Cypress	*Cupressus spp.*	24.7	76	*Yes*
213	ornamental Cypress	*Cupressus spp.*	23.2	70	*Yes*
214	ornamental Cypress	*Cupressus spp.*	14.8	65	*Yes*
215	ornamental Cypress	*Cupressus spp.*	9.5	34	*Yes*
216	ornamental Cypress	*Cupressus spp.*	20.7	70	*Yes*
216.1	ornamental Cypress	*Cupressus spp.*	10.0	33	*Yes*
217	ornamental Cypress	*Cupressus spp.*	21.8	64	*Yes*
218	ornamental Cypress	*Cupressus spp.*	21.3	66	*Yes*
219	ornamental Cypress	*Cupressus spp.*	24.1	74	*Yes*
220	ornamental Cypress	*Cupressus spp.*	23.0	76	*Yes*
221	ornamental Cypress	*Cupressus spp.*	21.1	70	*Yes*
222	ornamental Cypress	*Cupressus spp.*	10.6	44	*Yes*
223	ornamental Cypress	*Cupressus spp.*	24.0	77	*Yes*
224	ornamental Cypress	*Cupressus spp.*	11.8	62	*Yes*
225	ornamental Cypress	*Cupressus spp.*	14.2	65	*Yes*
226	Valley oak	*Quercus lobata*	50.7	98	No
227	Oregon white oak	*Quercus garryana*	7.6	34	No
228	Oregon white oak	*Quercus garryana*	6.3	22	No

229	Oregon white oak	*Quercus garryana*	15.0	54	No
230	Oregon white oak	*Quercus garryana*	10.2	52	No
231	Oregon white oak	*Quercus garryana*	8.1	28	No
232	Oregon white oak	*Quercus garryana*	11.0	43	No
233	Oregon white oak	*Quercus garryana*	9.4	36	No
234	Oregon white oak	*Quercus garryana*	13.2	40	No
235	Oregon white oak	*Quercus garryana*	11.5	40	No
236	Oregon white oak	*Quercus garryana*	8.2	43	No
237	Oregon white oak	*Quercus garryana*	16.4	53	No
238	Oregon white oak	*Quercus garryana*	17.8	57	No
239	Oregon white oak	*Quercus garryana*	7.2	35	*Yes*
240	Oregon white oak	*Quercus garryana*	13.6	48	*Yes*
241	Oregon white oak	*Quercus garryana*	11.4	41	*Yes*
242	Oregon white oak	*Quercus garryana*	16.9	59	*Yes*
243	Oregon white oak	*Quercus garryana*	6.7	33	*Yes*
244	Oregon white oak	*Quercus garryana*	11.6	54	*Yes*
245	Oregon white oak	*Quercus garryana*	19.4	51	*Yes*
246	Oregon white oak	*Quercus garryana*	9.8	46	*Yes*
247	Oregon white oak	*Quercus garryana*	7.1	31	*Yes*
248	Oregon white oak	*Quercus garryana*	7.8	51	*Yes*
249	Oregon white oak	*Quercus garryana*	9.0	62	*Yes*
250	Oregon white oak	*Quercus garryana*	9.0	43	*Yes*
251	Oregon white oak	*Quercus garryana*	13.5	52	*Yes*
252	Oregon white oak	*Quercus garryana*	10.8	57	*Yes*
253	Oregon white oak	*Quercus garryana*	6.8	44	*Yes*
254	Oregon white oak	*Quercus garryana*	7.1	40	*Yes*
255	Oregon white oak	*Quercus garryana*	7.3	40	*Yes*
256	Oregon white oak	*Quercus garryana*	14.6	46	*Yes*
257	Oregon white oak	*Quercus garryana*	21.3	57	*Yes*

258	Oregon white oak	*Quercus garryana*	11.6	54	*Yes*
259	Oregon white oak	*Quercus garryana*	11.5	51	*Yes*
260	Oregon white oak	*Quercus garryana*	6.6	42	*Yes*
261	Oregon white oak	*Quercus garryana*	14.3	58	*Yes*
262	Oregon white oak	*Quercus garryana*	30.8	75	*Yes*
263	Oregon white oak	*Quercus garryana*	28.9	59	*Yes*
264	Oregon white oak	*Quercus garryana*	21.7	54	*Yes*
265	Oregon white oak	*Quercus garryana*	10.5	55	*Yes*
266	Oregon white oak	*Quercus garryana*	15.5	54	*Yes*
267	Oregon white oak	*Quercus garryana*	15.4	65	*Yes*
268	Oregon white oak	*Quercus garryana*	29.6	53	*Yes*
269	Oregon white oak	*Quercus garryana*	6.2	34	*Yes*
270	Oregon white oak	*Quercus garryana*	6.6	37	*Yes*
271	California black oak	*Quercus kelloggii*	6.4	33	*Yes*
272	Oregon white oak	*Quercus garryana*	8.2	40	*Yes*
273	Oregon white oak	*Quercus garryana*	13.5	49	*Yes*
274	Oregon white oak	*Quercus garryana*	6.7	36	*Yes*
275	Oregon white oak	*Quercus garryana*	6.1	38	*Yes*
276	Oregon white oak	*Quercus garryana*	9.0	55	*Yes*
277	Oregon white oak	*Quercus garryana*	7.9	48	*Yes*
278	Oregon white oak	*Quercus garryana*	7.1	40	*Yes*
279	Oregon white oak	*Quercus garryana*	9.5	42	*Yes*
280	Oregon white oak	*Quercus garryana*	16.9	64	*Yes*
281	Oregon white oak	*Quercus garryana*	9.3	46	*Yes*
282	Oregon white oak	*Quercus garryana*	10.3	42	*Yes*
283	Oregon white oak	*Quercus garryana*	23.6	58	*Yes*
284	Oregon white oak	*Quercus garryana*	26.4	71	*Yes*
285	Oregon white oak	*Quercus garryana*	10.2	43	*Yes*
286	Oregon white oak	*Quercus garryana*	8.1	34	*Yes*

287	Oregon white oak	*Quercus garryana*	6.2	29	*Yes*
288	Oregon white oak	*Quercus garryana*	8.8	36	*Yes*
289	Oregon white oak	*Quercus garryana*	13.2	39	*Yes*
290	Oregon white oak	*Quercus garryana*	16.1	48	*Yes*
291	Oregon white oak	*Quercus garryana*	24.7	45	*Yes*
292	Oregon white oak	*Quercus garryana*	11.3	25	*Yes*
293	Oregon white oak	*Quercus garryana*	10.8	25	*Yes*
294	Oregon white oak	*Quercus garryana*	18.5	57	*Yes*
295	Oregon white oak	*Quercus garryana*	14.1	47	*Yes*
296	Oregon white oak	*Quercus garryana*	15.2	66	*Yes*
297	Oregon white oak	*Quercus garryana*	13.3	48	*Yes*
298	Oregon white oak	*Quercus garryana*	11.6	45	*Yes*
299	Oregon white oak	*Quercus garryana*	12.0	32	*Yes*
300	Oregon white oak	*Quercus garryana*	9.1	38	*Yes*
301	Oregon white oak	*Quercus garryana*	10.3	34	*Yes*
302	Oregon white oak	*Quercus garryana*	11.6	42	*Yes*
303	Oregon white oak	*Quercus garryana*	6.4	27	*Yes*
304	Oregon white oak	*Quercus garryana*	8.2	36	*Yes*
305	Oregon white oak	*Quercus garryana*	22.6	61	*Yes*
306	Oregon white oak	*Quercus garryana*	6.6	29	*Yes*
307	Oregon white oak	*Quercus garryana*	10.7	39	*Yes*
308	Oregon white oak	*Quercus garryana*	19.1	71	*Yes*
309	Oregon white oak	*Quercus garryana*	8.6	31	*Yes*
310	Oregon white oak	*Quercus garryana*	23.0	60	*Yes*
311	Oregon white oak	*Quercus garryana*	24.7	73	*Yes*
312	Oregon white oak	*Quercus garryana*	8.3	41	*Yes*
313	Oregon white oak	*Quercus garryana*	12.6	51	*Yes*
314	Oregon white oak	*Quercus garryana*	18.0	46	*Yes*
315	Oregon white oak	*Quercus garryana*	15.2	42	*Yes*

316	Oregon white oak	*Quercus garryana*	9.0	39	*Yes*
317	Oregon white oak	*Quercus garryana*	22.4	63	*Yes*
318	Ponderosa pine	*Pinus ponderosa*	6.1	26	*Yes*
319	Oregon white oak	*Quercus garryana*	11.2	46	*Yes*
320	Oregon white oak	*Quercus garryana*	9.1	44	*Yes*
321	Oregon white oak	*Quercus garryana*	10.7	44	*Yes*
322	Oregon white oak	*Quercus garryana*	7.3	42	*Yes*
323	Oregon white oak	*Quercus garryana*	11.3	34	*Yes*
324	Oregon white oak	*Quercus garryana*	8.1	35	*Yes*
325	Oregon white oak	*Quercus garryana*	19.6	64	*Yes*
326	Oregon white oak	*Quercus garryana*	21.5	67	*Yes*
327	Oregon white oak	*Quercus garryana*	7.2	49	*Yes*
328	Oregon white oak	*Quercus garryana*	7.2	32	*Yes*
329	Oregon white oak	*Quercus garryana*	9.4	38	*Yes*
330	Oregon white oak	*Quercus garryana*	22.3	64	*Yes*
331	Oregon white oak	*Quercus garryana*	25.2	71	*Yes*
332	Oregon white oak	*Quercus garryana*	19.8	53	*Yes*
333	Oregon white oak	*Quercus garryana*	6.2	27	*Yes*
334	Oregon white oak	*Quercus garryana*	6.3	35	*Yes*
335	Oregon white oak	*Quercus garryana*	11.4	46	*Yes*
336	Oregon white oak	*Quercus garryana*	18.0	55	*Yes*
337	Oregon white oak	*Quercus garryana*	13.2	39	*Yes*
338	Oregon white oak	*Quercus garryana*	12.2	36	*Yes*
339	Oregon white oak	*Quercus garryana*	26.4	66	*Yes*
340	Oregon white oak	*Quercus garryana*	34.0	66	*Yes*
341	Oregon white oak	*Quercus garryana*	7.7	48	*Yes*
342	Oregon white oak	*Quercus garryana*	14.5	40	*Yes*
343	Oregon white oak	*Quercus garryana*	17.6	63	*Yes*
344	California black oak	*Quercus kelloggii*	6.9	33	*Yes*

345	Oregon white oak	*Quercus garryana*	7.2	39	*Yes*
346	Oregon white oak	*Quercus garryana*	15.1	46	*Yes*
347	Oregon white oak	*Quercus garryana*	8.1	35	*Yes*
348	Oregon white oak	*Quercus garryana*	6.2	33	*Yes*
349	Oregon white oak	*Quercus garryana*	6.5	47	*Yes*
350	Oregon white oak	*Quercus garryana*	39.0	69	*Yes*
351	Oregon white oak	*Quercus garryana*	11.6	43	*Yes*
352	Oregon white oak	*Quercus garryana*	9.4	33	*Yes*
353	Oregon white oak	*Quercus garryana*	6.8	26	*Yes*
354	Oregon white oak	*Quercus garryana*	9.0	38	*Yes*
355	Oregon white oak	*Quercus garryana*	15.1	45	*Yes*
356	Oregon white oak	*Quercus garryana*	19.0	38	*Yes*
357	Oregon white oak	*Quercus garryana*	6.0	29	*Yes*
358	Oregon white oak	*Quercus garryana*	6.2	31	*Yes*
359	Oregon white oak	*Quercus garryana*	9.4	31	*Yes*
360	Oregon white oak	*Quercus garryana*	24.7	69	*Yes*
361	Oregon white oak	*Quercus garryana*	28.3	61	*Yes*
362	Oregon white oak	*Quercus garryana*	10.3	52	*Yes*
363	Oregon white oak	*Quercus garryana*	17.0	65	*Yes*
364	Oregon white oak	*Quercus garryana*	13.6	64	*Yes*

APPENDIX B

Photo Log

LACO

Sanhedrin Timber Entitlements
Photo Log
Photos Taken July 27, 2022

Looking east at the existing structure from the entrance of APN 108-040-11.

Looking south toward existing log yard from the entrance of APN 108-040-11.

Looking west at the entrance gate to APN 108-040-11.

Looking north from the northeastern portion of APN 108-040-11 (near entrance gate).

Looking north from the southernmost road of APN 108-040-11 (approximately 440 east from the entrance gate).

Looking east at existing storage tanks from the southernmost road of APN 108-040-11.

Looking southeast at existing storage tanks from the southernmost road of APN 108-040-11.

Looking west toward the entrance gate from the southernmost road of APN 108-040-11.

Looking south towards existing log yard on APN 005-030-42 from southernmost road of APN 108-040-11.

Looking northeast from the southernmost road of APN 108-040-11.

Looking northeast towards the storage structure from the southernmost road of APN 108-040-11.

Looking northeast toward the storage structure from the eastern end of the northernmost road of APN 108-040-11.

Looking east from the northernmost road of APN 108-040-11.

Looking south from the eastern end of the northernmost road of APN 108-040-11.

Looking west from the northernmost road of APN 108-040-11.

Looking northeast from the northernmost road of APN 108-040-11.

Looking south from the northernmost road of APN 108-040-11 (near the center of the parcel).

Looking east from the northernmost road of APN 108-040-11.

Looking northwest toward the adjacent storage facility from the northernmost road of APN 108-040-11.

Looking northeast from the northernmost road of APN 108-040-11.

Looking north toward adjacent storage facility from the westernmost road of APN 108-040-11.

Looking south from the westernmost road of APN 108-040-11.

Looking east from the entrance of APN 108-040-18.

Looking southeast from the entrance of APN 108-040-18.

Looking northeast from the entrance of APN 108-040-18.

Looking east from the entrance of APN 108-040-18.

LACO

Photos Taken October 06, 2023

Looking east towards the storage units on APN 108-040-11 from railroad tracks.

Looking east towards APN 108-040-011 from railroad tracks.

Looking southwest towards the southeast portion of APN 108-040-11.

Looking north from railroad tracks towards Highway 101. Project Site to the left.

LACO

Looking west towards APN 108-040-011 from above.

APPENDIX C

Biological Resources Assessment

Biological Resources Assessment
421 & 23701 North Main Street
Willits, Mendocino County, California
(APN 108-040-11 & 18)

SEPTEMBER 27, 2022

Prepared For:
Sanhedrin Timber Co., LLC.
P.O. Box 249
Weaverville, CA 96093

Prepared By:
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EXECUTIVE SUMMARY

This Biological Resource Assessment Report (BRAR) presents the results of a Biological Resources Assessment (BRA) conducted at the Biological Resource Assessment Area (BRAA) located at 421 & 23701 N. Main Street in Willits, Mendocino County, California. The property is located on Assessor Parcel Numbers (APNs) 108-040-11 & 18, approximately 600 feet north of Willits High School in an industrial area with some commercial and residential use, at the northern edge of the City of Willits. The property is accessed via a private drive from Main Street and covers 22 acre (Figure 1).

The purpose of this BRA is to document biological studies and perform an analysis of the proposed general plan amendment and rezone (from commercial to heavy industrial), boundary line adjustment, and log yard expansion Project in the City of Willits, in sufficient detail to determine to what extent the proposed Project may affect special-status species and natural resources. Based on information and data collected for the analysis, appropriate mitigation measures, designed to minimize and/or avoid potential biological resource impacts, are provided.

The BRAA is a nearly level former agricultural field, part of which was formerly developed as a Recreational Vehicle (RV) park. There are multiple ditches and some riparian habitats adjoining and within the Project area. Site work associated with the Project will involve vegetation removal, grading, construction of a rocked log yard, reconstruction of watercourse crossings, and several new watercourse crossings between the existing log yard on Casteel Lane, to the south, and the Project to the north. The Project also proposes to fill a ditch between the Project's two parcels.

The BRAA's ephemeral and intermittent ditches drain into an unnamed tributary to Mill Creek, east of the BRAA, that is mapped as a Federal Water of the US. As described in Chapter 3, the unnamed tributary to Mill Creek flows under the Highway 101 by-pass and into Mill Creek approximately 0.3 mile north of the Project.

Three special-status plants described in Chapter 4 - Baker's meadowfoam (*Limnanthes bakeri*, State Rare/CNPS 1B.1), Davy's semaphore grass (*Plueropogon californicus* var. *davyi*, CNPS 4.3), and North Coast semaphore grass (*Plueropogon hooverianus*, State Threatened/CNPS 1B.1) - were identified within the Seasonal Wetland habitat at the northern side of the BRAA. Several sensitive natural communities, described in Chapter 4, were identified throughout the BRAA. The Project site provides suitable habitat for nesting birds and special status animal species with potential habitat, described in Chapter 4.

TABLE OF CONTENTS

Chapter 1. Introduction

This Biological Resource Assessment Report (BRAR) presents the results of a Biological Resource Assessment (BRA) conducted at the property located at 421 & 23701 N. Main Street in Willits, Mendocino County, California. The property is located on Assessor Parcels 108-040-11 &18, approximately 600 feet north of Willits High School in an area with industrial use and some commercial and residential uses, at the northern edge of the City of Willits.

The purpose of the assessment is to identify special-status plant and wildlife species and sensitive habitats (including wetlands) that have the potential to occur on or in the vicinity of the Biological Resource Assessment Area (BRAA) to determine if the proposed Project could potentially affect these sensitive resources. Based on information and data collected for the analysis, appropriate mitigation measures, designed to minimize and/or avoid potential biological resource impacts, are provided.

1.1. Project History

The Sanhedrin Timber Company proposes to expand their current log storage yard, accessed from Casteel Lane, in the City of Willits, towards the north into two adjoining parcels, also within the city limits. Although the BRAA contains several existing structures, paved, rocked, and seasonal roads, existing watercourse crossings, and various abandoned recreational infrastructure, it remains primarily undeveloped. In the southwestern portion of the site is a building that previously functioned as the RV park office, and in the eastern portion of the site there is an existing storage unit building. Electricity, water, and sewer are currently available at the office building and had previously been distributed to multiple RV sites in the southwestern portion of the site. There is a run-down tennis court and other small improvement and landscape features associated with the previous RV park in APN 108-040-11.

1.2. Project Description

The Project consists of a general plan amendment and rezone (from commercial to heavy industrial) and boundary line adjustment to facilitate expansion of the existing log yard on Casteel Lane. The proposed Project is accessed via two private drives from N. Main Street in the City of Willits and covers approximately 14-acres of the 22.7-acre BRAA (Figure 1).

Site work associated with the Project will involve vegetation removal and grading for the construction of a rocked log yard, rocked road, watercourse crossings, two ponds, drainage ditches, new plumbing infrastructure, and reconstruction of existing watercourse crossings and drainage ditches.

The Project proposes to retain the office building but demolish the storage unit building. Various other RV infrastructure such as the RV sites, old tennis court, and landscaped areas will be demolished and removed as a part of the grading plan. To ensure adequate water for watering log decks, new wells

have been established that will connect to proposed fire hydrants and ponds. New drainage ditches are proposed to capture log-yard run-off and channel it into the ponds for re-use.

A new road is proposed outside of the rocked log yard near a proposed pond, and two new watercourse crossings are proposed to connect the Casteel Lane log yard with the Project site.

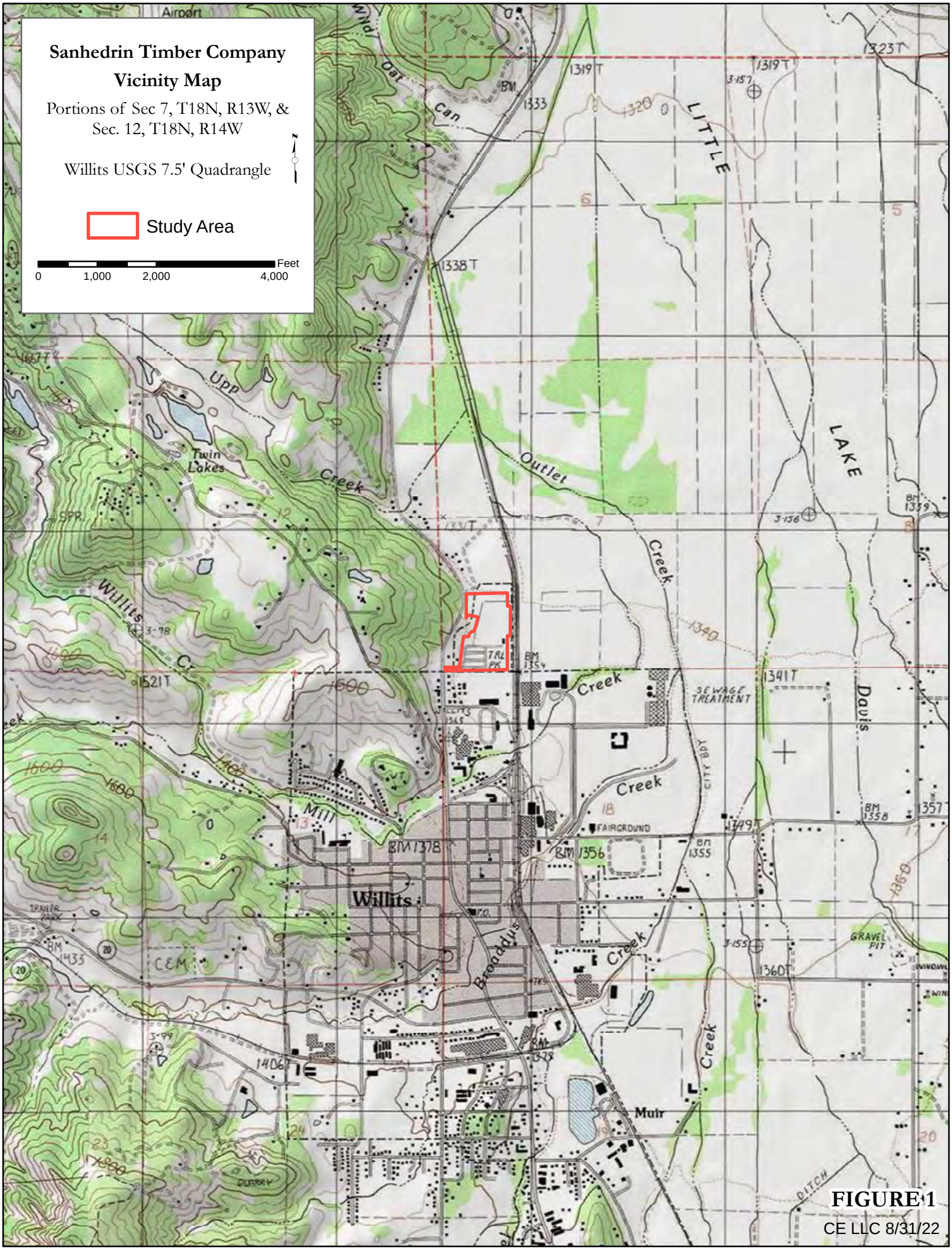


FIGURE 1

CE LLC 8/31/22

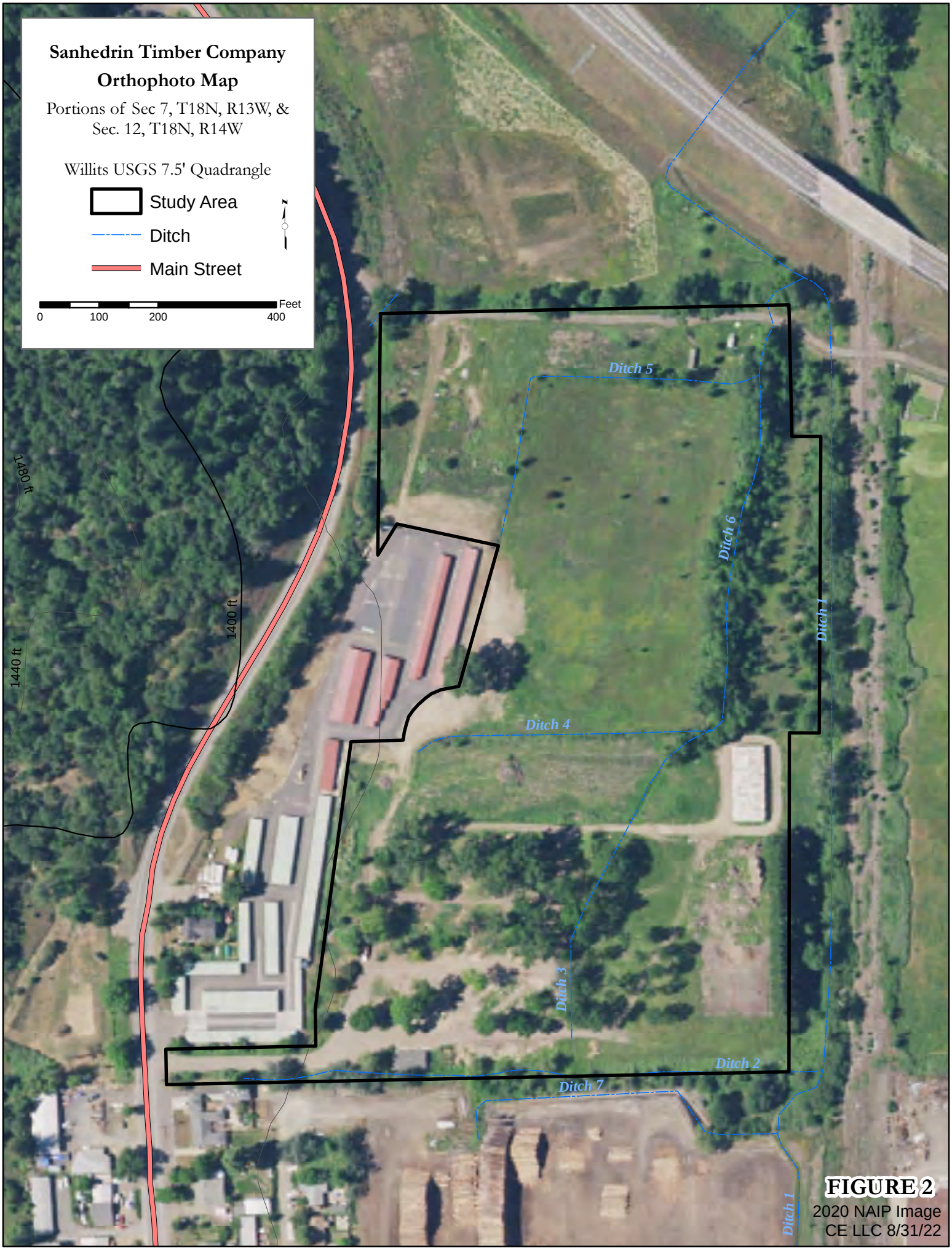


FIGURE 2
2020 NAIP Image
CE LLC 8/31/22

Chapter 2. Study Methods

This BRAR was prepared by Clifton Environmental LLC (CE), Principal Botanist, Estelle P. Clifton with assistance from CE Botany Technician, Paula Gaska. Data on special-status species and habitats known in the area was obtained from state and federal agencies. Maps and aerial photographs of the BRAA and surrounding areas were reviewed. Multiple field surveys were conducted to determine the habitats present. The field surveys, map review, and a review of the biology of evaluated species and habitats were used to determine the special-status species and sensitive habitats that could occur in the BRAA.

Special-status species in this BRA are those listed (or candidate or proposed) under the federal or state endangered species acts, under the California Native Plant Protection Act, as a California species of special concern or fully protected by the Department of Fish and Wildlife (CDFW), or that are on List 1 or 2 of the California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2022). Special status natural communities in this review are waters, wetlands, riparian communities, and any natural community ranked S1, S2, S3 on the *California Natural Community List* (CDFW 2022).

2.1. Regulatory Requirements

The purpose of the BRA is to document biological studies and perform analyses and evaluations necessary to satisfy the legal requirements of state and federal statutes. These statutes include:

- National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq.);
- Section 404 of the Clean Water Act (33 U.S.C. 1251-1376);
- Section 401 Water Quality Certification (33 U.S.C. 1341);
- Section 402 of the Clean Water Act (33 U.S.C. 1342)
- Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.);
- Section 1602 of the California Fish and Game Code pertains to streambed alterations;
- Federal Endangered Species Act (16 U.S.C. 1531-1543);
- Fish and Wildlife Coordination Act (16 U.S.C. 661-666);
- National Wild and Scenic Rivers Act (16 U.S.C. 1271-1287);
- Executive Order 11990, Protection of Wetlands (May 24, 1977);
- California Environmental Quality Act (P.R.C. 21000 et seq.);
- California Endangered Species Act (California Fish and Game Code 2050 et seq.);
- Native Plant Protection Act (California Fish and Game Code 1900-1913);
- California Wild and Scenic Rivers Act (P.R.C. 5093.50 et seq.);
- California Porter-Cologne Water Quality Control Act (CA Water Code 13000 et seq.)
- Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-711);
- Magnuson-Stevens Fishery Conservation and Management Act (as amended through 11 October 1996);

- Fish and Game Code 3503.5 – Birds of Prey;
- Fish and Game Code 3511, 4700, 5050, 5515 – Fully Protected Species;
- Executive Order 13112, Invasive Species (3 February 1999).

2.2. Listed and Proposed Species Potentially in the Biological Resource Assessment Area

Data received from the U.S. Fish and Wildlife Service (USFWS), the California Natural Diversity Database (CNDDB) of the California Department of Fish and Wildlife (CDFW 2022), and the California Native Plant Society (CNPS 2022) program was used to compile a table of regional species and habitats of concern (Table 1). Table 1 provides a general habitat description for each species and a rationale as to why regional species and habitats of concern are either potentially present or absent from the BRAA.

Table 1. Regional Species and Habitats of Concern

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Invertebrates						
Bombus caliginosus	Obscure bumble bee			Range includes the west coast of the United States. Common plants visited by workers include ceanothus, thistles, peas, lupins, rhododendrons, *Rubus*, willows, and clovers.	Absent	Limited flowering herbs available.
Bombus occidentalis	Western bumble bee			Tend to prefer flower-rich meadows of forests and subalpine zones. Primarily nesting in underground cavities and in open west-southwest slopes bordered by trees.	Absent	Grassland contains few flowering herbs.
Danaus plexippus	Monarch butterfly	FC		California overwintering population maps include the California coast range from Mendocino County south to Baja. Larvae consume milkweed.	Absent	Milkweed was not observed.
Fish						
Oncorhynchus kisutch pop. 4	coho salmon – southern Oregon/ northern California coast ESU	FT	ST	Generally, spawn in smaller streams than Chinook salmon. Spawning sites are typically at the heads of riffles or tails of pools in loose, silt-free, course gravel with nearby cover for spawning adults. Juveniles prefer deep, well-shaded pools with ample overhead cover. Optimal water temps are 40-62°F. Juveniles associated with undercut banks, logs, and other woody debris for shade and overhead cover.	Absent	While channel connectivity is present under the Hwy 101 by-pass, habitat is poor as streams consist of dredged channels that are shallow and impacted by silt. (NMFS 2014).
Amphibians						
Rana aurora	Northern red-legged frog		SSC	Inhabits quiet pools of streams, marshes, and occasionally ponds (CDFW 2008)	Absent	The BRAA is outside of the species mapped range (Gogol-Prokurat 2021).

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Rana boylii	foothill yellow-legged frog		SSC	Found in/near quiet permanent water of rocky streams, marshes, or ponds; damp woods/ meadows with rocky substrate. Occurs in woodland and forested sites with dense vegetation, close to water, some shading; and ephemeral pools if wet until late spring/early summer. Breeds in permanent water; eggs attached to emergent vegetation. Disperses from water in wet weather. Estivates in small burrows, leaf litter, moist sites near riparian areas. Egg clusters attached to gravel or rocks in moving water near stream margins. Mating & egg-laying in streams & rivers (not ponds or lakes), April-early July, after streams slow from winter runoff.	Absent	The brackish muddy ditches near the Project do not provide suitable habitat for the species.
Taricha rivularis	red-bellied newt		SSC	Adults are terrestrial, becoming aquatic when breeding. Adults emerge after a few fall rains and feed for a period before migrating to their breeding stream. Activity typically occurs at night and in the late afternoon, but newts are also found active in streams and on the surface in daylight during the breeding season and during rains. They spend the dry summer in moist habitats under woody debris, rocks, in animal burrows. Juveniles apparently spend most of their time underground and are not active on the surface until near sexual maturity. Reproduction is aquatic. Clean, rocky streams and rocky rivers with moderate to fast flow. Ponds, lakes, and other standing waters are avoided. Breeding takes place from late February to May, peaking in March.	Absent	The streams near the Project are not considered suitable habitat for the species.
Reptiles						

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Emys marmorata	western pond turtle		SSC	Habitats, with permanent or nearly permanent water with abundant vegetation. Omnivorous, feed on aquatic plants, invertebrates, fish, frogs. Require basking sites, such as partially submerged logs, rocks, floating vegetation. Hibernation in colder areas is underwater in mud. Two habitats for oviposition: Along large slow-moving streams, eggs are deposited in sandy banks. Along foothill streams, suitable nest sites may be up hillsides in sandy to very hard soils. Soils need fairly high humidity. Basking sites required. Mating in April-May	Absent	Habitat is not suitable with seasonal hydrology.
Birds						
Agelaius tricolor	tricolored blackbird		ST	Mostly a resident in CA; common in Central Valley and coastal areas from Sonoma Co. south. Highly colonial. Breeds near fresh water, in emergent wetlands with tall, dense cattails or tules; also in willow, blackberry, & wild rose thickets. Feed in grasslands/croplands, mostly on insects & spiders.	Absent	Limited thickets and at the margin of range.
Accipiter gentilis	northern goshawk		SSC	Uses dense, mature conifer and deciduous forests, interspersed with meadows, openings, and riparian areas.	Absent	Habitat is too fragmented and near development.
Accipiter striatus	sharp-shinned hawk		WL	Ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers riparian areas. North-facing slopes with plucking perches are critical requirements. Nests usually within 275 feet of water.	Absent	Habitat is too fragmented and near development.
Charadrius nivosus ssp. *nivosus*	western snowy plover	FT		Coastal beaches in Mendocino and Sonoma Counties.	Absent	Habitat is absent.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Coccyzus americanus occidentalis	western yellow-billed cuckoo	FT	CE	Uncommon to rare summer resident of valley foothill and desert riparian habitats in scattered locations in CA. Extensive riparian thickets, esp. w/ mature willows, dense understory foliage, near slow-moving watercourses.	Absent	The riparian thicket located on and near the Study Area are not substantial in size.
Elanus leucurus	white-tailed kite		FP	Open grasslands, meadows, marshes, foothills and valley margins adjacent to deciduous woodlands in CA lowlands west of the Sierra Nevada range. Nest of loosely piled sticks/twigs, placed near top of dense oak, willow, or other tree stand near open foraging area. Prey mostly voles, small mammals. Rarely found away from agricultural areas and restricted to lower elevations. Nest-building occurs January through August; non-migratory.	Present	Both nesting and hunting habitat present. **A pair was observed at the northeastern edge of the BRAA.**
Icteria virens	yellow-breasted chat		SSC	Frequents dense, brushy thickets and tangles near water, and thick understory in riparian woodland. Requires riparian thickets of willow and other brushy tangles near watercourses for cover.	Absent	The riparian habitat on and adjoining the BRAA are considered too sparse.
Progne subis	purple martin		SSC	Rare summer resident in N.CA. Found in valley foothill, montane hardwood, hardwood-conifer, and riparian habitats. Breeding habitat is old-growth, multi-layered open forests and woodlands with snags. Feed on insects, hawked in flight.	Absent	Conifers and old-growth are not present.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Setophaga petechia	yellow warbler		SSC	Frequents open to medium-density woodlands and forests with a heavy brush understory (during the breeding period). Habitat during the breeding season is found in deciduous riparian areas with cottonwoods, alder, willow and other miscellaneous small trees and shrubs.	Present	Nesting and foraging habitat is present.
Strix occidentalis caurina	Northern Spotted Owl	FT, BLM, USFS	ST, CDF	Mature multi-layered mixed conifer, redwood and Douglas fir forests with a permanent water source and suitable nesting sites. Prey mostly on small mammals. Nests in cavities or broken tops of large trees or snags. Breeds February to June.	Absent	Approximately 50-acres of suitable foraging habitat appears to be present within 0.7 miles from the BRAA. The nearest Activity Centers are mapped 2 miles north of the BRAA and 3 miles west of the BRAA.
Mammals						
Arborimus pomo	Sonoma tree vole		SSC	Prefers mature and other stands of Douglas fir, redwood, or mixed evergreen trees in fog belt Specializes on needles of Douglas fir and grand fir. Nests of Douglas fir needles are constructed in trees, preferably tall trees.	Absent	While in the range of this species, conifer forest is not present.
Corynorhinus townsendi	Townsend's big-eared bat		SSC	Prefers mesic habitats with caves, mines, tunnels and buildings for roosting and cover. May use separate sites for night, day, hibernation, or maternity roosts. Roosting sites are the most critical limiting factor.	Absent	Roosting habitat is absent.
Martes caurina humboldtensis	Humboldt marten	FT	SE	Occurs only in the coastal redwood zone from Oregon border south to Sonoma County. Associated with late-successional coniferous forests, prefer forests with low, overhead cover.	Absent	Coniferous forest is absent.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Pekania pennanti	fisher			Preferred habitat includes mid- to late-seral stages of conifer development and deciduous-riparian. High degrees of canopy cover are also preferred. Cavities in large trees, snags and logs, rocky areas and logging slash provide suitable cover. Fisher are active yearlong.	Absent	While in the range of the species, large areas of mature dense conifer forest do not extend into Little Lake Valley floor.
Taxidea taxus	American badger		SSC	Grasslands, savannas, and mountain meadows near timberline are preferred. Badgers prey primarily on burrowing rodents. Sufficient food, friable soils, and relatively open, uncultivated ground. Mating occurs in late summer or early autumn, followed by delayed implantation	Present	While there is a low likelihood of the species occurring, it is found statewide except for humid coastal forests of Del Norte and portion of Humboldt Co.
Plants			**/CNPS [b]**			
Alisma gramineum	narrow-leaved water-plantain		/2B.2	Perennial rhizomatous herb (aquatic) found in marshes and swamps (shallow freshwater) from 1280 to 5905 feet. Blooms June to August (CNPS 2022).	Present	Although not observed, suitable habitat is present.
Anisocarpus scabridus	scabrid alpine tarplant		/1B.3	Perennial herb found in upper montane coniferous forest (metamorphic, rocky) from 5415 to 7545 feet. Blooms July to August (September) (CNPS 2022).	Absent	Coniferous forest absent
Astragalus agnicidus	Humboldt Count milk-vetch		SE /1B.1	Perennial herb found in broadleaf upland forest, North Coast coniferous forest, disturbed areas, openings, sometimes roadsides from 395 to 2625 feet. Blooms April to September (CNPS 2022).	Absent	BRAA is outside known range.
Blennosperma bakeri	Sonoma sunshine	FE	SE/1B.1	Annual herb found in valley and foothill grassland (mesic) and vernal pools from 35 to 360 feet. Blooms March to May (CNPS 2022).	Absent	BRAA is outside the elevation range.
Brasenia schreberi	watershield		/2B.3	Perennial rhizomatous herb (aquatic) found in marshes and swamps (freshwater) from 0 to 7220 feet. Blooms June to September (CNPS 2022).	Absent	Suitable marsh not found within the BRAA.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Bruchia bolanderi	Bolander's bruchia		/4.2	Moss found in lower montane coniferous forest, meadows and seeps, upper montane coniferous forest, in damp soil from 5580 to 9185 feet (CNPS 2022).	Absent	Habitat and elevation range not suitable.
Calystegia collina ssp. *tridactylosa*	three-fingered morning glory		/1B.2	Perennial rhizomatous herb found in chaparral, cismontane woodland; gravelly, openings, rocky and serpentinite from 0 to 1970 feet. Blooms April to June (CNPS 2022).	Absent	Serpentine and chaparral habitats are absent.
Ceanothus gloriosus var. *exaltatus*	glory brush		/4.3	Perennial evergreen shrub found in chaparral from 100 to 2000 feet. Blooms March to June (August) (CNPS 2022).	Absent	Chaparral habitat is absent.
Cryptantha dissita	serpentine cryptantha		/1B.2	Annual herb found in chaparral (serpentinite) from 1295 to 1905 feet. Blooms April to June (CNPS 2022).	Absent	Serpentine and chaparral habitats are absent.
Cryptantha excavata	deep-scarred cryptantha		/1B.1	Annual herb found in cismontane woodland (gravelly, sandy) from 330 to 1640 feet. Blooms April to May (CNPS 2022).	Absent	Gravely sandy habitat is absent.
Fritillaria roderickii	Roderick's fritillary		SE /1B.1	Perennial bulbiferous herb; found in coastal bluff scrub, coastal prairie, valley and foothill grassland from 50 to 1310 feet. Blooms March to May (CNPS 2022).	Present	Although not observed, suitable habitat is present.
Gilia capitata ssp. *pacifica*	Pacific gilia		/1B.2	Annual herb found in coastal bluff scrub, coastal prairie, chaparral (openings), and valley and foothill grassland from 15 to 5465 feet. Blooms from April to August (CNPS 2022).	Present	Although not observed, suitable habitat is present.
Hemizonia congesta ssp. *calyculata*	Mendocino tarplant		/4.3	Annual herb found in cismontane woodland, valley and foothill grassland, usually serpentinite from 740 to 4595 feet. Blooms July to November (CNPS 2022).	Absent	Serpentine habitat is not present.
Hesperolinon adenophyllum	glandular western flax		/1B.2	Annual herb found in chaparral, cismontane woodland, valley and foothill grassland, usually serpentinite from 490 to 4315 feet. Blooms May to August (CNPS 2022).	Absent	Serpentine habitat is not present.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Horkelia tenuiloba	thin-lobed horkelia		/1B.2	Perennial herb found in broadleafed upland forest, chaparral, valley and foothill grassland; mesic, openings, sandy from 165 to 1640 feet. Blooms May to July (August) (CNPS 2022).	Absent	Soils not suitable.
Lasthenia burkei	Burke's goldfields	FE	SE /1B.1	Annual herb found in meadows and seeps (mesic), vernal pools from 50 - 1970 feet. Blooms April to June (CNPS 2022).	Present	Mesic grassland habitat is present.
Lasthenia conjugens	Contra Costa goldfields	FE	/1B.1	Annual herb found in cismontane woodland, playas (alkaline), valley and foothill grassland, and vernal pools; mesic from 0 to 1540 feet. Blooms March to June (CNPS 2022).	Present	Mesic grassland habitat is present.
Leptosiphon acicularis	bristly leptosiphon		/4.2	Annual herb found in chaparral, cismontane woodland, coastal prairie, valley and foothill grassland from 180 to 4920 feet. Blooms April to July (CNPS 2022).	Present	Mesic grassland habitat is present.
Limnanthes bakeri	Baker's meadowfoam		SR /1B.1	Annual herb found in meadows and seeps, marshes and swamps (freshwater), valley and foothill grassland (vernally mesic), and vernal pools from 575 to 2985 feet. Blooms April to May (CNPS 2022).	Present	Mesic grassland habitat is present. **Species was found within the BRAA.**
Lupinus milo-bakeri	Milo Baker's lupine		SCT /1B.1	Annual herb found in cismontane woodland (often roadsides), valley and foothill grassland from 1295 to 1410 feet. Blooms June to September (CNPS 2022).	Present	Suitable grassland habitat is present.
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia		/1B.1	Annual herb found in cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grassland, and vernal pools, mesic from 15 to 5710 feet. Blooms April to July (CNPS 2022).	Present	Mesic grassland habitat is present.
Perideridia gairdneri ssp. *gairdneri*	Gairdner's yampah		/4.2	Perennial herb found in broadleafed upland forest, chaparral, coastal prairie, valley and foothill grassland, vernal pools, vernally mesic from 0 to 2000 feet. Blooms June to October (CNPS 2022).	Present	Mesic grassland habitat is present.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Piperia candida	white-flowered rein orchid		/1B.2	Perennial herb found in broadleafed upland forest, lower montane coniferous forest, and North Coast coniferous forest from 100 to 4300 feet. Blooms (March) May to September (CNPS 2022).	Absent	Habitat not within the BRAA.
Plagiobothrys lithocaryus	Mayacamas popcornflower		/1A	Annual herb found in chaparral, cismontane woodland, valley and foothill grassland, mesic from 985 to 1475 feet. Blooms April to May (CNPS 2022).	Present	Mesic grassland habitat is present.
Pleuropogon californicus* var. *davyi	Davy's semaphore grass		/4.3	Perennial rhizomatous herb found in cismontane woodland, lower montane coniferous forest, meadows and seeps from 490 to 2000 feet. Blooms March to June (CNPS 2022).	Present	Mesic grassland habitat is present. **Species was found within the BRAA.**
Pleuropogon hooverianus	North Coast semaphore grass		ST/1B.1	Perennial rhizomatous herb found in broadleafed upland forest, meadows and seeps, North Coast coniferous forest; open areas, mesic from 35 to 2200 feet. Blooms April to June (CNPS 2022).	Present	Mesic grassland habitat is present. **Species was found within the BRAA.**
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed		/2B.2	Perennial rhizomatous herb (aquatic) found in marshes and swamps (shallow freshwater) from 1210 to 7125 feet. Blooms (June) July to September (CNPS 2022).	Absent	Suitable marsh habitat is not present.
Ramalina thrausta	angel's hair lichen		/2B.1	Fruticose lichen (epiphytic) found in North Coast coniferous forest; on dead twigs and other lichens from 245 to 1410 feet (CNPS 2022).	Absent	Forest habitat is not present.
Silene bolanderi	Bolander's catchfly		/1B.2	Perennial herb found in chaparral (edges), cismontane woodland, lower montane coniferous forest, meadows and seeps from 1380 to 3775 feet. Blooms May to June (CNPS 2022).	Absent	Forested montane habitat is absent.
Silene hookeri	Hooker's catchfly		/2B.2	Perennial herb found in chaparral, cismontane woodland, lower montane coniferous forest, often in grassy openings, sometimes on rocky slopes, often openings, sometimes rocky, sometimes serpentinite from 490 to 4135 feet. Blooms (March) May to July (CNPS 2022).	Absent	Forested montane habitat is absent.

Scientific Name	Common Name	Federal Status [a]	State Status [a]	General Habitat Description	Habitat Present/ Absent [c]	Rationale
Trifolium amoenum	two-fork clover	FE	/1B.1	Annual herb found in coastal bluff scrub, valley and foothill grassland (sometimes serpentinite) from 15 to 1360 feet. Blooms April to June (CNPS 2022).	Present	The BRAA meadow habitat may be suitable.
Trifolium buckwestiorum	Santa Cruz clover		/1B.1	Annual herb found in broadleafed upland forest, cismontane woodland, coastal prairie, gravelly, margins from 345 to 2000 feet. Blooms April to October (CNPS 2022).	Absent	The BRAA meadow soils are not believed to be suitable.
Trifolium hydrophilum	Saline clover		/1B.2	Annual herb found in marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools from 0 to 985 feet. Blooms April to June (CNPS 2022).	Present	Mesic grassland habitat is present.
Wyethia longicaulis	Humboldt County wyethia		/4.3	Perennial herb found in broadleafed upland forest, coastal prairie, lower montane coniferous forest, sometimes roadsides from 2460 to 5005 feet. Blooms May to July (CNPS 2022).	Absent	BRAA is out of the known range of this species.

[a] **Status**: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP); Federal Candidate (FC); Federal Delisted (FD); USFS Sensitive (S); USFS Watch list (WL); State Endangered (SE); State Threatened (ST); State Candidate Endangered (SCE); State Candidate Threatened (SCT); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); Species of Local Concern (SLC); Proposed Critical Habitat (PCH); Critical Habitat (FCH) - Project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present.

[b] **CNPS List**. 1A = Presumed Extinct in CA; 1B = Rare or Endangered in CA and elsewhere; 2 = R/E in CA and more common elsewhere; 3 = More information is needed about this plant species (review list); 4 = Limited distribution (watch list)

CNPS List Decimal Extensions: .1 = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); .2 = Fairly endangered in California (20-80% occurrences threatened); .3 = Not very endangered in California (<20% of occurrences threatened or no current threats known).

[c] Absent = No habitat present and no further work needed. Present = habitat is, or may be present.

2.3. Studies Required

A list from the U.S. Fish and Wildlife Service (USFWS), Critical Habitat Portal, was obtained in 2020 and updated on April 22, 2022 (USFWS 2022). The list identified federal-listed, candidate, or proposed species that potentially occur in or could be affected by the Project. The CNDDB and CNPS online searches were queried for the Willits 7.5' USGS quad and the eight surrounding quads to determine likely and known occurrences of special-status species on or near the BRAA (CDFW 2022 & CNPS 2022).

Data received from USFWS, CNDDB, and CNPS records were used to compile a table of regional species and habitats of concern (Table 1). Field surveys were based on the *Protocols for Surveying and Evaluation Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018) and consisted of walking through the BRAA to determine if any special-status species or their habitat were present. Plant species located during the surveys were identified to the lowest taxonomic level necessary to determine presence or absence of special status plants (Appendix A). *The Jepson Flora Project* (Jepson 2022) was consulted to determine the taxonomic nomenclature. *A Manual of California Vegetation* (CNPS 2022) was used to classify and describe the representative natural plant communities present (see photos in Appendix B). The *California Natural Community List* (CDFW 2022) was consulted for additional information on current ranking of described communities and their associations.

A Jurisdictional Delineation Report of waters of the U.S., including wetlands, was prepared to identify jurisdictional features regulated under Section 404 of the Clean Water Act (Appendix C). The purpose of the survey was to delineate all wetlands and waters of the U.S. within the BRAA.

Waters of the United States require U.S. Army Corps of Engineers (ACOE) authorization under Section 404 of the Clean Water Act (33 U.S.C. 1344) and Clean Water Act Section 401 authorization from the Regional Water Quality Control Board (RWQCB). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), wetlands (excluding isolated wetlands for the ACOE), and farmed wetlands. Waters of the United States are defined in EPA, 33 CFR § 328.3 and include "other waters" such as intrastate lakes, rivers, streams, and wetlands; tributaries to above waters; and wetlands adjacent to waters. Jurisdiction in non-tidal areas extends to the ordinary high-water mark (OHWM). Initial delineation surveys were timed approximately two-weeks after a sizable rain event when prolonged inundation and primary indicators of wetland hydrology could best be observed. A summary of potential jurisdictional features can be found in the Jurisdictional Delineation Report (Appendix C, Table 2).

2.4. Personnel and Survey Dates

Fieldwork for the BRA was led by Estelle P. Clifton of Clifton Environmental (CE LLC) with assistance from botanists Heather Morrison (Salix Natural Resource Consulting), and botany technicians Paula

Gaska (CE LLC), Ernest Simanungkalit (NCRM, Inc.), and Lexi Smith (NCRM, Inc.), and wildlife biologist Annalise Smith (NCRM, Inc.) between July 2020 and May 2022. Botanical surveys were conducted 16 April, 22 May, 6 June 2021, and 31 May, 7 May, and 13 May 2022. A routine-level preliminary wetland delineation (Appendix C) of the Study Area was conducted on 3 April 2021, 30 April, 5 May, 7 May, 10 May, and 13 May 2022 by Estelle Clifton.

2.5. Agency Coordination and Professional Contacts

Coordination occurred with Russell Dorvall of Sanhedrin Timber Company and Rebecca Dalske, Senior Planner with LACO Associates. Dusty Duley, City of Willits Planning Director, advised on environmental feedback received during a previous development application on a portion of the site, including comments received from CDFW in 2021 on the previous development proposal. Repeated attempts to contact the Arcata and Sacramento USFWS offices were unsuccessful in the spring of 2022.

2.6. Limitations That May Influence Results

There were no limitations that may influence results.

Chapter 3. Results: Environmental Setting

The BRAA is on the North Coast, Coastal Range at the margin of Little Lake Valley at the northern end of the City of Willits.

3.1. Description of the Existing Biological and Physical Conditions

3.1.1. Biological Study Area

The BRAA includes the two parcels where the Project is proposed to be constructed. The BRAA also includes two proposed stream crossings connecting the Project to the existing log yard located south of Project.

3.1.2. Physical Conditions

The BRAA is located on the Willits USGS topographic quad (Section 7, T18N, R13W and Section 12, T18N, R14W, MDB&M), see Figure 1, and is in the Eel River hydrologic unit (hydrologic unit code 11116101). The elevation of the BRAA is approximately 1,360 feet above sea level. Valley foothill is located west of the BRAA. Otherwise, the surrounding is level valley floor.

While some undisturbed natural communities are present, considerable anthropogenic disturbance has occurred in the BRAA as evidenced by recreational buildings and structures, paved, rocked, and seasonal roads, disturbance vegetation, berms near drainages, and the numerous ditch structures present.

3.1.3. Biological Conditions in the BRAA

Natural Communities are defined by species composition and relative abundance. The biological communities in the BRAA are meadow, wet meadow (wetlands), oak woodland, and ephemeral and intermittent streams/ditches. The biological communities are mapped on Figure 3. Existing roads, structures, and other developed areas are also mapped.

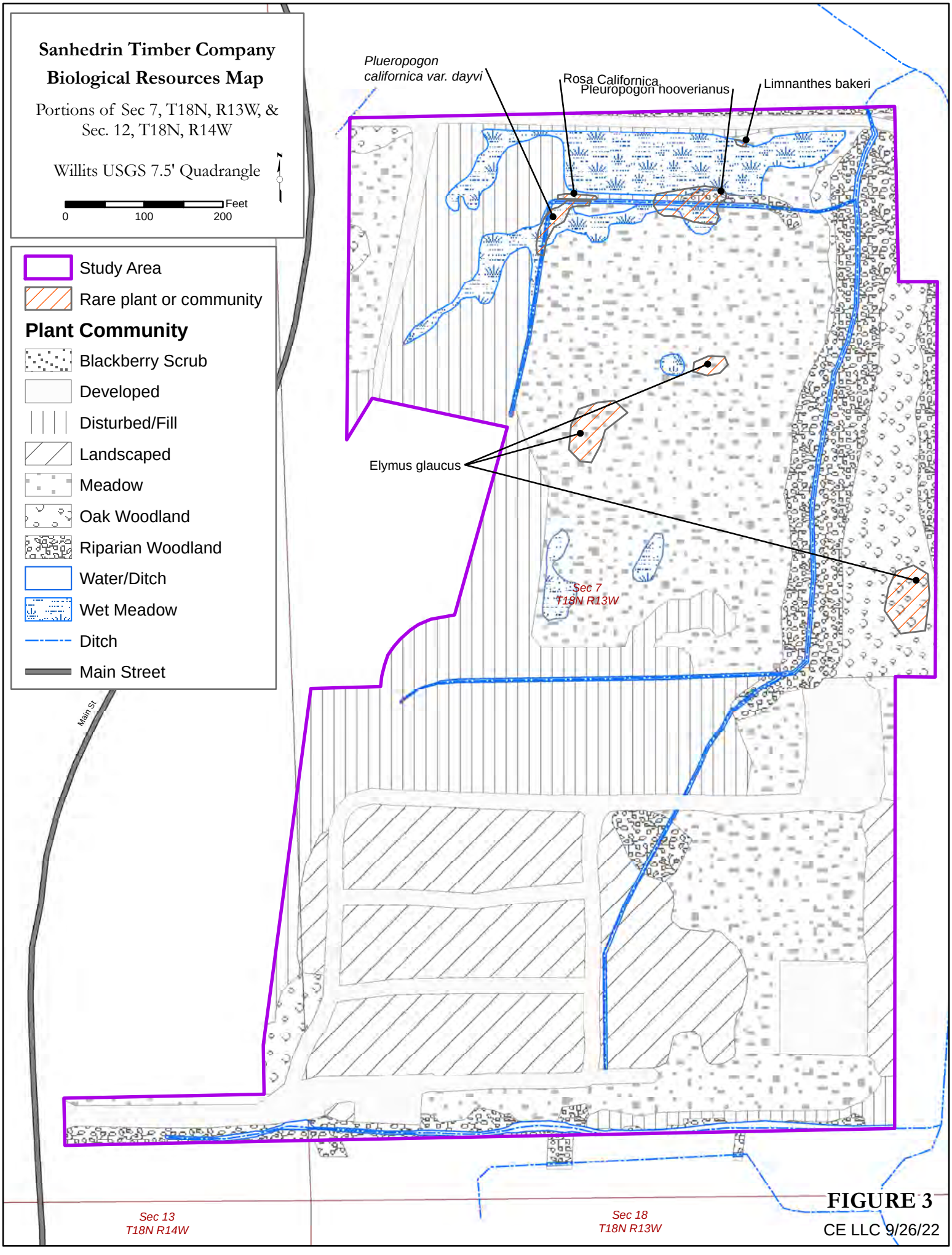
Sanhedrin Timber Company
Biological Resources Map

Portions of Sec 7, T18N, R13W, & Sec. 12, T18N, R14W

Willits USGS 7.5' Quadrangle

N

0 100 200 Feet



- Study Area
- Rare plant or community

Plant Community

- Blackberry Scrub
- Developed
- Disturbed/Fill
- Landscaped
- Meadow
- Oak Woodland
- Riparian Woodland
- Water/Ditch
- Wet Meadow
- Ditch
- Main Street

FIGURE 3

CE LLC 9/26/22

Chapter 4. Results: Biological Resources, Discussion of Impacts and Mitigation

The following sections discuss special status wildlife species with potential habitat, identified plant species, identified plant communities, wetlands and waters potentially subject to CWA jurisdiction, and impacts to natural communities and plants of special concern in the BRAA.

4.1. Natural Communities

As provided in Table 2 below, the BRAA contains the following identified plant communities and vegetation alliances correlated with *California Natural Community List* (CDFW) and *A Manual California Vegetation* (CNPS).

Table 2. Mapped Communities

Mapped Community Type	Acreage	Natural Community /Alliance name; rarity rank[1]
Meadow & Wet Meadow/Wetland	7.75	*Poa pratensis* Herbaceous Semi-Natural Alliance; GNA/SNA
		Blue wildrye prairie - *Elymus glaucus* Montane Herbaceous Alliance; S3?, G3?
		Danthonia californica Herbaceous Alliance; S4, GNR
		Phalaris aquatica Herbaceous Alliance; SNA, GNA
		California rose briar patches - *Rosa californica* Shrubland Alliance; S3, G3
		Holcus lanatus Herbaceous Semi-Natural Alliance; SNA, GNA
		Festuca arundinacea Provisional Semi-Natural Alliance; GNA SNA
Oak Woodland	1.26	*Quercus* (*kellogii, lobata*) Woodland Alliance; S4, G4
		Valley oak woodland - *Quercus lobata* Woodland Alliance; S3, G3
Riparian Woodland	1.96	*Salix lasiolepis* Shrubland Alliance; S4, G4
		Valley oak riparian woodland - *Quercus lobata* Riparian Woodland Alliance; S3, G3
Ditch/Water	0.39	*Juncus mexicanus* Herbaceous Alliance; G5, S4
		Juncus effusus Herbaceous Alliance; S4?, G4
		Salix lasiolepis Shrubland Alliance; S4, G4
Other		
Landscaped Woodland [2]	3.51	*Populus alba s*emi-natural stand

[1] CDFW (2021) considers a community with a global rank of G1, G2, or G3 or a state rank of S1, S2, or S3 to be of concern and included in CNDDB**. Sensitive natural communities of concern are displayed in bold font.**

[2] Not correlated to Manual of California Vegetation or other published community type.

Mapped Community Type	Acreage	Natural Community /Alliance name; rarity rank[1]
		Populus sp. - Acer sp. cultivar stand
Disturbed/Fill Scrub	4.51	*Conium maculatum* Herbaceous Semi-Natural Alliance; GNA/SNA
		Baccharis pilularis Shrubland Alliance; G5/S5
		Rubus armeniacus Shrubland Semi-Natural Alliance; GNR/SNR
		Bromus diandrus – Avena spp. Alliance; GNA, SNA
Paved/Disturbed/Barren	2.46	Ruderal
Total	**21.84**	

The most prominent biological community in the BRAA is Meadow. Of the 7.75 acres of the Meadow community, 0.97-acre were identified as Wet Meadow/Seasonal Wetland, which is a sensitive natural community (described in Section 4.1, below). Several populations of sensitive natural community Blue Wildrye Prairie are located in the Meadow. Other sensitive natural communities within the BRAA, including Valley Oak Woodland, Wet Meadow, and ephemeral and intermittent Ditches/Streams, discussed below.

A portion of the BRAA contains previously disturbed habits that appears to be on imported fill. The Disturbed/Fill habitat is dominated by non-native poison hemlock (*Conium maculatum*), coyote brush (*Baccharis pilularis*), and non-native Himalayan blackberry (*Rubus armeniacus*). This habitat occurs in multiple locations across the BRAA.

The Landscaped Woodland occupies 3.52 acres within the BRAA and sits in the southern half of the site where the previous RV park operated. Species that dominate this community include a semi-natural stand of white poplar (*Populus alba*), some of which has spread into the riparian woodland community, and cultivated poplar (*Populus sp.*), non-native maple (*Acer sp.*), and other cultivar trees.

Table 3 estimates the acreage of each natural community that will be affected by the Project based on preliminary designs, as shown on Figure 4.

Sanhedrin Timber Company
Proposed Project Map

Portions of Sec 7, T18N, R13W, &
Sec. 12, T18N, R14W

Willits USGS 7.5' Quadrangle

N

0 100 200 Feet

Main Street
Study Area

Project Feature
log decks
pond
new ditch
pvc
road
well pipe

Plant Community
Blackberry Scrub
Developed
Disturbed/Fill
Landscaped
Meadow
Oak Woodland
Riparian Woodland
Water
Wet Meadow
Ditch

Impact Area
Temporary Impact
Permanent Impact

FIGURE 4
CE LLC 9/27/22

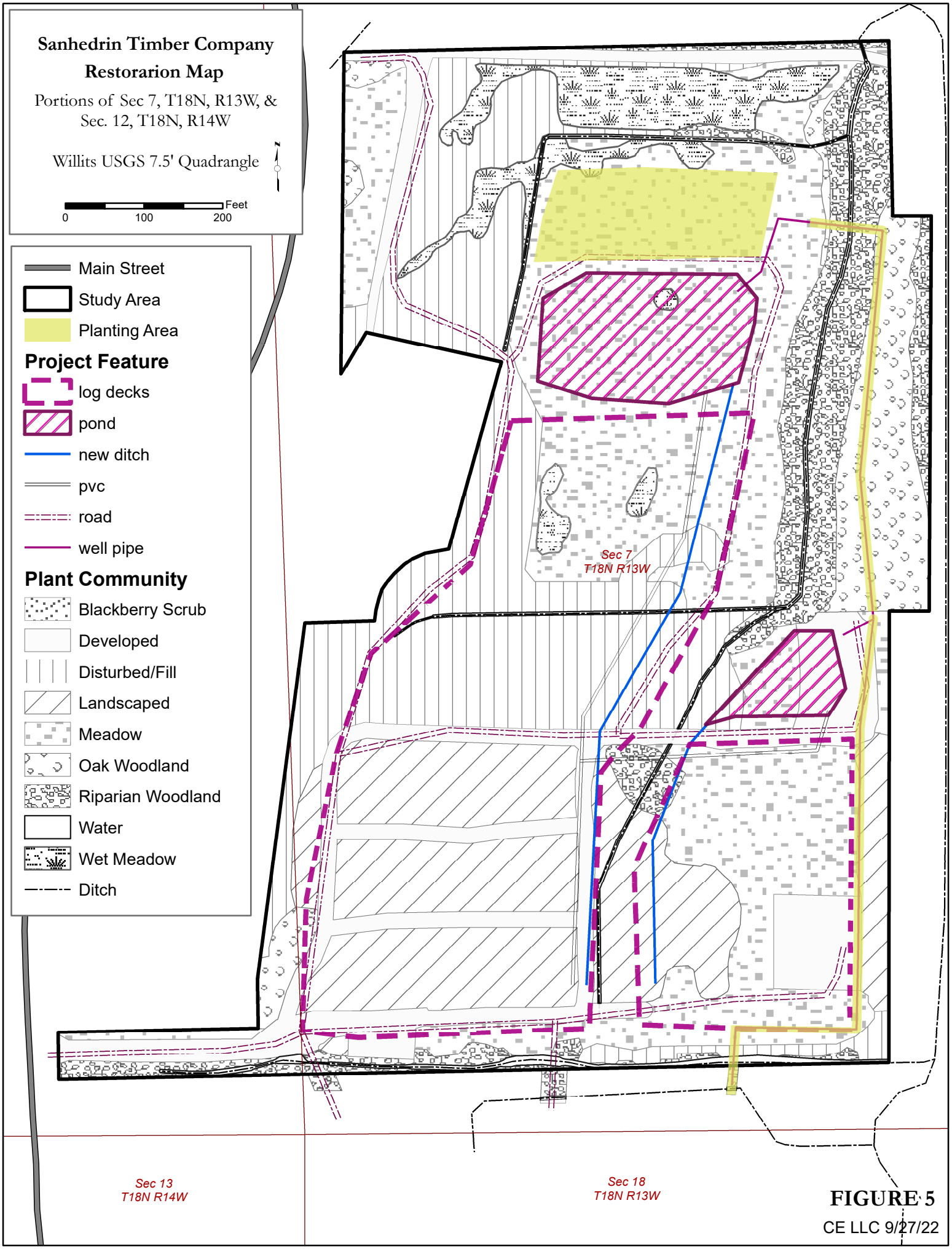


FIGURE 5

CE LLC 9/27/22

Table 3. Project Impact to Sensitive Natural Communities

Natural Community	Acreage	Temporary Impact (ac)	Permanent Impact (ac)
Blue wildrye prairie	0.18	--	0.1
Valley oak woodland	1.26	0.14	0.04
Valley oak riparian woodland	1.96	0.02	0.15
Ditch 2	0.14	0.003	0.01
Ditch 3	0.05	--	0.01
Ditch 4	0.04	--	0.04
Ditch 5	0.06	--	0.001
Ditch 6	0.09	0.001	--
Ditch 7	0.01	0.001	0.003
Wetland 1 – 5 (wet meadow)	0.97	0.01	0.02
Total		**0.18**	**0.37**

Additionally, of the other (non-sensitive communities), approximately 4.82 acres of Meadow are proposed to be permanently impacted and 0.80 acre temporarily impacted by the Project. Approximately 2.97 acres are of Landscaped Woodland is proposed to be permanently impacted and 0.08 acre temporarily impacted by the Project. The following sections describe the natural communities of special concern that are present on-site and the potential project impacts to these communities.

4.1.1. Discussion of Blue Wildrye Prairie

4.1.1.1. Survey Results

The Meadow and Wet Meadow plant community runs throughout the length of the BRAA, from a large field in the southeastern portion of the site, through the center of the project, and to the road along the site's northern border. The Meadow community is dominated by Kentucky blue grass (*Poa pratensis*), fescue (*Festuca* spp.), harding grass (*Phalaris aquatica*), Timothy grass (*Phleum pratense*), blue wildrye (*Elymus glaucus* spp. g*laucus*)*,* meadow foxtail (*Alopecurus pratensis*), and velvet grass (*Holcus lanatum*). Within the Meadow community are several areas correlated to the Blue Wildrye Prairie community, considered a natural community of special concern by CDFW with the qualifier "?," identifying this community rank as inexact or uncertain.

4.1.1.2. Avoidance and Minimization Efforts

Blue Wildrye Prairie cannot be avoided during construction of a proposed water storage pond and a water pipeline. It occurs in three patches, two of which are within the Meadow habitat where a water storage pond is proposed. A third area is within the eastern most Valley Oak Woodland. Temporary impact could occur to the Blue Wildrye Prairie located within the Valley Oak Woodland. Minimization efforts will include marking the limits of construction with temporary fencing. Incorporation of this

mitigation measure will ensure that construction is limited to the Project area to avoid the potential for impacts to Blue Wildrye Prairie beyond those permitted by construction entitlements.

4.1.1.3. PROJECT IMPACTS

Impacts to the Blue Wildrye Prairie include construction of the proposed northern water storage pond and a water pipeline along the northeastern portion of the BRAA. The Project will result in the permanent loss of 0.10 acre of Blue Wildrye Prairie in the BRAA (Figure 4).

4.1.1.4. COMPENSATORY MITIGATION

The project proposes to revegetate areas of temporary disturbance within the Project footprint with native vegetation, including blue wildrye (*Elymus glaucus*) seed. Revegetation of temporarily disturbed areas will total approximately 0.26 acre for a compensatory mitigation ratio of 2.6:1. Planting areas are shown on Figure 5.

Commercially available native grasses will be used to revegetate. These grasses include but are not limited to:

- Blue wildrye (*Elymus glaucus*)
- California brome (*Bromus sitchensis* var. *carinatus*)
- California fescue (*Festuca californica*)
- Pine bluegrass (*Poa secunda*)
- California oatgrass (*Danthonia californica*)

A native grass seed blend such as Holdfast Native Blend from LeBallister's can be purchased and used as a viable option for revegetation plans. This mix consists of California brome, blue wild rye, three weeks fescue (*Festuca microstachys*), California poppy (*Eschscholzia californica*), and California native lupines (*Lupinus spp*.) (LeBallister's 2022). This seed mix conforms to the standard practice of using grasses, legumes, and wildflowers in combination for erosion control and revegetation plans.

A qualified botanist or landscape architect will advise the field crew on seeding rate and dispersal technique. Broadcast seeding is an effective way to reclaim bare areas and should be done just prior to the autumn rains. If insufficient rain is in the forecast when seeding can occur, irrigation must be used to gently water in the seeds.

4.1.1.5. CUMULATIVE EFFECTS

With implementation of the native grass revegetation measures, the Project will not result in adverse cumulative impacts to Blue Wildrye Prairie.

4.1.2. Discussion of Valley Oak Woodland

4.1.2.1. Survey Results

1.26 acres of Valley Oak Woodland are mapped within the BRAA. While Valley Oak Woodland is a common natural community in the Little Lake Valley, it is considered a natural community of special concern by CDFW. Valley Oak Woodland is primarily located in the northeast portion of the BRAA where a pipeline is proposed by the Project. This plant community is dominated by valley oak (*Quercus lobata*) and black oak (*Quercus kelloggii*).

4.1.2.2. Avoidance and Minimization Efforts

Valley Oak Woodland cannot be avoided during construction of a Project pipeline. In other portions of the Project, Valley Oak Woodland is near the development footprint and could be impacted as well. Minimization efforts will include marking the limits of construction with temporary fencing. Incorporation of this mitigation measure will ensure that construction impacts are limited to the Project area to avoid potential impacts to Valley Oak Woodland beyond those permitted by construction entitlements.

4.1.2.3. Project Impacts

Impacts to the Valley Oak Woodland include construction of a proposed water pipeline along the northeastern portion of the BRAA. A total of 0.18 acre of Valley Oak Woodland will be temporarily disturbed due to Project construction (Figure 4). When the project grading design is finalized, prior to construction, a qualified botanist will count the number of qualifying trees over ≥5.5 inches diameter at breast height (DBH) that will be removed by the Project. The final tree removal determination will be made by City of Willits.

4.1.2.4. Compensatory Mitigation

The project proposes to mitigate the loss of Valley Oak Woodland with planting native trees at a 3:1 replacement ratio. The planting area is shown in Figure 5 but could be established in other portions of the property with approval from CDFW, such as within portions of the meadow habitat. Species to be planted will correspond with the impacted native trees. These may include valley oak and black oak trees. The native trees shall be obtained from a local nursery or propagated utilizing on-site acorns. This assessment is based on preliminary impacts. When the project grading design is finalized, prior to construction commencing, a final count of trees to be mitigated will be made. Sanhedrin Timber Company will be responsible for successfully establishing replacement trees with an 80% survival performance standard and the City of Willits will be responsible for ensuring replacement plantings were successfully established.

4.1.2.5. CUMULATIVE EFFECTS

With implementation of replacement planting of oak trees, the Project will not result in adverse cumulative impacts to Valley Oak Woodland.

4.1.3. Discussion of Valley Oak Riparian Woodland

4.1.3.1. SURVEY RESULTS

Valley Oak Riparian Woodland, within the BRAA, is primarily located along drainages. Valley Oak Riparian Woodland is considered a natural community of special concern by CDFW. Valley Oak Riparian Woodland is dominated by valley oak (*Quercus lobata*), black oak (*Quercus kelloggii*), willow (*Salix* sp.), and Oregon ash (*Fraxinus latifolia*).

4.1.3.2. AVOIDANCE AND MINIMIZATION EFFORTS

Valley Oak Riparian Woodland cannot be avoided during construction of new roads and pipelines. Minimization efforts will include marking the limits of construction with temporary fencing. Incorporation of this avoidance measure will ensure that construction is limited to the Project area to avoid the potential for impacts to Valley Oak Riparian Woodland beyond those permitted by construction entitlements.

4.1.3.3. PROJECT IMPACTS

Impacts to the Valley Oak Riparian Woodland include construction of two new truck road watercourse crossings at Ditch 2 and installation of two new water pipelines, crossing Ditch 2 and Ditch 6. A total of 0.02 acre of Valley Oak Riparian Woodland will be temporarily disturbed due to Project construction. The Project will result in the permanent loss of 0.15 acre of Valley Oak Riparian Woodland (Figure 4). When the project grading design is finalized, prior to construction, a qualified botanist will count the number of qualifying trees ≥5.5 inches DBH that will be removed by the Project. The final tree removal determination will be made by City of Willits.

4.1.3.4. COMPENSATORY MITIGATION

The project proposes to mitigate the loss of Valley Oak Riparian Woodland with planting native trees at a 3:1 replacement ratio. The planting area is shown in Figure 5 but could be established in other portions of the property with approval from CDFW, such as within portions of the meadow habitat. Species to be planted will correspond with the impacted native trees. These may include valley oak, black oak, willow, and Oregon ash trees. The native trees shall be obtained from a local nursery. This assessment is based on preliminary impacts. When the project grading design is finalized, prior to construction commencing, a final count of trees to be mitigated will be made. Sanhedrin Timber Company will be responsible for successfully establishing replacement trees with an 80% survival

performance standard and the City of Willits will be responsible for ensuring replacement plantings were successfully established.

4.1.3.5. CUMULATIVE EFFECTS

With implementation of the revegetation measures, the Project will not result in adverse cumulative impacts to valley oak riparian woodland.

4.1.4. Discussion of Seasonal Wetland

4.1.4.1. SURVEY RESULTS

Seasonal Wetland, mapped as wet meadow in Figure 3, is a sensitive natural community. There are six seasonal wetlands (W1-W6) in the BRAA that may be considered jurisdictional features regulated under Section 401 and Section 404 of the Clean Water Act. Wetlands and waters are described below within the *Preliminary Delineation of Wetlands and Other Waters of the U.S.* (Appendix C). Dominant herbaceous species include those found within the Meadow habitat as well as rush (*Juncus* spp.) and sedge (*Carex* spp.). Three special status species were identified within BRAA Seasonal Wetlands: Davy's semaphore grass (*Plueropogon californicus var. davyi*) in W5 and W6; North Coast semaphore grass (*Pleuropogon hooverianus*) in W4 and W5, and Baker's meadowfoam (*Limnanthes bakeri*) in W6.

4.1.4.2. AVOIDANCE AND MINIMIZATION EFFORTS

Section 401 and 404 authorizations shall be obtained for impacts to state and federal wetlands and waters. During construction, water quality will be protected by implementation of best management practices (BMPs) of the California Stormwater Quality Association (CSQA 2021) as specifically outlined in the Stormwater Pollution Prevention Plan (SWPPP). Seasonal Wetland will be impacted during construction of the log yard, pond, wetland enhancement site, and road reconstruction. Minimization efforts will include marking the limits of construction with temporary fencing. Incorporation of this mitigation measure will ensure that construction is limited to the Project area to avoid the potential for impacts to Seasonal Wetland beyond those permitted by construction entitlements.

4.1.4.3. PROJECT IMPACTS

Proposed construction of a rocked log yard, a water storage pond, and a segment of road realignment in the northwest portion of the BRAA will impact seasonal wetlands W1 to W5. Construction related impacts are estimated to temporarily impact 0.01 acre of Seasonal Wetlands and result in the permanent loss of approximately 0.02 acre of Seasonal Wetland (Figure 4). Special-status species are mapped in Figure 3 and discussed in below in Section 4.2.

4.1.4.4. COMPENSATORY MITIGATION

The Project proposes to mitigate loss of wetland through wetland creation, mitigation bank credits, or in-lieu fees. An area in the northern portion of the BRAA has been identified as a potential location for

on-site mitigation entailing creating a new seasonal wetland (Figure 5) . Should wetland creation mitigation be chosen to address impacts during 401 and 404 permitting, the proposed new wetland will be approximately 0.24 acre to satisfy a minimum replacement ratio of 3:1 for the Project's permanent impacts to both Seasonal Wetland and Ditch habitats (Section 4.1.5). Wetland creation would require a Wetland Mitigation and Monitoring Plan (WMMP) be developed to mitigate the loss of functions and values of impacted Seasonal Wetland. A WMMP should include performance standards and success criteria, implementation details and schedule, monitoring methods and schedule, and contingency measures. In addition to wetland mitigations, areas of temporary disturbance within the Project footprint are proposed to be revegetated with native vegetation.

4.1.4.5. CUMULATIVE EFFECTS

Through wetland creation, mitigation bank credits, or in-lieu fees, the Project will not result in adverse cumulative impacts to Seasonal Wetland.

4.1.5. Discussion of Ditches 2 - 7

4.1.5.1. SURVEY RESULTS

Multiple drainages are located within the BRAA that flow into Ditch 1, the unnamed tributary to Mill Creek just east and north of the BRAA (Figure 3). These ephemeral and intermittent Ditches within the project are described below and within the *Preliminary Delineation of Wetlands and Other Waters of the U.S.* (Appendix C). Plant communities, primarily within the intermittent Ditches, consists of Mexican rush (*Juncus mexicanus*), common rush *(Juncus effusus*), and willow (*Salix* sp.). The hydrology within the BRAA appears to have been altered in multiple locations as evidenced by the shape and flow direction of the Ditches, as well as berms and possible dredging activities. Ditches 1 – 7 may be jurisdictional waters of the U.S. (Appendix C).

Ditch 1 is an intermittent water mapped as a Relatively Permanent Water (USFWS 2022). Ditch 2 is an intermittent drainage containing wetlands. Ditch 3 is an ephemeral and sparsely vegetated drainage that runs through the center of the southern portion of the Project; it is believed to be the original channel for Ditch 2. Ditch 4 is ephemeral with some wetland vegetation and appears to have been dredged along the parcel line at the center of the Project. Ditch 5 is intermittent water surrounded by wetlands containing rare plants. Ditch 6 is an intermittent stream that shows less signs of alteration than other drainages in the BRAA. Ditch 7 is an intermittent drainage ditch located at the north edge of the existing log yard.

4.1.5.2. AVOIDANCE AND MINIMIZATION EFFORTS

Section 401 and 404 authorizations shall be obtained for impacts to state and federal wetlands and waters. During construction, water quality will be protected by implementation of best management practices (BMPs) of the California Stormwater Quality Association (CSQA 2021) as specifically outlined

in the Stormwater Pollution Prevention Plan (SWPPP). The BMPs will be designed to minimize the potential for siltation and downstream sedimentation in Ditch 1 and Ditch 6. Ditches 2 through 7 cannot be avoided. With the exception of Ditch 4, only minor impacts will occur. Ditch 4 is proposed to be filled to allow for site utilization.

4.1.5.3. PROJECT IMPACTS

Impacts to Ditches include filling Ditch 4, construction of new truck road drainage crossings of Ditch 2, minor road reconstruction impacts, and temporary impacts due to pipeline construction. A total of 0.01 acre of Ditch will be temporarily disturbed due to Project construction and an estimated 0.06 acre will be permanently impacted (Figure 4).

4.1.5.4. COMPENSATORY MITIGATION

As discussed in Section 4.1.4.4, the Project proposes to mitigate loss of Ditch and Seasonal Wetland through wetland creation, mitigation bank credits, or in-lieu fee mitigation. An area in the northern portion of the BRAA has been identified as a potential location for on-site mitigation entailing creating a new seasonal wetland (Figure 5).

4.1.5.5. CUMULATIVE EFFECTS

With implementation of the wetland mitigation and revegetation measures, the Project will not result in adverse cumulative impacts to Ditches within the BRAA.

4.2. Special Status Plant Species

4.2.1. Discussion of Baker's meadowfoam (*Limnanthes bakeri*)

Baker's meadowfoam is an annual herb found in meadow, marsh/swamp (freshwater), valley/foothill grassland (vernally mesic), and vernal pool habitats from 574 to 2,986 feet. It blooms from April through May. There are 11 CNDDB recorded occurrences in the nine-quadrangle area surrounding the BRAA; all of which are within the Willits quadrangle. A large occurrence, covering 3-square miles and containing thousands of plants, is located just north of the BRAA. The southernmost polygon of this occurrence overlaps with the BRAA (CNDDB 2022).

4.2.1.1. SURVEY RESULTS

Baker's meadowfoam was located within the BRAA during 2021 and 2022 surveys, north of the Project. The Baker's meadowfoam occurrence included 60 plants covering approximately 8-square feet of area near the outlet of a culvert on a non-appurtenant rocked road that travels west to east within the site boundaries (see Figure 3). The project is not proposing use of the road, and no maintenance or alterations are proposed near the Baker's meadowfoam occurrence.

4.2.1.2. AVOIDANCE AND MINIMIZATION EFFORTS

No avoidance or minimization measures are proposed.

4.2.1.3. PROJECT IMPACTS

The Project will not impact Baker's meadowfoam.

4.2.1.4. COMPENSATORY MITIGATION

No compensatory mitigation is proposed.

4.2.1.5. CUMULATIVE EFFECTS

No adverse cumulative effects were identified.

4.2.2. Discussion of North Coast Semaphore Grass (*Pleuropogon hooverianus*)

North Coast semaphore grass is a perennial rhizomatous herb found in broadleafed upland forest, meadow/seep, and north coast coniferous forest (open areas, mesic) habitats from 35 feet to 2,200 feet (CNPS 2022). It blooms from April through June and has been observed in Mendocino, Marin, and Sonoma Counties. There are 7 CNDDB recorded occurrences in the nine-quadrangle area surrounding the BRAA, all of which are in the Willits quadrangle. An occurrence, 300 feet east of the BRAA, notes thousands of plants present from 2007 to 2012 and anticipated partial impact by construction of the Highway 101 bypass in Willits (CNDDB 2022).

4.2.2.1. SURVEY RESULTS

North Coast semaphore grass was found within the BRAA during the botanical surveys conducted in 2021 and 2022. A large population straddles Ditch 5.

4.2.2.2. AVOIDANCE AND MINIMIZATION EFFORTS

Minimization efforts will include marking the limits of construction with temporary fencing to prevent impacts to the North Coast semaphore grass population.

4.2.2.3. PROJECT IMPACTS

The Project will not impact North Coast semaphore grass.

4.2.2.4. COMPENSATORY MITIGATION

No compensatory mitigation is proposed.

4.2.2.5. CUMULATIVE EFFECTS

No adverse cumulative effects were identified.

4.2.3. Discussion of Davy's Semaphore Grass (*Pleuropogon californicus* var. *davyi*)

Davy's semaphore grass is a perennial rhizomatous herb found in cismontane woodland, lower montane coniferous forest, and meadows and seeps from 490 to 2000 feet (CNPS 2022). It blooms from March through June and has been observed in Mendocino, Lake, and Sonoma Counties (CalFlora 2022). There are 0 CNDDB recorded occurrences in the nine-quadrangle area surrounding the BRAA (CNDDB).

4.2.3.1. SURVEY RESULTS

Davy's semaphore grass was found within the BRAA during the botanical surveys conducted in 2021 and 2022. A large population is located west of Ditch 5 within Wetland 4.

4.2.3.2. AVOIDANCE AND MINIMIZATION EFFORTS

Minimization efforts will include marking the limits of construction with temporary fencing to prevent impacts to the Davy's semaphore grass population.

4.2.3.3. PROJECT IMPACTS

The Project will not impact Davy's semaphore grass.

4.2.3.4. COMPENSATORY MITIGATION

No compensatory mitigation is proposed.

4.2.3.5. CUMULATIVE EFFECTS

No adverse cumulative effects were identified.

4.3. Special Status Animal Species Occurrences

During project scoping, 23 special status wildlife species were identified and reviewed to determine if suitable habitat is present within or directly adjacent to the BRAA (see Table 1). Of these 23 species, 3 were found to potentially have suitable habitat within the BRAA, and 1 was observed during spring 2022 at the margin of the BRAA. As discussed under Sections 4.3.3 and 4.3.4, bird surveys for community disruptions to special status birds are necessary.

Aquatic habitats within the BRAA where not found to be suitable for Northern California steelhead (*Oncorhynchus mykiss*), Chinook salmon (*O. tshawytscha*), and coho salmon (*O. kisutch*), known to spawn downstream in Mill Creek (0.3 miles from the BRAA). Mill Creek flows into Outlet Creek (1.1 miles from the Project site). The Highway 101 by-pass culvert may be an impassable barrier (located about 350-feet downstream of the BRAA) for fish. In addition, the ditches within and adjacent to the BRAA appears to be poor quality habitat, due to the low gradient flows creating brackish water and soil substrate.

4.3.1. Discussion White-Tailed Kite (*Elanus leucurus*)

White-tailed kites are non-migratory and are classified as Fully Protected under the California Endangered Species Act. In the western United States, white-tailed kites range from Baja California north to southwestern Washington (NatureServe 2022). In California, the yearlong range is from the southern border along the coast and through the Central Valley, to the northern border just along the coast (CDFW 2004). There are no CNDDB records of white-tailed kite occurrences in the 9-quadrangle area surrounding the BRAA. Of the 184 CNDDB occurrences, in Mendocino County, there is 1 occurrence on the coast from August 2006, between Albion and Elk near Big Salmon Creek. A pair of white-tailed kites were observed on the northeastern edge of the BRAA in May 2022. The observation was of 3 individuals near a nest tree in a small stand of 80- to 100-year-old redwood and Douglas fir trees.

White-tailed kites are known to inhabit open grasslands, meadows, marshes, foothills, and valley margins adjacent to deciduous woodlands in California lowlands west of the Sierra Nevada range. They prey on mostly voles and other small mammals and make their nests of loosely piled sticks near the top of dense oak, willow, or other trees near open foraging areas. The meadow and woodland plant communities of the BRAA provide both hunting and nesting habitat. Nesting occurs January through August, and avoidance and minimization measures are needed to prevent unnecessary disturbance.

4.3.1.1. Survey Results

A pair of white-tailed kites was observed at the northeastern edge of the BRAA during a biological survey on May 7, 2022. Both nesting and hunting habitat is present within and adjoining the BRAA.

4.3.1.2. Avoidance and Minimization Efforts

If vegetation disturbance or removal is planned between January 15-August 15, nesting surveys should be conducted by a qualified biologist within 7 days prior to vegetation disturbance or removal. If an active white-tailed kite nest is found within or adjacent to Project boundaries, a 500-foot buffer or exclusion zone shall be established, in consultation with CDFW, until the nest becomes inactive as determined by a qualified biologist. Within the nesting season, should a white-tailed kite or raptor nest become active the applicant shall immediately establish a 500-foot buffer, work exclusion zone around the nest and contact CDFW.

4.3.1.3. Project Impacts

Project construction has the potential to impact white-tailed kite nesting habitat in the Valley Oak Woodland and Valley Oak Riparian Woodland. This construction includes the development of two new truck road watercourse crossings at Ditch 2 and installation of two new water pipelines, one crossing Ditch 2 at the southern end of the BRAA and one crossing Ditch 6 along the northeastern portion of the BRAA. Tree removal associated with these developments is addressed in Sections 4.1.2 and 4.1.3.

4.3.1.4. COMPENSATORY MITIGATION

The project proposes to revegetate areas of temporary disturbance within the Project footprint with native vegetation. The applicant will replace removed native oak and riparian trees greater than 5 inches DBH at a ratio of 3:1. Preliminary planting areas are shown on Figure 4.

4.3.1.5. CUMULATIVE EFFECTS

No adverse cumulative effects were identified.

4.3.2. Discussion of Yellow Warbler (*Dendroica petechia brewsteri*)

Yellow warbler is classified as a Species of Special Concern by CDFW and a Bird of Conservation Concern by USFWS. The yellow warbler occurs primarily as a migrant and summer resident in California form late March through early October and breeds from April to late July. This species breeds throughout most of California, excluding the Central Valley and Mojave Desert (Shuford et. al 2008). Yellow warblers are known to frequent open to medium-density woodlands and forests with a heavy brush understory during their breeding period. Deciduous riparian areas with cottonwood, alder, willow, and other miscellaneous small trees and shrubs are ideal breading habitat. There are 78 CNDDB occurrences of yellow warbler throughout California, including one occurrence in Mendocino County (Willits Quad) from 1977. An unknown number of breeding birds was detected in Little Lake Valley north of Willits, where the habitat/ecosystem was described as “savanna dominated by *Quercus lobata*” and “ephemeral lake in valley during rainy season.” The yellow warbler was not observed in the BRAA, however, the Valley Oak Riparian Woodland could potentially serve as habitat for this species during breeding season. Avoidance and minimization measures are designed to avoid unnecessary disturbance in these areas.

4.3.2.1. SURVEY RESULTS

Yellow warbler was not present in the BRAA during BRA field visits. The seasonal drainages within the project area and surrounding Valley Oak and Valley Oak Riparian Vegetation could provide breeding season habitat for this species, although it should be emphasized that this habitat is relatively unsubstantial and low quality compared with surrounding areas.

4.3.2.2. AVOIDANCE AND MINIMIZATION EFFORTS

If vegetation disturbance or removal is planned between March 15-August 15, nesting surveys should be conducted by a qualified biologist within 7 days prior to vegetation disturbance or removal. If an active yellow warbler nest is found within project area boundaries, a 100-foot buffer or exclusion zone shall be established in consultation with CDFW until the nest becomes inactive as determined by a qualified biologist.

4.3.2.3. PROJECT IMPACTS

Project construction has the potential to impact yellow warbler nesting habitat in the Valley Oak Woodland and Valley Oak Riparian Woodland. This construction includes the development of two new truck road watercourse crossings at Ditch 2 and installation of two new water pipelines, one crossing Ditch 2 at the southern end of the BRAA and one crossing Ditch 6 along the northeastern portion of the BRAA. Tree removal associated with these developments is addressed in Sections 4.1.2 and 4.1.3.

4.3.2.4. COMPENSATORY MITIGATION

The project proposes to revegetate areas of temporary disturbance within the Project footprint with native vegetation. The applicant will replace removed native oak and riparian trees greater than 5 inches DBH at a ratio of 3:1. Preliminary planting areas are shown on Figure 4.

4.3.2.5. CUMULATIVE EFFECTS

No adverse cumulative effects were identified.

4.3.3. American Badger (*Taxidea taxus*)

American badger is classified as a Species of Special Concern by CDFW. The American badger is widely distributed in California. They are most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Grasslands, savannas, and mountain meadows near timberline are preferred. This species requires sufficient food, friable soils, and open, uncultivated ground. They prey on burrowing rodents and dig burrows for themselves as well. Mating occurs in late summer or early autumn, followed by delayed implantation. There are 594 CNDDB occurrences of American badger throughout California, including two occurrences in Mendocino County (Sherwood Peak and Brushy Mtn./Jamison Ridge Quads) from 1916 and 1945. The closest recorded observation to the BRAA occurred in 1916 at Eden Valley Ranch, about 18 miles northeast of Willits. An American badger was not observed in the BRAA, however, there may be suitable Meadow habitat which would entail avoidance and minimization measures. However, if American badger is detected at this site in the future, all work should stop until proper mitigations are implemented as determined by CDFW.

4.3.3.1. SURVEY RESULTS

The American badger was not observed in the BRAA during biological surveys. Based on past occurrences, it is a low likelihood that this species would use the BRAA as habitat.

4.3.3.2. AVOIDANCE AND MINIMIZATION EFFORTS

In the unlikely event that an American badger den (evidenced by a large mound of dirt piled outside an excavated den) is encountered during construction of the Project, construction work shall halt, a qualified biologist shall evaluate the potential den site, and CDFW shall be notified if the hole is determined to be a potential American badger den.

A 100-foot no-work buffer shall be established around occupied maternity dens throughout the pup-rearing season, February 15 through July 1 and a 15-foot no-work buffer around occupied dens during other times of the year. If non-maternity dens are found and cannot be avoided during construction activities, they will be monitored for badger activity. If the biologist determines that dens may be occupied, passive den exclusion measures will be implemented for three to five days to discourage the use of these dens prior to project disturbance activities.

4.3.3.3. PROJECT IMPACTS

The Project has the potential to impact American badger, but mitigation measures will avoid or minimize impacts.

4.3.3.4. COMPENSATORY MITIGATION

No compensatory mitigation is proposed.

4.3.3.5. CUMULATIVE EFFECTS

No adverse cumulative effects were identified.

Chapter 5. Conclusion and Determination

5.1. Federal Endangered Species Act (FESA) Consultation Summary

Projects that have the potential to effect federal endangered species require formal and informal consultation with USFWS and/or NMFW under FESA. The project will have no effect on federally listed species that either do not have the potential to occur in the BRAA or were not identified during floristic surveys of the BRAA. This Project will have no effect on Southern Oregon/Northern California coast coho salmon as ditch/stream features in the BRAA given the quality of ditch/stream habitats.

5.2. California Endangered Species Act Consultation Summary

The BRAA was found to contain two state listed species: state endangered species Baker's meadowfoam (*Limnanthes bakeri*), and state-threatened species North Coast semaphore grass (*Pleuropogon hooverianus*). Although not observed, the BRAA is within the range of and contains suitable habitats for state-endangered Roderick's fritillary (*Fritillaria roderickii*) and Burke's goldfield (*Lasthenia burkei*), and state threatened Milo Baker's lupine (*Lupinus milo-bakeri*).

5.3. Wetlands and Other Waters Coordination Summary

A jurisdictional delineation was prepared for the BRAA (Appendix C). Six waters (Ditches 2 to 7) and five wetlands (W1 to W5) were identified within the BRAA. Based on preliminary engineering a total of approximately 0.02 acres of wetland and water features will be temporarily and 0.08 acres will be permanently impacted. The Project will require permits from the ACOE, CDFW, and the RWQCB. All permit conditions will be implemented.

5.4. Invasive Species

Invasive plant species in the BRAA rated by Cal-IPC (2021) are noted in Appendix A. Two species rates as High rated as "High" by Cal-IPC (2006) in terms of its ecological impact, invasive potential, and ecological distribution, occurs in the BRAA: Himalayan blackberry (*Rubus armeniacus*) and cheatgrass (*Bromus tectorum*).

The invasive plant species found in the BRAA are common throughout Mendocino County. The scope of this Project precludes effective eradication of these invasive species from the BRAA. The spread of invasive species in the BRAA will be reduced by cleaning equipment before it comes to the BRAA and re-vegetating disturbed areas native or sterile nonnative species. By revegetating disturbed creek

banks and roadsides with native species, the Project will reduce the spread of these species in the BRAA.

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Appendix A Plant and Wildlife Species Observed

Plant Species Observed

Family Name	Scientific Name	Common Name	Native?	Cal-IPC
Alismataceae	*Alisma lanceolatum*	lanceleaf water plantain	No	
Alliaceae	*Allium bolanderi*	Bolander's onion	Yes	
Alingiaceae	*Liquidambar* spp.	liquidambar	No	
Amaryllidaceae	*Narcissus pseudonarcissus*	daffodil	No	
Anacardiaceae	*Toxicodendron diversilobum*	poison oak	Yes	
Apiaceae	*Daucus carota*	wild carrot	No	
	Conium maculatum	poison hemlock	No	M
	Foeniculum vulgare	sweet fennel	No	
	Torilis arvensis	hedgeparsley	No	M
Apocynaceae	*Vinca major*	periwinkle	No	M
Asteraceae	*Achillea millefolium*	yarrow	Yes	
	Artemesia douglasiana	mugwort	Yes	
	Baccharis glutinosa	marsh baccharis	Yes	
	Baccharis pilularis	coyote brush	Yes	
	Carduus pycnocephalus	Italian thistle	No	M
	Centaurea melitensis	Maltese star thistle	No	M
	Chamaemelum fuscatum	chamomile	No	
	Cichorium intybus	chicory	No	
	Cirsium vulgare	bull thistle	No	M
	Dittrichia graveolens	stinkwort	No	M
	Hypochaeris glabra	smooth cat's ear	No	L
	Hypochaeris radicata	hairy cats ear	No	M
	Lactuca spp.	lettuce	No	
	Matricaria discoidea	pineapple weed	Yes	
	Taraxacum officinale	common dandelion	No	
Boraginaceae	*Myosotis discolor*	forget-me-not	No	
Brassicaeae	*Brassica rapa*	mustard	No	L
Caprifoliaceae	*Symphoricarpos* spp.	snowberry	Yes	
Caryophyllaceae	*Cerastium fontanum*	mouse ear chickweed	No	
	Spergula arvensis	spurry	No	
Convolvulaceae	*Convolvulus arvensis*	field bindweed	No	
Cornaceae	*Cornus sericea* ssp. *sericea*	red osier dogwood	Yes	
Cupressaceae	*Juniperus virginiana*	Eastern redcedar	No	
Cyperaceae	*Carex densa*	dense sedge	Yes	
	Carex gracilior	slender sedge	Yes	
	Cyperus eragrostis	nutsedge	Yes	

Family Name	Scientific Name	Common Name	Native?	Cal-IPC
Dipsacaceae	*Dipsacus fullonum*	wild teasel	No	M
Ericaceae	*Arbutus menziesii*	madrone	Yes	
	Arctostaphylos standfordiana spp. *standordiana*	Stanford manzanita	Yes	
Fabaceae	*Acmispon americanus*	American bird's foot trefoil	Yes	
	Gleditsia triacanthos	honey locust	No	
	Lathyrus latifolius	sweet pea	No	W
	Lathyrus sativus	white pea	No	
	Lotus corniculatus	bird's foot trefoil	No	
	Lupinus bicolor	lupine	Yes	
	Medicago polymorpha	burclover	No	L
	Trifolium dubium	shamrock clover	No	
	Trifolium repens	white clover	No	
	Trifolium subterraneum	subterranean clover	No	
	Vicia hirsuta	hairy vetch	No	
	Vicia sativa ssp. *sativa*	garden vetch	No	
Fagaceae	*Quercus garryana*	Oregon oak	Yes	
	Quercus kelloggii	California black oak	Yes	
	Quercus lobata	valley oak	Yes	
Geraniaceae	*Erodium botrys*	big heron bill	No	
	Erodium cicutarium	redstem stork's bill	No	L
	Geranium dissectum	geranium	No	L
	Geranium molle	crane's bill geranium	No	
Hamamelidaceae	*Liquidambar styraciflua*	sweetgum	No	
Hypericaceae	*Hypericum perforatum*	common St. Johnswort	No	L
Iridaceae	*Iris germanica*	german iris	No	
	Sisyrinchium bellum	blue eyed grass	Yes	
Juncaceae	*Juncus bolanderi*	Bolander's rush	Yes	
	Juncus bufonius	toad rush	Yes	
	Juncus effusus	Pacific rush	Yes	
	Juncus ensifolius	sword leaved rush	Yes	
	Juncus mexicanus	Mexican rush	Yes	
Lamiaceae	*Lamium purpureum*	purple dead nettle	No	
	Melissa officinalis	lemon balm	No	
	Mentha pulegium	pennyroyal	No	M
	Lysimachia arvensis	scarlet pimpernel	No	
Magnoliaceae	*Liriodendron* spp.	tulip tree	No	
Moraceae	*Morus* spp.	mulberry	No	
Myrsinaceae				

Family Name	Scientific Name	Common Name	Native?	Cal-IPC
Oleaceae	*Fraxinus latifolia*	Oregon ash	Yes	
Onagraceae	*Epilobium ciliatum*	slender willow herb	Yes	
	Epilobium densiflorum	denseflower willowherb	Yes	
Orobanchaceae	*Triphysaria versicolor*	owl's clover	Yes	
Papaveraceae	*Eschscholzia californica*	California poppy	Yes	
Pinaceae	*Pinus ponderosa*	yellow pine	Yes	
Plantaginaceae	*Kickxia elatine*	cancerwort	No	
	Plantago lanceolata	ribwort	No	L
	Plantago major	common plantain	No	
	Platanus racemosa	western sycamore	No	
	Veronica americana	speedwell	Yes	
Poaceae	*Agrostis stolonifera*	redtop	No	L
	Aira caryophyllea	silvery hairgrass	No	
	Alopecurus pratensis	meadow foxtail	No	W
	Anthoxanthum odoratum	sweet vernal grass	No	L
	Avena barbata	slender oat	No	M
	Briza maxima	rattlesnake grass	No	L
	Briza minor	little rattlesnake grass	No	
	Bromus diandrus	ripgut brome	No	M
	Bromus catharticus var. *elatus*	chilean brome	No	
	Bromus hordeaceus	soft brome	No	L
	Bromus sitchensis var. *carinatus*	California brome	Yes	
	Bromus tectorum	cheatgrass	No	H
	Cynosurus echinatus	dogtail grass	No	M
	Dactylis glomerata	orchard grass	No	L
	Danthonia californica	California oatgrass	Yes	
	Distichlis spicata	saltgrass	Yes	
	Elymus glaucus ssp. *glaucus*	blue wild rye	Yes	
	Elymus triticoides	beardless wild rye	Yes	
	Festuca arundinacea	reed fescue	No	M
	Festuca microstachys	small fescue	Yes	
	Festuca perennis	Italian rye	No	M
	Gastridium phleoides	nit grass	No	
	Holcus lanatus	common velvetgrass	No	M
	Hordeum murinum	foxtail barley	No	M
	Phalaris aquatica	bulbous canarygrass	No	M
	Phalaris lemmonii	lemmon's canarygrass	Yes	
	Phalaris paradoxa	hood canarygrass	No	
	Phleum pratense	timothy	No	

Family Name	Scientific Name	Common Name	Native?	Cal-IPC
	Plueropogon californicus var. *davyi*	Davy's semaphore grass	Yes	
	Pleuropogon hooverianus	North Coast semaphore grass	Yes	
	Poa annua	annual blue grass	No	
	Poa compressa	Canada blue grass	No	
	Poa pratensis	Kentucky blue grass	No	L
Polygonaceae	*Rumex acetosella*	sheep sorrel	No	M
	Rumex crispus	curly dock	No	L
Polemoniaceae	*Navarretia squarrosa*	skunkweed	Yes	
Ranunculaceae	*Ranunculus occidentalis*	buttercup	Yes	
Rosaceae	*Crataegus monogyna*	hawthorn	No	L
	Luzula comosa	wood rush	Yes	
	Potentilla gracilis	Northwest cinquefoil	Yes	
	Prunus cerasifera	cherry plum	No	L
	Rosa gymnocarpa	wood rose	Yes	
	Rubus armeniacus	Himalayan blackberry	No	H
	Rubus ursinus	California blackberry	Yes	
Rubiaceae	*Galium muricatum*	bedstraw	Yes	
Salicaceae	*Populus alba*	white poplar	No	
	Populus nigra	lombardy poplar	No	
	Populus trichocarpa	black cottonwood	Yes	
	Salix laevigata	red willow	Yes	
	Salix lasiandra	Pacific willow	Yes	
	Salix lasiolepis	arroyo willow	Yes	
Sapindaceae	*Acer rubrum*	red maple	No	
	Acer saccharinum	silver maple	No	
	Aesculus californica	buckeye	Yes	
Scrophulariaceae	*Scrophularia californica*	figwort	Yes	
Verbenaceae	*Verbena lasiostachys*	verbena	Yes	

Cal-IPC Inventory categorizes plants that threaten California's natural areas. Ratings include High (H) – species that have sever ecological impacts, Moderate (M) – species that have a substantial and apparent- but generally not severe-co impact, Limited (L) – species that are invasive but their ecological impacts are minor, and Watch (W) – these species have been assessed as posing a high risk of becoming invasive.

Wildlife Species Observed

Common Name	***Scientific Name***
AMPHIBIANS	
Pacific treefrog	*Pseudacris sierra*
INSECTS	
bumble bee	*Bombus* sp.
BIRDS	
red-tailed hawk	*Buteo jamaicensis*

Common Name	***Scientific Name***
white-tailed kite	*Elanus leucurus*
quail	*Callipepla californica*
turkey vulture	*Cathartes aura*
red-winged black bird	*Agelaius phoeniceus*
mourning dove	*Zenaida macroura*
MAMMALS	
deer	*Odocoileus hemionus*
bobcat	*Lynx rufus*
REPTILES	
garter snake	*Thamnophis elegans elegans*
fence lizard	*Sceloporus occidentalis occidentalis*

Appendix B Photographs

Ditch 1

Ditch 1 Connection

Ditch 2

Ditch 2

Ditch 3

Ditch 3

Looking east at Ditch 5 where it runs west-to-east.

Looking west at Ditch 5 where it connects to Ditch 6.

Looking north at Ditch 5 where it runs south-to-north.

Looking south at Ditch 5 where it runs south-to-north.

Looking south along Ditch 6.

Looking north along Ditch 6.

Looking south at Ditch 7 and toward the existing log yard.

Looking north toward Ditch 7.

Facing southwest, Wetland 4.

Facing east, Wetland 4.

Davy's semaphore grass (*Pleuropogon californica var. dayvi*) in Wetland 4.

Looking north at Wetland 5, Data Point 8.

Baker's meadowfoam (*Limnanthes bakeri*) in Wetland 6.

Valley Oak Woodland location in BRAA

Valley Oak Riparian Woodland at the southern border of the BRAA, looking south.

Valley Oak Riparian Woodland location in BRAA

Landscape

Landscaped Woodland

Disturbed/Fill Scrub

Appendix C Jurisdictional Delineation Report

CLIFTON
ENVIRONMENTAL, LLC

PRELIMINARY DELINEATION OF WETLANDS AND OTHER WATERS OF THE U.S.
SANHEDRIN TIMBER COMPANY LOG YARD PROJECT
23701 & 421 N. MAIN STREET
WILLITS, CALIFORNIA
JULY 2022

Project Description

The study area is located within the North Coast Range, in the valley floor of Little Lake Valley, with the northern most portion of the City of Willits, Mendocino County, California. The study area hosts upland habitats and several drainage ditches, wetland meadow, and riparian forest habitat. The proposed Project is an outdoor log storage yard.

Methodology

A routine-level wetland delineation of the study area was conducted on 3 April 2021 and 30 April, 5 May, 7 May, 10 May, and 13 May 2022. The purpose of the survey was to delineate all potentially jurisdictional wetlands[1] and waters[2] of the U.S. within the Study area. The delineation followed the U.S. Army Corps of Engineers (Corps) Wetland Delineation Manual (Corps 1987) and the Corps' Western Mountains, Valleys, and Coast Region (WMVCR), Regional Supplement (Corps 2010). Other resources that aided in the delineation include The U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook (Corps 2007), the Ordinary High Water Mark Identification Regulatory Guidance Letter (Corps 2005) and Classification of Wetlands and Deepwater Habitats of the United States (FGDC 2013). Prior to field investigations, aerial photographs (NAIP 2016 & 2020), the Soil Survey of Mendocino County, Eastern Part (USDA 1991), the Willits USGS topographic map (USGS 1991) of the Study area, and preliminary project design maps were reviewed.

The National Wetland Plant List was reference to determine the wetland indicator status ratings of plant species found within the Study area. Wetland indicator status ratings definitions are in Appendix A.

[1] See Wetlands in Appendix A.
[2] See Waters of the U.S. in Appendix A.

13 complete wetland delineation data points were collected in the field (Appendix C), in addition 35 additional partial points were investigated to better understand the extent of hydrology and hydrophytic vegetation. Plant species identified within the Study area followed the Jepson Manual (Jepson 2022) nomenclature and were assigned a wetland indicator status[3] based on The National Wetland Plant List (Corps 2018) for the WMVCR. Soils were analyzed at each complete data point for evidence of redoximorphic features. Moist soil colors were determined using the Munsell Color Chart (Greg MacBeth 2000).

Surveys were timed approximately two weeks after a suitable rain event when prolonged inundation and primary indicators of wetland hydrology could best be observed.

The Ordinary High-Water Mark (OHWM) of several drainage ditches were delineated (Corps 2005). The Study area ditches' OHWM were delineated using physical characteristics and where absent were considered at bank full or were investigated for wetland parameters.

Data points were mapped in the field using the Avenza Maps app (trademark of Avenza Systems Inc.) on a mobile device. The width of Waters of the U.S. was measured in the field using a steel tape and ocular estimation. Data points and waters were subsequently overlain on a color digital orthophotograph using ESRI ArcGIS software. A summary of potential jurisdictional features can be found below in Table 2.

This report is a preliminary determination of wetlands and other waters of the U.S. on the study area. This determination is not considered complete until the Corps makes an independent assessment and issues a formal determination.

Study Area Description

The study area is located at 23701 & 421 N. Main Street in the City of Willits, Mendocino County, California, approximately 600 feet north of the Willits Highschool (Appendix B, Exhibit 1 & 2), covering approximately 22 acres. The Study area includes two assessor's parcels (APN 108-040-11 & 18). Land uses surrounding the Study area include industrial, commercial, and residential. The Study area is characterized by five drainage ditch streams, herbaceous grassland, native and landscaped woodland, and scattered developments. The Study area is located on the Willits USGS 7.5' quadrangle (USGS 1991) in portions of Section 7, T18N, R13W, MDBM [-123.742, 39.5284, NAD83] and Section 12, T18N, R14W. It lies within the Davis Creek Planning Watershed (1111.61.01) which is part of the Eel River Hydrologic Unit (Calwater 2004). Waters on the Study area flow into an unnamed tributary to Mill Creek, a tributary to Outlet Creek which flows into the Main Fork Eel, thence the Pacific Ocean. The elevation is approximately 1350 feet to 1365 feet above sea level.

[3] See Wetland Indicator Abbreviations in Appendix A

Based on the Web Soil Survey (USDA 2021a), one soil type has been mapped within the Study area (Appendix B, Exhibit 3). The soil type is Cole silty clay loam, 0 to 2 percent (115), typically found in bottomlands in alluvium derived from sedimentary rock. It is somewhat poorly drained. Cole silty clay loam is included in the hydric soils list, as about 10 percent of this soil unit includes minor components with hydric soil ratings (USDA 2021b).

Precipitation for the winter of 2021/2022 was far below average, as indicated in Table 1, although April precipitation was above average.

Table 1. Summary of Precipitation, Willits, California (NCEI 2022) and historic Willits, California (WRCC 2021)

Precipitation	October	November	December	January	February	March	April	May	June	July	Totals
Winter '21/'22 (inches) Oct 2021-July 2022	11.14	4.08	11.98	1.77	0.00	1.36	7.11	0.28	--	--	37.72
Historic Average (inches) 3/6/1902-9/27/2012	3.08	7.35	9.81	9.74	7.96	7.60	3.14	1.49	0.39	0.07	51.40

Results

Preliminary wetlands and waters of the U.S. within the Study area are summarized in Table 2 and depicted in Appendix B, Exhibits 4. The Study area has a history of disturbance resulting in alterations to the hydrology, as evidenced by the flow patterns of the study area drainage ditches.

The Study area contains a combination of facultative, xeric/upland, and hydrophytic/wetland vegetation such as: valley oak (*Quercus lobata*, FACU), coyote brush (*Baccharis pilularis*, UPL), velvet grass (*Holcus lanatus*, FAC), willow (*Salix sp.*, FACW), and rushes (*Juncus* sp, FACW). This mix of species may partially be a result of the site being in the interface between the Willits valley Mill Creek (wetland habitat), and surrounding hills (upland habitat). It could also be influenced by anthropogenic disturbances that have altered hydrological conditions over time. A complete list of identified plant species can be found in the 2022 Biological Resource Assessment Report covering the study area.

Ditch 1 is located approximately 70 feet east of the Study area. Ditch 1 is mapped as a Federal Water of the US in the USFWS online wetland mapper tool (USFWS 2021). It appears to be an intermittent, Relatively Permanent Water and is the unnamed tributary to Mill Creek that receives drainage from the study area.

Ditches 2, 3 &4 may were found to be Non-relatively Permanent Water and Ditch 5 &6 to be RPWs (Corps 2007).

Ditch 2 is intermittent with discontinuous seasonal flow and is characterized by a channel with a bed and bank, partially vegetated by herbaceous wetland plants and surrounded by a riparian forest community. There is a berm along most of the channels northern bank. The overstory of Ditch 2 is dominated by willow (*Salix* spp., FACW) shrubs and trees, valley oak (*Quercus lobata*), and white poplar (*Populus alba*). Herbaceous species include rush (*Juncus* spp., FACW) and pennyroyal (*Mentha pulegium*, OBL)

Dich 3 is an ephemeral ditch that has a bed and bank and is sparsely vegetated within the channel. Dominate overstory species are largely landscaped trees - poplar (*Populus* X), sycamore (*Platanus* spp.), with few channel herbs.

Ditch 4 is ephemeral and flows west to east along the parcel line between the two study area parcels. It has a berm along its northern bank and is largely vegetated with herbaceous wetland species rush (*Juncus* spp., FACW) and pennyroyal (*Mentha pulegium*, OBL). See Data Point 1 (DP1)

Ditch 5 is intermittent and originates at a culvert that drains the neighbor's storage unit facility. Although numerous drop inlets are evident throughout the neighbor's site, it is not known the source of water discharging out of the culvert located in the northeast corner of the neighbor's parcel and contributing to Ditch 5. The channel contained standing water (DP7) and herbaceous wetland plants (*Juncus* spp., FACW) and Davy's semaphore grass (*Pleuropogaon californicus* var. *davyi*, OBL). The lower extent of Ditch 5 does not contain hydrophytic vegetation and is ephemeral as it flows into Ditch 6.

Ditch 6 is intermittent and travels through the mixed oak riparian woodland with a bed and bank and few herbs. The overstory is dominated by valley oak (*Quercus lobata*, FACU), black oak (*Quercus kelloggii*, NI), and Oregon ash (*Fraxinus latifolia,* FACW). Dogwood dominates the mid-layer canopy (*Cornus sericea*, FACW), and poison oak (*Toxicodendron diversilobum*, FAC) and California blackberry (*Rubus ursinus*, FACU) the understory.

The study area's herbaceous field habitat (mapped as meadow) is dominated by species such as reed fescue (*Festuca arundinacea*, FAC), velvet grass (*Holcus lanatus*, FAC), Himalayan blackberry (*Rubus armeniacus*, FAC), meadow foxtail (*Alopecurus pratensis*, FACW), and harding grass

(*Phalaris aquaticus*, FACU). Portions of the meadow that were dominated by Facultative species were investigated for hydrology and soil indicators. Wetlands W1, W2, W3, W5, and W6 represent wet portions of the herbaceous field, while W4 was uncharacteristic. Wetland 4 may be formed as a result of past dredging and unidentified hydrology inputs seeping into the site from the adjacent storage unit parcel, or old Highway 101 development to the west. Extensive fill is deposited in this portion of the Study area and W4 was found surrounded by uneven terrain, is partially composed of a small potentially dredged pond, and the portion near Ditch 5 contains an abundant herbaceous, wetland community found inundated during the survey.

Table 2. Preliminary Wetlands and Waters of the U.S. in the Study Area

Feature	Acres/Linear Feet
Ditch 2	0.14
Ditch 3 to 6	0.24
W 1 (Wetland 1)	0.03
W2	0.07
W3	0.02
W4	0.13
W5	0.11
W6	0.61
Total	**1.35**

Plant Community Descriptions

Developed\Fill & Blackberry Scrub: Portions of the site are uneven, benching, bermed, and appear to be heavily disturbed, graded comprised of imported fill. These communities are characterized by poison hemlock (*Conium maculatum*), coyote brush (*Baccharis pilularis*), blackberry (*Rubus ursinus*), teasel (*Dipsacus fullonum*), harding grass (*Phalaris aquatica*), reed grass (*Festuca aurundinacea*), vinca (*Vinca major*) and/or poison oak (*Toxicodendron diversilobum*)

Landscaped Woodland: A mix of cultivars (*Populus nigra*), maple (*Acer* sp.), and sycamore (*Plantanus racemose*) are co-dominant in the tree canopy. Shrubs (e.g., *Rubus sp.*) and grasses (e.g., *Festuca sp.*, *Poa sp.*, *Elymus sp.*, etc.) are co-dominant in the understory layers. This well-established, landscaped woodland occurs within the study area's southern parcel where a former R.V.'s parking and recreational field were located.

Bluegrass/Fescue/Redtop Meadows: *Poa pratensis*, *Festuca arundinacea*, *Phalaris aquatica*, *Alopecurus pratensis*, and/or *Phleum pratense* are dominant or co-dominant in the herbaceous layer with *Achillea millefolium*, *Bromus sp.*, *Elymus sp.*, *Hordeum sp.*, *Juncus sp.*, or *Taraxacum*

officinale. Emergent oak trees and hawthorn, plum and coyote brush shrubs are present at low cover. Wet portions of the meadow contain sedge (*Carex* spp.), rush (*Juncus* spp.), and Douglas' baccharis (*Baccharis glutinosa*).

Oak Woodland: Located near the riparian woodland, the oak woodland areas did not exhibit wetland hydrology or soil indicators. Dominate overstory species include *Quercus garryana*, *Quercus kelloggii*, and/or *Quercus lobata* with blackberry and bluegrass (*Elymus glaucus* ssp. *glaucus*) in the understory.

Riparian Woodland: On the southern parcel the riparian woodland is younger, has fewer oaks and contains more invasive species. There a portion of the tree and shrub canopy is dominated by white poplar (*Populus alba*), Oregon ash, sycamore and willow. Oaks are found throughout the woodland. Other shrub species include dogwood, rose (*Rosa californica*), blackberry and hawthorn (*Crataegus monogyna*).

Regulations

Jurisdictional wetlands and other waters of the U.S. are regulated by the Corps under provisions of Section 404 of the Clean Water Act (33 United States Code [USC] § 403). Any disposal of dredged or fill material and structures, as well as work in wetlands or waters, requires a permit from the Corps. The Corps determines jurisdictional wetlands and / or other waters of the U.S. based on preliminary wetland delineations completed by wetland professionals and on-site evaluations and independent review by the Corps.

Under Section 401 of the federal Clean Water Act, the Corps is required to meet state water quality regulations prior to granting a Section 404 permit for work in a creek, river, or drainage. This is accomplished by application to the local Regional Water Quality Control Board for Section 401 Certification that requirements have been met. In addition, the California Department of Fish and Game may regulate activities affecting or potentially affecting such resources.

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Federal Regulations

33 CFR 328.3.

33 USC §403 (Section 10 of the Rivers and Harbor Act of 1899)

33 USC §1344, (Section 404 of the Clean Water Act)

APPENDIX A
DEFINITIONS AND ABBREVIATIONS

Wetlands: "The U.S. Army Corps of Engineers (Federal Register 1982) and the Environmental Protection Agency (Federal Register 1980) jointly define wetlands as: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." (Corps 1987)

Waters of the U.S.: Waters of the U.S. include, but are not limited to the following: any channel that has real or potential interstate commerce value including lakes, rivers, streams [including perennial and intermittent streams, and ephemeral streams that have an ordinary high water mark (OHWM)], tributaries to waters, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and impoundments of waters (33 CFR 328.3). The OHWM is described as the elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence on the landscape.

Wetland Indicator Abbreviations

OBL = Obligate Wetland Plant (estimated probability of occurring in wetlands >99%)
FACW = Facultative Wetland Plant (estimated probability >67% to 99%)
FAC = Facultative Plant (estimated probability 33% to 67%)
FACU = Facultative Upland Plant (estimated probability 1% to <33%)
UPL = Obligate Upland Plant (estimated probability <1%)
NI = No Indicator

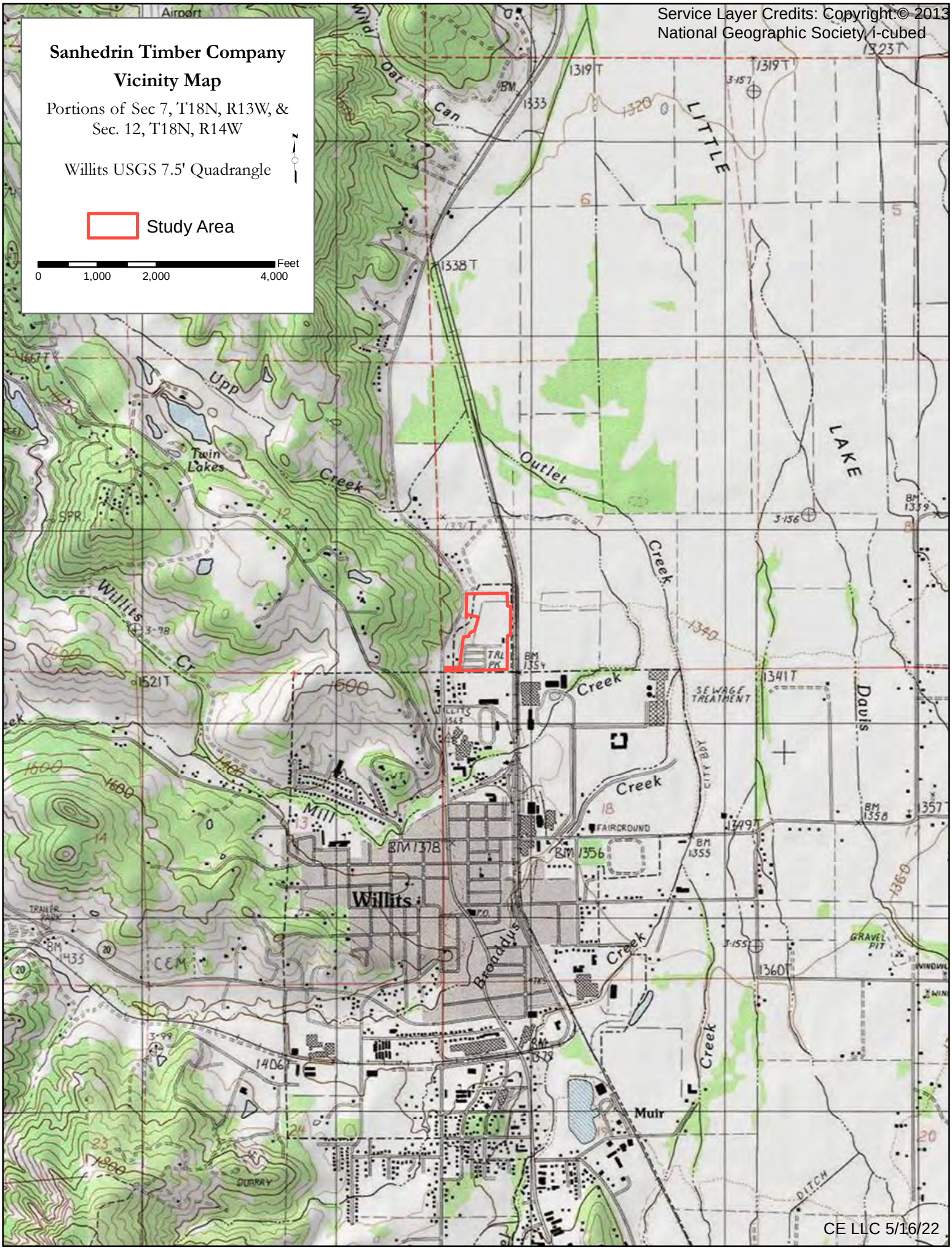
APPENDIX B
MAP EXHIBITS

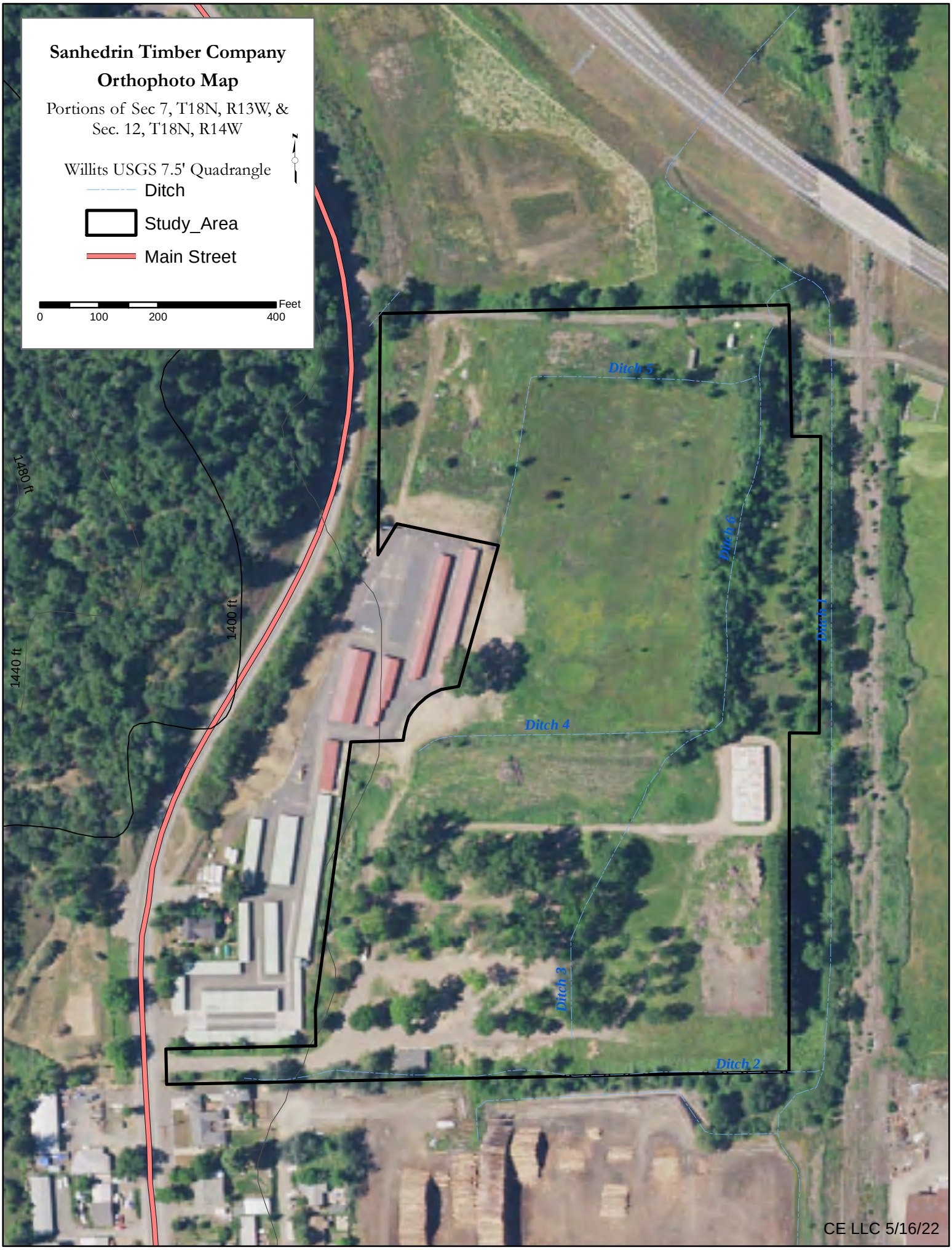
Exhibit 1 – Regional Location Map

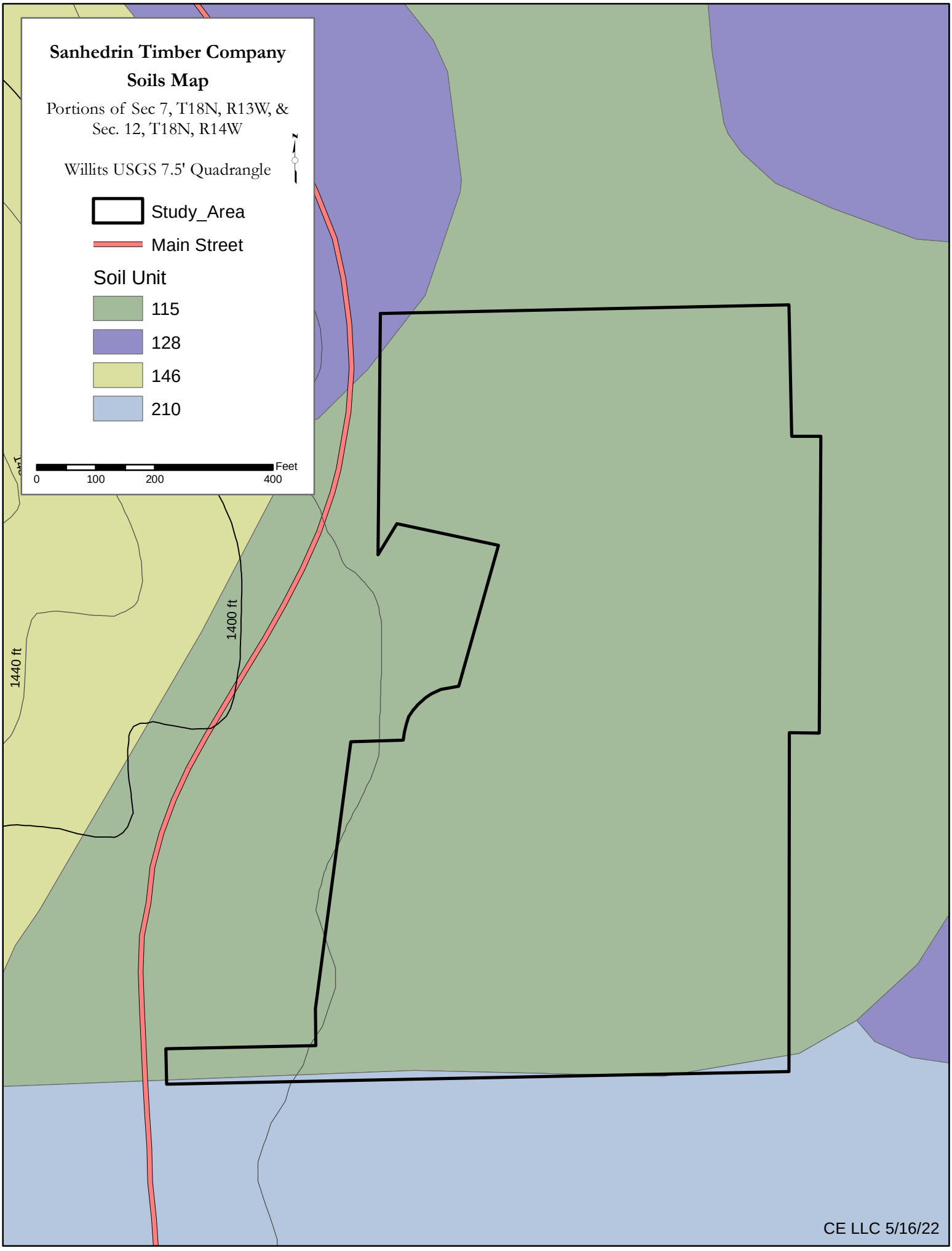
Exhibit 2 – Project Orthophoto Map

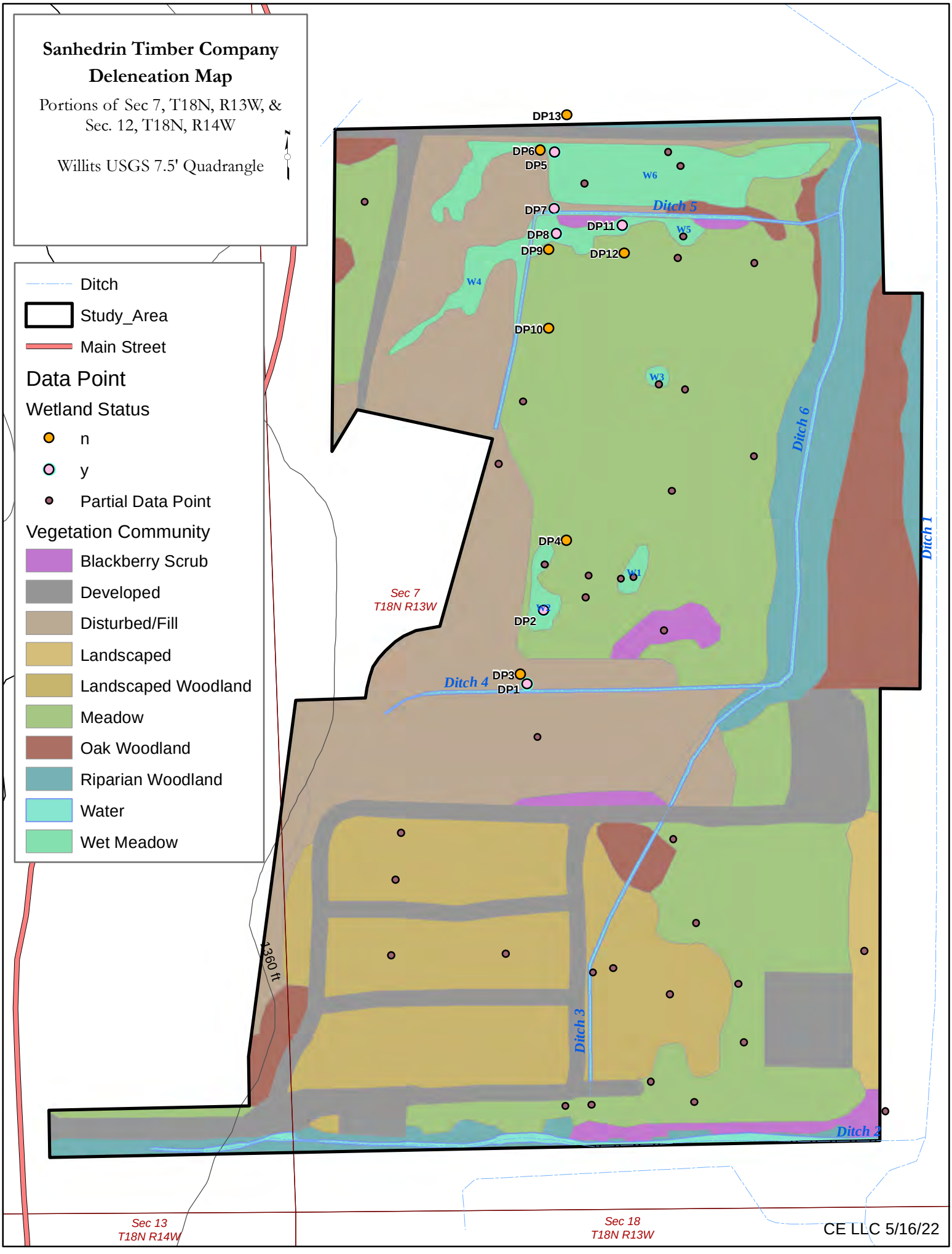
Exhibit 3 – Soils Map

Exhibit 4 – Delineation Map


Sanhedrin Timber Company
Vicinity Map
Portions of Sec 7, T18N, R13W, & Sec. 12, T18N, R14W
Willits USGS 7.5' Quadrangle
Study Area
0
1,000
2,000
4,000
Feet
Service Layer Credits: Copyright © 2013 National Geographic Society, i-cubed
Willits
Muir
Twin Lakes
Creek
Outlet
LAKE
LITTLE
Davis
Broaddus
Mill
Willits Cr
SEWAGE TREATMENT
FAIRGROUND
CEM
GRAVEL PIT
DITCH
CE LLC 5/16/22


Sanhedrin Timber Company
Orthophoto Map
Portions of Sec 7, T18N, R13W, &
Sec. 12, T18N, R14W
Willits USGS 7.5' Quadrangle
Ditch
Study_Area
Main Street
Feet
0
100
200
400
Ditch 5
Ditch 6
Ditch 1
Ditch 4
Ditch 3
Ditch 2
1480 ft
1400 ft
1440 ft
CE LLC 5/16/22


Sanhedrin Timber Company
Soils Map
Portions of Sec 7, T18N, R13W, &
Sec. 12, T18N, R14W
Willits USGS 7.5' Quadrangle
N
Study_Area
Main Street
Soil Unit
115
128
146
210
0
100
200
400
Feet
1400 ft
1440 ft
CE LLC 5/16/22


Sanhedrin Timber Company
Deleneation Map
Portions of Sec 7, T18N, R13W, &
Sec. 12, T18N, R14W
Willits USGS 7.5' Quadrangle
Ditch
Study_Area
Main Street
Data Point
Wetland Status
n
y
Partial Data Point
Vegetation Community
Blackberry Scrub
Developed
Disturbed/Fill
Landscaped
Landscaped Woodland
Meadow
Oak Woodland
Riparian Woodland
Water
Wet Meadow
DP13
DP6
DP5
DP7
DP11
DP8
DP9
DP12
DP10
DP4
DP2
DP3
DP1
W1
W2
W3
W4
W5
W6
Ditch 1
Ditch 2
Ditch 3
Ditch 4
Ditch 5
Ditch 6
Sec 7
T18N R13W
1360 ft
Sec 13
T18N R14W
Sec 18
T18N R13W
CE LLC 5/16/22

APPENDIX C
WETLAND DETERMINATION DATA FORMS

Data Point Forms 1-13

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin City/County: Mendocino Sampling Date: 5/5/22

Applicant/Owner: Sanhedrine Timber Co. State: CA Sampling Point: 1

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): Ditch 4 Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): Sec7 T8N R13W Lat: 39.4218°N Long: -123.3527°W Datum: NAD 83 zon 10

Soil Map Unit Name: 115 Cole Silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: Man-made ditch travels along parcel-line

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 1/250 AC)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: ____)			
1. Juncus ensifolius	40	y	FACW
2. Festuca arundinacea	20	y	FAC
3. Mentha pulegium	20	y	OBL
4. Carex gracilior	20	y	FAC
5. Epilobium ciliatum	5	n	FACW
6.			
7.			
8.			
9.			
10.			
11.			
	105 = Total Cover		
	50% = 52.5		
	20% = 21		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	7.5YR 3/2	99	2.5YR 4/6	1	C	M	silty clay	
3-7	2.5YR 3/1	20	7.5YR 5/6	1	C	M	clay loam	
	7.5YR 3/3	79						
7-16	2.5YR 3/1	20	7.5YR 5/6	10	C	M	clay	
	2.5YR 3/2	70						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No ____ Depth (inches): ____

Water Table Present? Yes X No ____ Depth (inches): 12"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 11"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co. City/County: Mendocino Sampling Date: 5/5/22

Applicant/Owner: same State: CA Sampling Point: 2

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N, R13W

Landform (hillslope, terrace, etc.): field Local relief (concave, convex, none): flat Slope (%): 0

Subregion (LRR): Lat: 39.4221° N Long: -123.3526° W Datum: NAD83 zone 10

Soil Map Unit Name: 115 - Cole Silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks: Drought year, but signif. precipitation occured in April (7")

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 1/250th)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Festuca arundinacea	20	Y	FAC
2. Poa pratensis	20	Y	FAC
3. Dipsacus fullonum	10	N	FAC
4. Phalaris aquatica	5	N	FACU
5. Lactuca spp.	2	N	FACU
6. Lathyrus latifolius (L. lanszwertii)	2	N	UPL
7. Vicia sativa	2	N	UPL
8. Geranium dissectum	2	N	NI
9. Carex densa	5	N	FAC
10. Ranunculus occidentalis	1	N	FACW
11.			
	69 = Total Cover		
	50% = 34.5		
	20% = 13.8		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	7.5YR 3/2	100						
2-4	4/1	10	5/6	10	C	M	sandy clay	
	5/1	30						
	5/3	40						
4-8	7.5YR 4/1	35	5/4	5			clay	
	3/2	60						
8-16	7.5YR 4/1	60	7.5YR 5/8	40			clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes X No ____ Depth (inches): 15

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 4 11

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Water table is not immediately below the saturated zone. ?

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Ephedrin Timber Co City/County: Mendocino Sampling Date: 5-5-22

Applicant/Owner: State: CA Sampling Point: 3

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec. 7 T18N R13W

Landform (hillslope, terrace, etc.): berm/fill Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): Lat: 39.4219°N Long: -123.3527°W Datum: NAD83

Soil Map Unit Name: Cole silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: Berm, likely imported fill or dredged from adj. ditch

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Conium maculatum	70	Y	FAC
2. Rubus armeniacus	40	Y	FAC
3. Festuca arundinacea	20		FAC
4. Phalaris aquatica	20		FACU
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	150 = Total Cover		75/30
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 3/2						Silty clay	
4-10	7.5YR 3/1	10	7.5YR 7/6	2				
	7.5YR 3/2	77	7.5YR 6/6	10			clay	
			7.5YR 5/6	1				
10-16	7.5YR 2.5/2	100	—				clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Redwood Timber Co City/County: Mendocino Sampling Date: 5-5-22

Applicant/Owner: " " State: CA Sampling Point: 4

Investigator(s): Estelle P. Clifton Section, Township, Range: S07 T18N R13W

Landform (hillslope, terrace, etc.): valley field Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): Lat: 39.4223° Long: -123.3525° Datum: WGS 83

Soil Map Unit Name: Cole silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes No X
Hydric Soil Present?	Yes No X	
Wetland Hydrology Present?	Yes No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size:)			
1. Phalaris aquatica	40	Y	FAC
2. Poa pratensis	40	Y	FAC
3. Carex gracilior	2		FACU
4. Festuca arundinacea	5		FAC
5. Dipsacus fullonum	5		FAC
6. Festuca microstachys	2		NI
7. Bromus hordeaceus	2		FACU
8.			
9.			
10.			
11.			
	96 = Total Cover		
Woody Vine Stratum (Plot size:)	50% = 48% 20% = 19.2%		
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 1 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-9	7.5YR 3/2						silty clay loam	
9-12	7.5YR 3/2	90						
	7.5YR 3/1	10						
12-15	7.5YR 3/2	70						
	7.5YR 3/1	10					silty clay	
	7.5YR 4/6	20						
15-22	7.5YR 5/1	65	7.5YR 5/6	25	C	M	silty clay	
	7.5YR 6/1	10						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Almost F6

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): 22"

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 5

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): field Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): Lat: 39.4237° Long: -123.3525° Datum: Nad 83

Soil Map Unit Name: Cole silty loam NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 1/250)	Absolute % Cover	Dominant Species?	Indicator Status
1. ~~2~~			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. ~~0~~			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: ____)			
1. Alopecurus pratensis	5		FAC
2. Festuca arundinacea	5		FAC
3. Dipsacus fullonum	50	Y	FAC
4. Juncus mexicanus	15		FACW
5. Carex gracilior	2		FAC
6. Bromus hordeaceus	2		FACU
7. Holcus lanatum	30	Y	FAC
8.			
9.			
10.			
11.			
	109 = Total Cover		
	50% - 54.5%		
	20% = 21.8 %		
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	7.5YR 3/1	100	—				silty clay loam	
2-14	7.5YR 3/1	90	7.5YR 2.5/1	1	C	M	clay	
			7.5YR 5/6	9	C	M		
14-16	7.5YR 5/1	70	7.5YR 5/6	30	C	M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes X No ____ Depth (inches): 14"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 13"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

MLRA 14 - Central CA Coastal Valleys ; B9 evidence of flooding or ponding

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 6

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec. 7 T18N R13W

Landform (hillslope, terrace, etc.): slight hill/berm Local relief (concave, convex, none): none Slope (%): 2

Subregion (LRR): Lat: 39.4237° Long: -123.3525° Datum: NAD 83

Soil Map Unit Name: Cole silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: Appear to be area w/ deposited fill, based on landform & species

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: ____)			
1. Lathyrus latifolius	15	Y	UPL
2. Poa pratensis	35	Y	FAC
3. Vicia sativa	10		UPL
4. Dipsacus fullonum	5		FAC
5. Holcus lanatum	5		FAC
6. Conium maculatum	20	Y	FAC
7. Lolium hordeaceaus	5		FACU
8. Phalaris aquatica	10		FACU
9. Geranium dissectum	10		NI
10. Rumex crispus	3		FAC
11. Avena spp.	2		UPL
	120 = Total Cover		
	x 20% = 24		
Woody Vine Stratum (Plot size: ____)	Soil = 60		
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-16	7.5YR 3/2	99	7.5YR 5/6					

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No X Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 7

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): ditch 5 Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): _____ Lat: 39.4235° Long: -123.3525° Datum: NAD83

Soil Map Unit Name: Cole silty clay NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes _____ No _____
Hydric Soil Present?	Yes Y No _____	
Wetland Hydrology Present?	Yes Y No _____	

Remarks: Ditch, surface water present, flow patern indicated trenching/dredging

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Plenropogon californicus	70	Y	OBL
2. Juncus effusus	30	Y	FACW
3. Juncus mexicanus	5		FACW
4. Mentha pulegium	15		OBL
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	120 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.	60		
2.	64		
% Bare Ground in Herb Stratum _____	_____ = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

	Total % Cover of:	Multiply by:
OBL species	_____	x 1 = _____
FACW species	_____	x 2 = _____
FAC species	_____	x 3 = _____
FACU species	_____	x 4 = _____
UPL species	_____	x 5 = _____
Column Totals:	_____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Sampling Point: 7

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	10YR 4/1		7.5YR 3/4		C	PL	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 2"

Water Table Present? Yes ___ No ___ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): _____

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: Located Water S

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 8

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): field Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): Lat: 39.4234° Long: -123.3525° Datum: NAD 83

Soil Map Unit Name: Cole silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes X No ____
Hydric Soil Present?	Yes X No ____	
Wetland Hydrology Present?	Yes X No ____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Poa pratensis	60	Y	FAC
2. Anthoxanthum odoratum	5		FACU
3. Plemopogon californica	5		OBL
4. Mentha pulegium	30		OBL
5. Epilobium ciliatum	2		FACW
6. Myosis discolor	2		FAC
7.			
8.			
9.			
10.			
11.	104	= Total Cover	52/20.8
Woody Vine Stratum (Plot size: ____)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species ____	x 1 =	____
FACW species ____	x 2 =	____
FAC species ____	x 3 =	____
FACU species ____	x 4 =	____
UPL species ____	x 5 =	____
Column Totals: ____ (A)		____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1"	7.5YR 3/2	100	—					
1-5	7.5YR 3/2	60	7.5YR 3/4	30	C	M	clay loam	
5-8+	7.5YR 4/1	80	7.5YR 3/3	20			clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes X No ___ Depth (inches): 7"

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 6-5"

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 9

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): _____ Lat: 39.4234° Long: -123.3526° Datum: NAD 83

Soil Map Unit Name: Cole silty clay NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes X	No _____	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Anthoxanthum odoratum	50	Y	FACU
2. Rubus ursinus	20	Y	FACU
3. Alopecurus pratensis	10		FAC
4. Holcus lanatum	5		FAC
5. Carex gracilior	5		FAC
6. Baccharis glutinosa	10		OBL
7.			
8.			
9.			
10.			
11.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: _____)	50/50		
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	100
FACW species	_____	x 2 =	_____
FAC species	20	x 3 =	60
FACU species	70	x 4 =	280
UPL species	_____	x 5 =	_____
Column Totals:	100 (A)		440 (B)

Prevalence Index = B/A = 4.4

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ 5 - Wetland Non-Vascular Plants[1]

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3	7.5YR 3/2		✓					
3-6	7.5YR 4/1	85	7.5YR 4/4	15	C	M	Sandy loam	
6-13	7.5YR 4/1	70	4/4	30				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- • Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- X Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): _____

Water Table Present? Yes X No ___ Depth (inches): 11

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 10

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 10

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): field Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): Lat: 39.4231 Long: -123.3526 Datum: NAD 83

Soil Map Unit Name: Cole silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X

Hydric Soil Present? Yes ____ No X

Wetland Hydrology Present? Yes ____ No X

Remarks:

Is the Sampled Area within a Wetland? Yes ____ No X

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Anthoxanthum odoratum	80	Y	FACU
2. Trifolium subterraneum	15		NI
3. Vicia sativa	2		UPL
4. Acmispon americanus	20		FACU
5. Convolvulus spp.	30	Y	NO/UPL
6. Hypochaeris radicata	2		FACU
7. Aira caryophyllea	1		FACU
8. Calandrinia arvensis	2		NO/UPL
9. Briza minor	10		FAC
10. Rumex acetosella	2		FACU
11. Scroph	15		
	179 = Total Cover		
Woody Vine Stratum (Plot size: ____)	50% = 89.5%		
1.	20% = 35.8%		
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: Hairy cats ear Hypochaeris radicata FACU

Sheep Sorrel (Rumex acetosella) or Curly dock (Rumex crispus)? FACU FAC

Convolvulus arvensis

Panicum acuminatum? capillare?

Sampling Point: 10

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 3/2		7.5YR 4/3	3				
12-16	2.5YR 4/1	60	7.5YR 4/4	10			Silty clay	
	7.5YR 4/2	30						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:
The 12"-16" layer fits the matrix description of F3, but it's too far down from the surface.
F6? Redox concentrations distinct enough?

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 16

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 11

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): _____ Lat: 39.4234° Long: -123.3522° Datum: NAD83

Soil Map Unit Name: Cole silty clay NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No _____	**Is the Sampled Area within a Wetland?** Yes X No _____
Hydric Soil Present?	Yes X No _____	
Wetland Hydrology Present?	Yes X No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: _____)			
1. Festuca microstachys	25	Y	NI
2. F. perenne	25	Y	FACW
3. Holcus lanatus	20	Y	FAC
4. Juncus ensifolius	15		FACW
5. Dipsacus fullonum	5		FAC
6. Carex gracilior	2		FAC
7. Alopecurus pratensis	2		FACW
8. Potentilla gracilis	1		FAC
9.			
10.			
11.			
	95 = Total Cover 47.5/19		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

SOIL

Sampling Point: 1 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 4/2							
2-11	10YR 4/1	90	10YR 4/4	10			clay loam	
11-16		70		30				

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- X Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ____

Remarks:

Gleyed matrix is present wlin 12" of the surface.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ____ No X Depth (inches): ____

Water Table Present? Yes X No ____ Depth (inches): 14"

Saturation Present? (includes capillary fringe) Yes X No ____ Depth (inches): 12"

Wetland Hydrology Present? Yes X No ____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Water table is located immediately below the saturated zone

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 12

Investigator(s): Estelle P. Clifton Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): small relief in field Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR): Lat: 39.4234° Long: -123.3522° Datum: NAD 83

Soil Map Unit Name: Cole silty clay NWI classification:

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No ____	**Is the Sampled Area within a Wetland?** Yes ____ No ____
Hydric Soil Present?	Yes ____ No X	
Wetland Hydrology Present?	Yes ____ No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Phalaris aquatica	25	Y	FACU
2. Festuca perenne	20	Y	FAC
3. Holcus lanatum	20	Y	FAC
4. Anthoxanthum odoratum	10		FACU
5. Mentha pulegium	3		OBL
6.			
7.			
8.			
9.			
10.			
11.			
	78 = Total Cover		
Woody Vine Stratum (Plot size: ____)	39/5.6		
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ____

Remarks:

SOIL

Sampling Point: 12

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3						clay loam	
4-9	10YR 4/2	50					sandy clay	
	10YR 4/3	50						
9-15	10YR 3/1	70						
	10YR 4/3	30						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 14 11

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 12.5 11

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project/Site: Sanhedrin Timber Co City/County: Mendocino Sampling Date: 5-7-22

Applicant/Owner: " " State: CA Sampling Point: 13

Investigator(s): Estelle P. Clifton Along road Section, Township, Range: Sec 7 T18N R13W

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR): _____ Lat: 39.4238° Long: -123.3525° Datum: NAD 83

Soil Map Unit Name: Cole silty clay NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes X No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes _____	No X	

Remarks: Riparian Forest north of Study Area

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Quercus lobata	30	Y	FACU
2. Q kelloggii	40	Y	NI
3. Fraxinus latifolia	25	Y	FACW
4. Arbutus menziesii	2		UPL
Crataegus monogyna 1	98	= Total Cover 49/20	FAC

Sapling/Shrub Stratum (Plot size: _____)			
1. Cornus sericea	60	Y	FACW
2. Prunus cerasifera	10		NI
3. Crataegus monogyna	1		FAC
4. Arctostaphylos	1		NI
5. Salix spp.	2		FACW
	74	= Total Cover 37/15	

Herb Stratum (Plot size: _____)			
1. Toxicodendron diversilobum	100	Y	FAC
2. Rubus ursinus	40	Y	FACU
3. R. armeniacus	30		FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	170	= Total Cover 85/34	

Woody Vine Stratum (Plot size: _____)			
1.			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 6 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

- ___ 1 - Rapid Test for Hydrophytic Vegetation
- ___ 2 - Dominance Test is >50%
- ___ 3 - Prevalence Index is ≤3.0[1]
- ___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ 5 - Wetland Non-Vascular Plants[1]
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Sampling Point: 13

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/2	90						
	10YR 4/1	10						
4-14	10YR 3/1	99	10YR 4/6	1				
14-18	10YR 3/1	30	10YR 4/1	40				
	10YR 4/3	30						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1) **(except MLRA 1)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

0"-4": F2

4"-18": Almost F6

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- ___ Salt Crust (B11)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Stunted or Stressed Plants (D1) **(LRR A)**
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes X No _____ Depth (inches): 18

Saturation Present? (includes capillary fringe) Yes X No _____ Depth (inches): 11

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

APPENDIX D

Mitigation and Monitoring Program (MMRP)

MITIGATION MONITORING AND REPORTING PROGRAM

Public Resources Code, Section 21081.6 (Assembly Bill 3180) requires that mitigation measures identified in environmental review documents prepared in accordance with California Environmental Quality Act (CEQA) are implemented after a project is approved. Therefore, this Mitigation Monitoring and Reporting Program (MMRP) has been prepared to ensure compliance with the adopted mitigation measures during the implementation of the Sanhedrin Timber Company General Plan Amendment, Rezone, and Boundary Line Adjustment (Project). The City of Willits is the agency responsible for implementation of the mitigation measures identified in the Initial Study.

This MMRP provides the City of Willits with a convenient mechanism for quickly reviewing all the mitigation measures including the ability to focus on select information such as timing. The MMRP includes the following information for each mitigation measure:

- The phase of the project during which the required mitigation measure must be implemented;
- The phase of the project during which the required mitigation measure must be monitored;
- The enforcement agency; and
- The level of significance after mitigation.

The MMRP includes a checklist to be used during the mitigation monitoring period. The checklist will verify the name of the monitor, the date of the monitoring activity, and any related remarks for each mitigation measure.

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
Biological Resources						
BIO-1: Prior to the start of construction, areas of the Site that are associated with listed species and sensitive habitats and that are not proposed to be impacted shall be identified and designated as Environmentally Sensitive Areas (ESAs) using flagging, high-visibility orange fencing, and/or silt fencing. This applies specifically to areas with Baker's meadowfoam, North Coast semaphore grass, Davy's semaphore grass, Blue Wildrye Prairie, Valley Oak Woodland, Valley Oak Riparian Woodland, and wetlands. ESAs shall be shown on design plans or maps for the proposed project, to be provided to construction personnel. The ESA flagging/fencing shall remain in place throughout the duration of construction activities to prevent the encroachment of construction equipment/personnel into sensitive areas. To the extent feasible, construction activities shall be located outside of any designated ESA.	Prior to Construction	During Construction	City of Willits	Less than significant		
BIO-2: Barriers shall be installed around the limits of listed species and sensitive habitats that may be impacted by unintended encroachment during operation of the proposed project and that are not easily identified, including Baker's meadowfoam, North Coast semaphore grass, Davy's semaphore grass, Blue Wildrye Prairie, and wetlands. These barriers shall be installed in a way that would be clearly identified by employees but would not interfere with wildlife movement.	Post Construction	Post Construction	City of Willits	Less than significant		
BIO-3: Construction activities for the proposed project shall be conducted, if possible, outside of the nesting season for white-tailed kites or yellow warblers (January 15 to August 15 for white-tailed kites and March 15 to August 15 for yellow warblers) to avoid direct effects to these species. If construction activities begin during the nesting season, a qualified biologist shall conduct a pre-construction survey for active nests in suitable nesting habitat within 500 feet of the construction area no more than seven (7) days prior to the initiation of construction. If no active nests are identified during the pre-construction survey, no further mitigation is necessary. If at any time during the nesting season construction stops for a period of seven (7) days or longer, a supplemental pre-construction survey shall be conducted prior to construction resuming. If active nests are found within the construction footprint or immediately adjacent to construction activities within the project area, the biologist shall establish a species-appropriate buffer or exclusion zone around the nest (approximately 500 feet for white-tailed kites and 100 feet for yellow warblers) and/or operational restrictions within the buffer in consultation with the California Department of Fish and Wildlife (CDFW). Construction activities shall avoid nest buffers until the qualified biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. These buffers may be modified by the qualified biologist, in consultation with CDFW, depending upon the species, nest location, and existing visual buffers. If construction activity is required within the established buffer, the qualified	Prior to Construction, During Construction	Prior to Construction, During Construction	City of Willits	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
biologist shall be consulted prior to beginning construction activities within this area. If the qualified biologist determines that the activity would impact the nest, the qualified biologist shall have the authority to stop work. If the qualified biologist determines that the activity would not disturb the nest, construction may continue under supervision of the qualified biologist or designee.						
BIO-4: In the unlikely event that an American badger den (evidenced by a large mound of dirt piled outside an excavated den) is encountered during construction of the proposed project, construction work shall halt in the vicinity of the den, a qualified biologist shall evaluate the potential den site, and CDFW shall be notified if the hole is determined to be a potential American badger den. A 100-foot no-work buffer shall be established around occupied maternity dens throughout the puprearing season (February 15 through July 1) and a 15-foot no-work buffer around occupied dens during other times of the year. If non-maternity dens are found and cannot be avoided during construction activities, they shall be monitored by a qualified biologist for badger activity. If the qualified biologist determines that dens may be occupied, passive den exclusion measures shall be implemented for three (3) to five (5) days to discourage the use of these dens prior to disturbance activities during construction.	Prior to Construction, During Construction	Prior to Construction, During Construction	City of Willits	Less than significant		
BIO-5: Before construction activities begin, a qualified biologist shall conduct an education program for all construction personnel. The training shall include a description of special status species, including State-listed species and associated habitats with potential to occur in the study area; an explanation of the status of these species and their protection under the California Endangered Species Act; the measures to conserve listed species and their habitats as they relate to the work being done; and ESAs to be avoided during construction. A fact sheet conveying this information will be prepared and distributed to all construction crews. Upon completion of the program, personnel shall sign a form stating that they attended the program and understand the mitigation measures.	Prior to Construction	Prior to Construction	City of Willits	Less than significant		
BIO-6: The project proponent shall offset the removal of mature oak trees, defined as trees greater than 12 inches in diameter at DBH, through one or more of the oak woodland mitigation alternatives in PRC §21083.4, which may include conserving oak woodlands through the use of conservation easements, planting an appropriate number of trees, contributing funds to the Oak Woodlands Conservation Fund, or other mitigation measures developed by the City, if any. Prior to the issuance of a building and/or grading permit by the City and the start of construction, an Oak Mitigation and Monitoring Plan (Oak MMP) shall be prepared by a certified arborist, registered professional forester, botanist, or landscape architect. The Oak MMP shall be prepared to satisfy the standards of PRC §21083.4 and shall include the following elements: selected mitigation alternatives pursuant to PRC §21083.4; a map showing the location of all ok trees 5 inches or more DBH; oak tree protection measures for oak trees to be retained	Prior to Construction, Post Construction	Post Construction	City of Willits	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
with 20 feet of the construction area; and details related to on-site mitigation, proposed. For on-site mitigation, the following information shall be provided: proposed mitigation ratio; description and size of the area for replanting; planting techniques; maintenance and monitoring activities and schedule; irrigation requirements; success criteria; reporting plan and schedule; and remediation measures. The Oak MMP shall be submitted for review and approval by the City's Community Development Director or his/her designee.						
BIO-7: To compensate for permanent impacts to the Blue Wildrye Prairie community during construction of the proposed project, portions of the Site shall be revegetated with a native seed mix that includes Blue wildrye (*Elymus glaucus*). Revegetation shall occur at a minimum ratio of 2.6 to 1, or as otherwise required by CDFW, to compensate for permanent impacts. Revegetation shall occur within the meadow and wetland communities on-site, to the extent feasible, and in areas that are temporarily disturbed during construction. - Commercially available native grasses shall be used to revegetate. These grasses include but are not limited to: Blue wildrye (*Elymus glaucus*), California brome (*Bromus sitchensis var. carinatus*), California fescue (*Festuca californica*), Pine bluegrass (*Poa secunda*), and California oatgrass (*Danthonia californica*). - A native grass seed blend such as Holdfast Native Blend from LeBallister's can be purchased and used as a viable option for revegetation plans. This mix consists of California brome, Blue wild rye (*Elymus glaucus*), three weeks fescue (*Festuca microstachys*), California poppy (*Eschscholzia californica*), and California native lupines (*Lupinus spp.*). This seed mix conforms to the standard practice of using grasses, legumes, and wildflowers in combination for erosion control and revegetation plans. - A qualified botanist or landscape architect shall advise the field crew on seeding rate and dispersal technique. Broadcast seeding is an effective way to reclaim bare areas and should be done just prior to the autumn rains. If insufficient rain is in the forecast when seeding can occur, irrigation must be used to gently water in the seeds for the first season.	Post Construction	Post Construction	City of Willits	Less than significant		
BIO-8: Due to the proposed impacts to on-site wetlands and drainage ditches, the project proponent shall obtain a Section 404 Clean Water Act (CWA) permit through U.S. Army Corps of Engineers (USACE) for impacts to waters of the United States and a Section 401 Water Quality Certification (WQC) from the North Coast Regional Water Quality Control Board (NCRWQCB), if deemed necessary by these resource agencies. If required, these permits shall be obtained prior to issuance of grading permits for construction activities in or adjacent to the on-site wetlands and drainage ditches, as determined through consultation with the USACE and NCRWQCB. The project proponent shall ensure that the design of the proposed project would not result in a loss of functions and values of waters of the United States or	Prior to Construction, Post Construction	Post Construction	City of Willits	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
State through impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as determined by the resource agencies. The project proponent shall design the proposed project to limit the obstruction of and human intrusion into the riparian area of the on-site wetlands and drainage ditches, to the extent feasible. If it is determined, through obtaining an Approved Jurisdictional Determination through the USACE, that the aquatic resource features at the Site are not jurisdictional under the CWA, then the Section 404 CWA permit and Section 401 WQC may not be required. Compensatory mitigation may consist of: 1. Providing on-site compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity in a location at or adjacent to the impact site; 2. Providing off-site compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity at another location, usually within the same watershed as the permitted impact; 3. Obtaining credits from a mitigation bank; and/or 4. Making a payment to an in-lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities. The project proponent retains responsibility for the implementation and success of the mitigation project. Evidence of compliance with this mitigation measure shall be provided to the City's Community Development Department prior to initiating construction activities in or adjacent to the on-site wetlands and drainage ditches.						
Cultural Resources						
CUL-1: In the event archaeological resources or cultural resources, including human remains, are inadvertently unearthed or discovered during construction, the contractor shall immediately halt all grading/land-clearing activities and contact a qualified archaeologist. Project personnel shall not collect the potential resources. All activity in the vicinity of the resources shall cease until a qualified archaeologist can evaluate it. If the qualified archaeologist determines that the resources may be significant, they shall notify the City's Community Development Department and develop an appropriate treatment plan for the resources. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources. In considering any suggested mitigation proposed by the archaeologist, and Native American representative where applicable, the City's Community Development Department will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being	During Construction	During Construction	City of Willits	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
carried out.						
CUL-2: If human remains are encountered on-site, all work must stop in the immediate vicinity of the discovered remains and the Mendocino County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission (NAHC) shall be contacted by the Coroner so that a "Most Likely Descendant" can be designated and further recommendations regarding treatment of the remains can be provided.	During Construction	During Construction	City of Willits	Less than significant		
CUL-3: Any identified cultural resources shall be recorded on DPR 523 historic resource recordation forms by a qualified archaeologist, available online from the Office of Historic Preservation's website: http://ohp.parks.ca.gov/default.asp?page_id=1069.	During Construction	During Construction	City of Willits	Less than significant		
Geology and Soils						
GEO-1: In the event that paleontological resources, including individual fossils or assemblages of fossils, are encountered during construction activities all ground disturbing activities shall halt, and the City's Community Development Department shall be contacted. Additionally, a qualified paleontologist shall be procured to evaluate the discovery and make treatment recommendations.	During Construction	During Construction	City of Willits	Less than significant		
Hazards and Hazardous Materials						
HAZ-1: Prior to operation of the project and future proposed projects, the project proponent shall prepare an EAP to the satisfaction of the Little Lake Fire District. The EAP shall describe plans and preparedness for emergency response. This includes a list of emergency contacts, access requirements, evacuation routes and procedures, employee trainings, deck orientation maps, adequate water supply, and on-site firefighting equipment. Firefighting equipment to keep on-site for use in emergencies may include but not be limited to a water truck, fire extinguishers, fire tools, and a portable foaming fire suppression system. The EAP shall also include fire prevention and mitigation strategies, including identification of potential fire hazards, general housekeeping, and required training. Implementation of the EAP shall provide employees with the ability to put out a 10-foot by 10-foot, or equivalent, spot fire should the need arise. For uses involving bark storage, a Bark Management Plan shall be included as part of the EAP. The Bark Management Plan shall include general management techniques, strategies to reduce the risk of bark piles catching on fire, response protocols, and other details as required by the Little Lake Fire District.	Prior to Operation	Prior to Operation	City of Willits	Less than significant		
Noise						
NOI-1: To reduce the possibility of the construction noise becoming an annoyance to existing residences near the Site, exterior construction activity shall be confined to between the hours of 7:00 a.m. and 7:00 p.m. Monday through Saturday, or as approved by the City. Additionally, construction activities shall	During Construction	During Construction	City of Willits	Less than significant		

Mitigation Monitoring and Reporting Program						
Mitigation Measure	**Implementation Phase**	**Monitoring Phase**	**Enforcement Agency**	**Level of Significance After Mitigation**	**Verification of Compliance**	
					Initial	**Date**
utilize quiet models of air compressors and other stationary noise sources where technology exists and use mufflers on all internal combustion engine-driven equipment.						
NOI-2: To ensure future typical industrial facilities that would be allowed under the land use and zoning designations of M-G and MH do not generate noise in excess of standards established in the Willits General Plan (1992), City Code (2021), and other applicable noise standards, a noise assessment shall be conducted to analyze noise that may be generated by the project. If the noise assessment concludes that noise generated by the project would exceed standards established in the Willits General Plan (1992), City Code (2021), and other applicable noise standards, abatement measures shall be incorporated into the project design to reduce noise to below these standards.	Prior to Construction of Future Typical Industrial Facilities	Prior to Construction of Future Typical Industrial Facilities	City of Willits	Less than significant		

APPENDIX E

Focused Transportation Impact Study

November 29, 2023

Mr. Dee Sanders
Sanhedrin Timber Company, LLC
P.O. Box 249
Weaverville, CA 96093

Focused Transportation Impact Study for the Sanhedrin Timber Company Entitlements Project

Dear Mr. Sanders;

W-Trans has completed a focused analysis of the potential transportation impacts associated with the proposed expansion of an existing lumber yard to encompass two adjacent parcels, including the Quail Meadows site in the City of Willits.

Existing Conditions

The study area consists of North Highway 101 (North Main Street) in the City of Willits. North Highway 101 generally runs north-south through the center of the City of Willits. Along the project frontage the road has a two-way left-turn lane in addition to two 11-foot travel lanes. The posted speed limit is 35 mph.

Project Description

The proposed project would nominally expand operation of the existing North Fork Lumber log yard on Casteel Lane to include two adjacent parcels, APN 108-040-11 (Quail Meadows) and 108-040-18. The project would require a change in the land use and zoning for both project parcels from Commercial General (C-G) and Community Commercial (C1) to Industrial General (M-G) and Heavy Industrial (MH) respectively. The expanded log yard is intended to support local timber harvesting operations and increase log purchasing and storage capacity in the region. The proposed expansion would reduce crowding on the existing lumber yard site and enable trucks to circulate more easily as well as providing additional log storage for the mill operations. Development would generally consist of clearing the site and constructing irrigation ponds, log yards and internal roadways.

Access to the site would be via the existing driveway on Casteel Lane as well as the driveway for the Quail Meadows site on North Main Street. Three culverts would be constructed to enable traffic to circulate between the two project parcels and the existing log yard to the south.

Trip Generation

Truck volumes peak between May 15 and November 15. During this period, there are currently and would continue to be 40 to 60 inbound log trucks per day, with occasional days of 65 to 70 trucks; in addition, there are typically 15 to 20 outbound lumber trucks per day and occasional days with as many as 25 trucks. From November 15 through May 15, the volume of inbound log trucks would continue to be considerably lower, with occasional spikes of up to 25 trucks per day. There would be an estimated 25 to 30 outbound trucks loaded with logs each day.

The proposed expansion of the yard would not change the number of trucks entering or leaving on peak days. Rather, it would allow a more consistent schedule of deliveries and shipments over the course of the year, dampening some of the variance between peak days and low-volume days.

From May 15 through November 15 the project would operate five to six days per week, typically from 6:00 a.m. to 5:00 p.m., and 5:30 a.m. to 7:00 p.m. at peak delivery times. During the remainder of the year, operation would be five days per week or less, from 7:00 a.m. to 4:00 pm.

Trip Distribution

The site is approximately one mile south of the North Main Street exit from US 101. As US 101 is the main route through Mendocino County, it is assumed trucks will primarily head north on Main Street to access US 101 to avoid going through the City of Willits.

Zoning Change

Consideration was given to the potential change in trip generation that could be expected due to the proposed rezoning of the 10.6-acre Quail Meadows site from Commercial to Light Industrial. Assuming that building sizes per acre would be relatively equal regardless of the use, trip generation rates for various uses were obtained from the *Trip Generation Manual*, 11th Edition, Institute of Transportation Engineers, 2021. As shown in Table 1, the rates for industrial types of uses (the 100-series) are substantially lower than those for office, retail, or service uses. While rates are available for many more land uses, the sample shown is indicative of the various categories of use. In general, the industrial uses would need to have floor areas about three times higher than the least-intensive commercial uses.

Table 1 – Trip Generation Rate Comparison

Land Use	Daily Trips	AM Peak Hour	PM Peak Hour
General Light Industrial (LU #110)	4.87	0.74	0.65
Manufacturing (LU #140)	4.75	0.68	0.74
Warehousing (LU #150)	1.71	0.13	0.18
General Office Building (LU #710)	10.84	1.52	1.44
Building Materials/Lumber Store (LU #812)	17.05	1.59	2.25
Hardware/Paint Store (LU #816)	8.07	0.92	2.98
Automobile Sales (LU #840)	27.84	1.86	2.42
Marijuana Dispensary (LU #882)	211.12	10.54	18.92
High-Turnover (Sit-Down) Restaurant (LU #932)	107.20	9.57	9.05
Automobile Parts and Service Center (LU #943)	16.60	1.91	2.06

Note: All rates are in trips per thousand square feet

Based on the information shown above, it is reasonable to anticipate that the change in land use, even if redeveloped rather than being used as proposed for an extension of an existing use, would result in less traffic than would be anticipated with the existing zoning.

Access and Circulation

Access Analysis

The project site would be served by two existing access points. The existing lumber operation takes access from North Main Street via Casteel Lane. The project would introduce a new access point to the site through a connection to the Quail Meadow site, which has an existing driveway that connects to North Main Street.

There is an existing two-way left-turn lane on North Main Street that can be used for traffic inbound at Casteel Lane. As the northerly driveway on the Quail Meadow site is not served by this two-way left-turn lane, the need for a left-turn lane for inbound travel was evaluated based on criteria contained in the Intersection Channelization Design Guide, National Cooperative Highway Research Program (NCHRP) Report No. 279, Transportation Research Board, 1985, as well as an update of the methodology developed by the Washington State Department of Transportation and published in the Method For Prioritizing Intersection Improvements, January 1997. The NCHRP report references a methodology developed by M. D. Harmelink that includes equations that can be applied to expected or actual traffic volumes to determine the need for a left-turn pocket based on safety issues.

The log yard receives an average of 55 truckloads of logs daily for six months of the year and approximately 10 loads the other six months, for an annual average of 33 trucks entering the site daily. Given the nine-hour workday a maximum of five trucks during a single hour would be expected. Because trucks require more space on the roadway and more time to make movements, a vehicle equivalency of three passenger vehicles per truck was assumed, translating the five inbound trucks to 15 inbound vehicle movements. An additional two trips were assumed for employees or other vehicles for 17 total inbound trips in an hour.

Assuming that trucks would come from US 101, it is likely that many of the drivers would enter via the first driveway they encounter, or the one at Quail Meadow. Of the 17 total inbound trips, 15 were assumed to occur at the Quail Meadow driveway. Counts for North Main Street obtained on April 26, 2023, were used to determine if there is a need for a left-turn lane. Based on these current counts and the project's trip generation, a left-turn pocket is not warranted. Copies of the counts and warrant spreadsheets are enclosed.

Sight Distance

Sight distance along North Highway 101 at the project driveways was evaluated based on sight distance criteria contained in the *Highway Design Manual* published by Caltrans. The recommended sight distances for driveways are based on stopping sight distance, with approach travel speeds used as the basis for determining the recommended sight distance.

For the posted speed limit of 35 mph, 250 feet of sight distance is needed. From the northern driveway, sight lines extend more than 300 feet in both directions. At the existing southern driveway there are clear sight lines for more than 500 feet in either direction. Sight lines are therefore adequate at both driveways.

Emergency Response

On-site circulation was reviewed using the site plan provided. As the site has been laid out for large logging trucks, it is anticipated that all types of vehicles, including emergency responders, would be able to adequately navigate the site.

Vehicle Miles Traveled (VMT)

The Mendocino Council of Governments (MCOG) has adopted a regional baseline VMT study based on the guidance provided by the California Governor's Office of Planning and Research (OPR) in the publication *Transportation Impacts (SB 743) CEQA Guidelines Update and Technical Advisory*, 2018. In June 2020, MCOG accepted the *Senate Bill 743 Vehicle Miles Traveled Regional Baseline Study*, which includes a recommended methodology and thresholds for VMT analysis for use in Mendocino County. Since the City of Willits has not yet adopted VMT thresholds, the MCOG methodology was used to analyze the potential impacts of the Sanhedrin Timber Company Entitlements Project

As described in the *Technical Advisory* and CEQA Guidelines Section 15064.3, "vehicle miles traveled refers to the amount and distance of automobile travel attributable to a project." The *Technical Advisory* indicates "the term 'automobile' refers to on-road passenger vehicles, specifically cars and light duty trucks." Accordingly, the *Regional Baseline Study* adopted by MCOG does not include VMT thresholds related to heavy-duty trucks; therefore, no VMT analysis was conducted regarding the minor modification of truck operations. While heavy truck trips are excluded from VMT analysis, it is noted that the project is not expected to increase trips on peak days and the purpose of the project is to increase operational efficiencies for the applicant. The project is expected to reduce the number of truck trips between Eureka and Willits, resulting in a beneficial impact on greenhouse gas (GHG) emissions, which supports the intent of SB 375.

Conclusions and Recommendations

- The proposed project would be expected to generate no new trip ends per day for either employees or trucks.
- Both existing driveways have adequate sight distance. Left turns would be accommodated at Casteel Lane, which is served by an existing two-way left-turn lane. A left-turn lane is not warranted at the Quail Meadow driveway.
- On-site circulation is expected to operate acceptably for all types of vehicles, including emergency responders.
- The project would be expected to have a less-than-significant impact on VMT.

We hope this information adequately addresses any questions regarding the project's potential transportation impacts. Thank you for giving us the opportunity to provide these services.

Sincerely,

Dalene J. Whitlock, PE, PTOE
Senior Principal

DJW/djw/WIL052-1.L1

Enclosures: Counts, Left-turn Lane Warrant Spreadsheets

Prepared by NDS/ATD

VOLUME

N Main St N/O Casteel Ln

Day: Wednesday
Date: 4/26/2023

City: Willits
Project #: CA23_080125_001

DAILY TOTALS	NB	SB	EB	WB	Total
	2,407	2,311	0	0	4,718

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	1		2				3		12:00	32		30				62	
0:15	3		3				6		12:15	35		38				73	
0:30	3		2				5		12:30	36		49				85	
0:45	5	12	3	10			8	22	12:45	44	147	42	159			86	306
1:00	2		1				3		13:00	47		28				75	
1:15	0		0				0		13:15	34		41				75	
1:30	0		3				3		13:30	32		40				72	
1:45	0	2	2	6			2	8	13:45	38	151	43	152			81	303
2:00	0		3				3		14:00	44		25				69	
2:15	1		1				2		14:15	46		39				85	
2:30	2		0				2		14:30	44		44				88	
2:45	0	3	3	7			3	10	14:45	44	178	42	150			86	328
3:00	2		1				3		15:00	62		26				88	
3:15	0		0				0		15:15	54		49				103	
3:30	2		0				2		15:30	52		49				101	
3:45	1	5	4	5			5	10	15:45	49	217	53	177			102	394
4:00	1		1				2		16:00	48		43				91	
4:15	1		3				4		16:15	37		40				77	
4:30	9		8				17		16:30	39		53				92	
4:45	3	14	4	16			7	30	16:45	41	165	51	187			92	352
5:00	4		4				8		17:00	52		58				110	
5:15	9		2				11		17:15	46		72				118	
5:30	13		6				19		17:30	51		52				103	
5:45	14	40	9	21			23	61	17:45	33	182	60	242			93	424
6:00	22		11				33		18:00	32		46				78	
6:15	31		15				46		18:15	23		50				73	
6:30	37		16				53		18:30	38		51				89	
6:45	41	131	13	55			54	186	18:45	33	126	36	183			69	309
7:00	48		11				59		19:00	33		29				62	
7:15	60		23				83		19:15	19		26				45	
7:30	68		27				95		19:30	22		25				47	
7:45	59	235	47	108			106	343	19:45	23	97	30	110			53	207
8:00	54		34				88		20:00	24		21				45	
8:15	45		40				85		20:15	19		31				50	
8:30	38		36				74		20:30	15		16				31	
8:45	34	171	38	148			72	319	20:45	11	69	14	82			25	151
9:00	32		29				61		21:00	12		14				26	
9:15	29		33				62		21:15	8		13				21	
9:30	36		35				71		21:30	6		13				19	
9:45	32	129	30	127			62	256	21:45	13	39	11	51			24	90
10:00	26		24				50		22:00	12		6				18	
10:15	28		40				68		22:15	13		9				22	
10:30	27		32				59		22:30	6		5				11	
10:45	33	114	39	135			72	249	22:45	3	34	7	27			10	61
11:00	29		35				64		23:00	3		5				8	
11:15	32		35				67		23:15	3		3				6	
11:30	40		36				76		23:30	4		4				8	
11:45	32	133	32	138			64	271	23:45	3	13	3	15			6	28
TOTALS		989		776				**1765**	**TOTALS**		1418		1535				**2953**
SPLIT %		56.0%		44.0%				**37.4%**	**SPLIT %**		48.0%		52.0%				**62.6%**

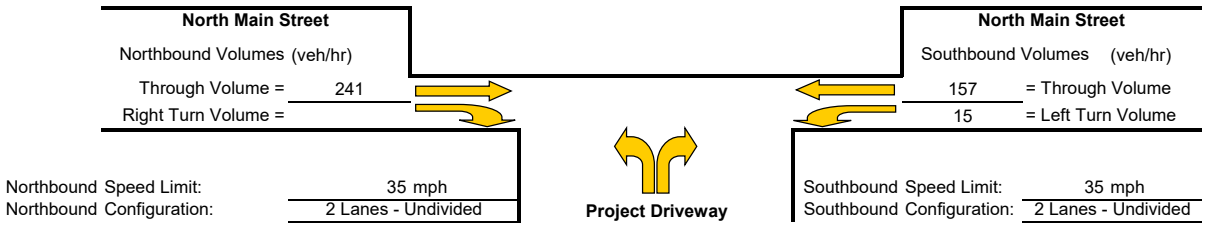
DAILY TOTALS	NB	SB	EB	WB	Total
	2,407	2,311	0	0	4,718

AM Peak Hour	7:15	7:45				**7:30**	**PM Peak Hour**	15:00	17:00				**17:00**
AM Pk Volume	241	157				**374**	**PM Pk Volume**	217	242				**424**
Pk Hr Factor	0.886	0.835				**0.882**	**Pk Hr Factor**	0.875	0.840				**0.898**
7 - 9 Volume	406	256	0	0		**662**	**4 - 6 Volume**	347	429	0	0		**776**
7 - 9 Peak Hour	7:15	7:45				**7:30**	**4 - 6 Peak Hour**	16:45	17:00				**17:00**
7 - 9 Pk Volume	241	157	0	0		**374**	**4 - 6 Pk Volume**	190	242	0	0		**424**
Pk Hr Factor	0.886	0.835	0.000	0.000		**0.882**	**Pk Hr Factor**	0.913	0.840	0.000	0.000		**0.898**

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: North Main Street/Project Driveway
Study Scenario: Existing plus Project AM Peak Hour

Direction of Analysis Street: North/South
Cross Street Intersects: From the East



Northbound Speed Limit: 35 mph
Northbound Configuration: 2 Lanes - Undivided

Southbound Speed Limit: 35 mph
Southbound Configuration: 2 Lanes - Undivided

Northbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	1050.1
Advancing Volume	Va =	241
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Northbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

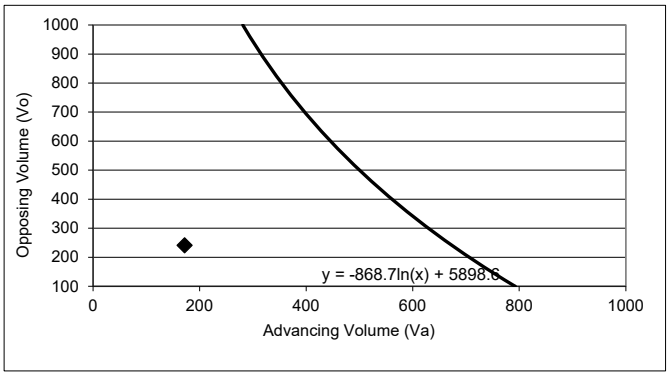
Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	241
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Southbound Left Turn Lane Warrants

Percentage Left Turns	%lt	8.7 %
Advancing Volume Threshold	AV	674 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 35 mph
Turn lane warranted if point falls to right of warrant threshold line

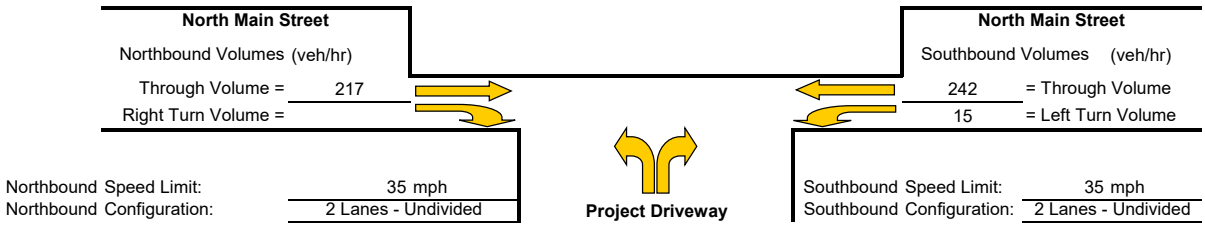
Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

Turn Lane Warrant Analysis - Tee Intersections

Study Intersection: North Main Street/Project Driveway
Study Scenario: Existing plus Project PM Peak Hour

Direction of Analysis Street: North/South
Cross Street Intersects: From the East



Northbound Speed Limit:	35 mph	Southbound Speed Limit:	35 mph
Northbound Configuration:	2 Lanes - Undivided	Southbound Configuration:	2 Lanes - Undivided

---

Northbound Right Turn Lane Warrants

1. Check for right turn volume criteria

Thresholds not met, continue to next step

2. Check advance volume threshold criteria for turn lane

Advancing Volume Threshold	AV =	1050.1
Advancing Volume	Va =	217
If AV<Va then warrant is met		No

Right Turn Lane Warranted: **NO**

Northbound Right Turn Taper Warrants
(evaluate if right turn lane is unwarranted)

1. Check taper volume criteria

NOT WARRANTED - Less than 20 vehicles

2. Check advance volume threshold criteria for taper

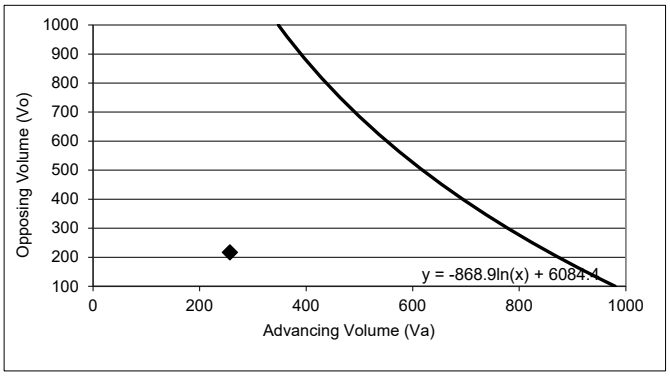
Advancing Volume Threshold	AV =	-
Advancing Volume	Va =	217
If AV<Va then warrant is met		-

Right Turn Taper Warranted: **NO**

Southbound Left Turn Lane Warrants

Percentage Left Turns	%lt	5.8 %
Advancing Volume Threshold	AV	857 veh/hr

If AV<Va then warrant is met



◆ Study Intersection
Two lane roadway warrant threshold for: 35 mph
Turn lane warranted if point falls to right of warrant threshold line

Left Turn Lane Warranted: **NO**

Methodology based on Washington State Transportation Center Research Report *Method For Prioritizing Intersection Improvements*, January 1997.
The right turn lane and taper analysis is based on work conducted by Cottrell in 1981.
The left turn lane analysis is based on work conducted by M.D. Harmelink in 1967, and modified by Kikuchi and Chakroborty in 1991.

APPENDIX F

Native American Heritage Commission Sacred Lands File Search and Contact List

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 3, 2020

Heath Browning, Cultural Resources Consultant
Browning Cultural Resources, Inc.

Via Email to: heath@browningcr.com

Re: Quail Meadows Parcel (APN 1080401100) Project, Mendocino County

Dear Mr. Browning:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Sarah.Fonseca@nahc.ca.gov.

Sincerely,

Sarah Fonseca
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Native American Contact List
Mendocino County
7/3/2020

Coyote Valley Band of Pomo Indians
Michael Hunter, Chairperson
P.O. Box 39/ 7901 Hwy 10, North Pomo
Redwood Valley, CA, 95470
Phone: (707) 485 - 8723
Fax: (707) 485-1247

Guidiville Indian Rancheria
Merlene Sanchez, Chairperson
P.O. Box 339 Pomo
Talmage, CA, 95481
Phone: (707) 462 - 3682
Fax: (707) 462-9183
admin@guidiville.net

Pinoleville Pomo Nation
Erica Carson, Tribal Historic Preservation Officer
500 B Pinoleville Drive Pomo
Ukiah, CA, 95482
Phone: (707) 463 - 1454
Fax: (707) 463-6601

Pinoleville Pomo Nation
Leona Willams, Chairperson
500 B Pinoleville Drive Pomo
Ukiah, CA, 95482
Phone: (707) 463 - 1454
Fax: (707) 463-6601

Sherwood Valley Rancheria of Pomo
Michael Knight, Chairperson
190 Sherwood Hill Drive Pomo
Willits, CA, 95490
Phone: (707) 459 - 9690
Fax: (707) 459-6936
svradministrator@sbcglobal.net

Sherwood Valley Rancheria of Pomo
Hillary Renick, Tribal Historic Preservation Officer
190 Sherwood Hill Drive Pomo
Willits, CA, 95490
Phone: (707) 459 - 9690
Fax: (707) 459-6936
chishkinmen@gmail.com

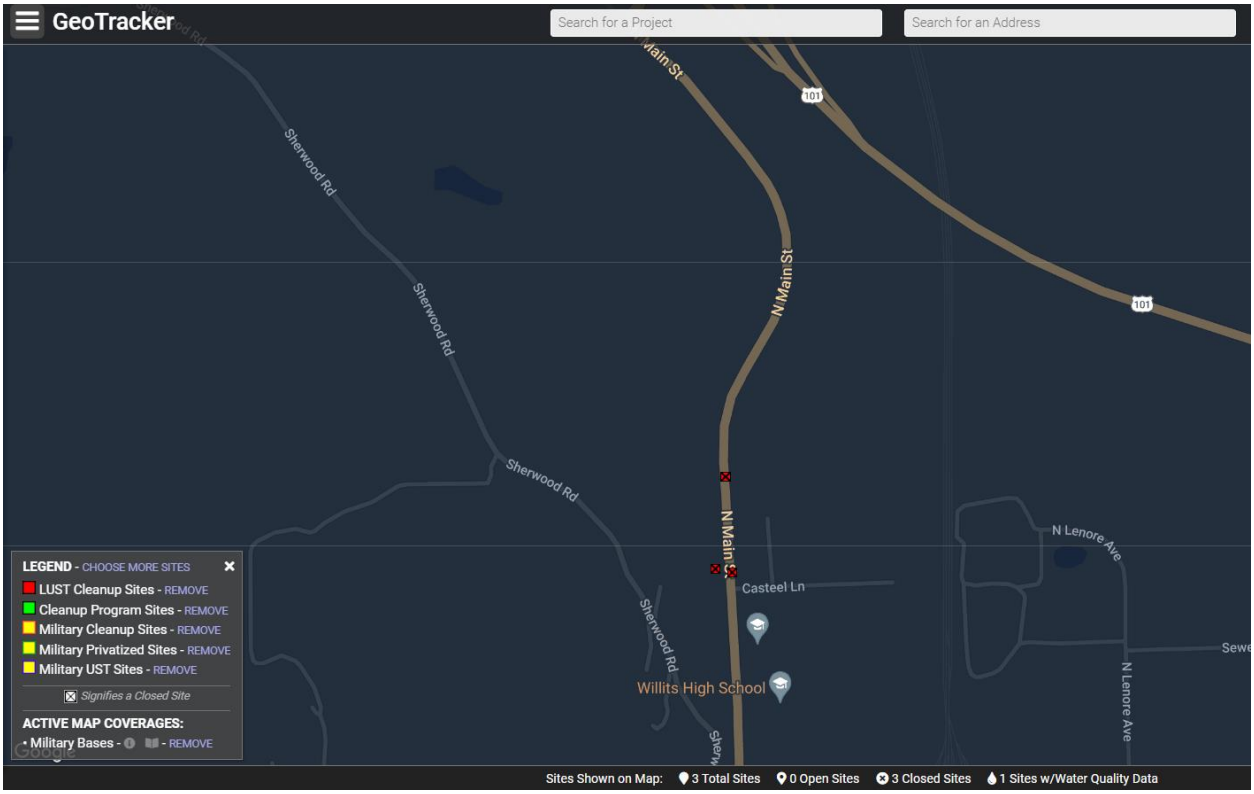
This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed Quail Meadows Parcel (APN 1080401100) Project, Mendocino County.

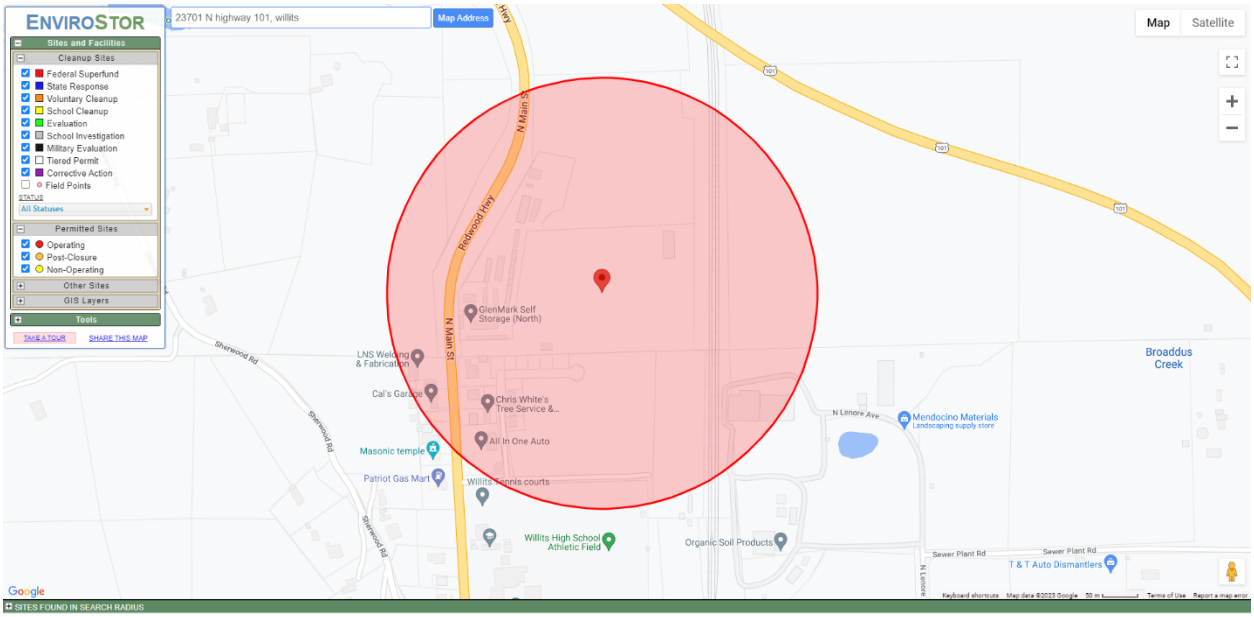
APPENDIX G

GeoTracker and EnviroStor Database Queries

GeoTracker, State Water Resources Control Board, 2023.



EnviroStor, Department of Toxic Substances, 2023.



APPENDIX H

FEMA Flood Insurance Rate Map (FIRM)

National Flood Hazard Layer FIRMette

FEMA

123°21'28"W 39°25'31"N

123°20'50"W 39°25'3"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/17/2023 at 11:19 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX I

Well Impact Report

VESTRA
5300 Aviation Drive | Redding, CA 96002
Phone 530.223.2585 | Fax 530.223.1145
info@vestra.com | www.vestra.com
GIS, Environmental, & Engineering Services

October 5, 2023

72323

Marlayna Duley, REHS
Land Use Program Manager
Mendocino County Public Health
Division of Environmental Health
860 N. Bush Street
Ukiah, CA 95482

Via Email
bourbonm@mendocinocounty.org

RE: Well Impact Report
Sanhedrin - Willits Log Yard Expansion Area
Willits, Mendocino County, California

Dear Ms. Duley:

This report outlines the potential impact of three industrial wells to be located on Assessor's Parcel Nos. (APN) 108-04-011 and 108-04-018 in Mendocino County, California. As of March 2022, State of California Executive Order N-7-22 requires all new non-residential well permit applicants to provide the following statements to be issued by the County:

1) That extraction of groundwater from the proposed well is not likely to interfere with the production and functioning of existing nearby wells; and
2) That extraction of groundwater from the proposed well is not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

Additionally, the amended executive order issued by the State of California prohibits agencies from approving a permit for a new groundwater well, or for alteration of an existing well, in a basin subject to the Sustainable Groundwater Management Act (SGMA) and classified as medium- or high-priority, without first obtaining written verification from a Groundwater Sustainability Agency (GSA) managing the basin or area of the basin where the well is proposed to be located; and that groundwater extraction by the proposed well would not be inconsistent with any sustainable groundwater management program established in any applicable Groundwater Sustainability Plan (GSP) adopted by that GSA, and would not decrease the likelihood of achieving a sustainability goal for the basin covered by such a plan. The Little Lake Valley Groundwater Basin is classified as a **Low-Priority** groundwater basin under the SGMA and does not require additional approval by the managing GSA.

This Well Impact Report has been prepared to address these new conditions.

Project Location and Background

The project consists of three proposed wells to be located on two adjacent parcels totaling 22.72 acres at the north end of Willits, California. The legal description for the site location is Section 7; Township 18 North; Range 13 West. The site is located southwest of Highway 101 and is accessed by an unnamed road via North Main Street. The existing log yard can be accessed by Casteel Lane via

North Main Street. The site will be used for the expansion of the existing Sanhedrin Log Yard in Willits which is located immediately south of the expansion area. The general site location is shown on Figure 1. A general site layout showing the well locations is provided on Figure 2.

The water well permit applications for the three proposed new wells were submitted to the County by Weeks Drilling on June 7, 2023. The permit applications incorrectly stated that the water wells would be used for domestic purposes. The proposed wells will be used for industrial purposes and the well locations include:

Well #1 and Well #2
23701 N. Hwy 101
Willits, CA 95490
APN 108-040-11

Well #3
421 N. Main Street
Willits, CA 95490
APN 108-040-018

The property owner is Sanhedrin Timber Company, 1375 Main Street, Weaverville, California. Sanhedrin submitted a General Plan Amendment for the subject property on September 23, 2022. A review draft of this Well Impact Report was originally submitted to the County on September 9, 2023.

Proposed Use and Well Construction

The three proposed wells will provide the additional water required to irrigate the expansion area log decks. The expansion area is located on the two parcels immediately north of the existing log yard operation. The approximately 23-acre expansion area includes about ten acres of log decks and two unlined recycle ponds with a total capacity of approximately 1.5 million gallons. Water from the recycle ponds will be used to irrigate the decked logs, and runoff from the leg deck areas will be directed back to the recycle ponds for reuse. Seepage from the ponds will recharge the underlying shallow aquifer.

The proposed well locations and site layout are shown on Figure 2. Sanhedrin anticipates water usage of up to 80,000 gallons per day (approximately 55 gallons per minute) during the peak months of July through October. During the months of May, June, and November, the estimated water usage would be approximately 40,000 gallons per day (approximately 30 gallons per minute). Little to no water usage is anticipated for the remainder of the year. These water requirements were provided by the operator and verified using the water balance included in Attachment A.

In order to reach the necessary yields, the wells are proposed to be of similar construction to the three existing wells onsite. The wells will be drilled to depths of 200 to 250 feet deep located along the eastern side of the property from south to north. As shown on Figure 2, the nearest structures are a mill located 400 feet southeast of the southernmost well and a storage facility located 500 feet west of the northernmost well. The nearest property line is approximately 125 feet to the east of the three proposed wells.

Well completion reports for the existing onsite wells were provided by Sanhedrin Timber Company, and well logs from nearby wells were obtained from the California Department of Water Resources (DWR). These records indicate that the nearest well is located 1,350 feet to the south. The current yields of the wells onsite range from 5 gallons per minute to 35 gallons per minute. The well logs are included in Attachment B. The three proposed wells call for a combined yield of approximately 55 gallons per minute.

Hydrogeology

The project site is in Little Lake Valley as identified by the U.S. Geological Survey (USGS) and the California Department of Water Resources in the 1986 investigation *Ground-Water Resources in Mendocino County, California*. Little Lake Valley is located in central Mendocino County about 25 miles north of Ukiah. The valley is around 5 miles long from north to south and about 2.5 miles wide from east to west. The valley is bound by the Coast Range mountains, which primarily consist of rocks of the Franciscan Complex. Several small streams flow through the valley and join in a marshy area at the north end of the valley. The marshy area drains the valley via Outlet Creek, which is a tributary to the Eel River.

The lithology of the site consists of Holocene alluvium deposits overlying continental basin deposits. Holocene alluvium is composed of uncemented gravel, sand, silt, and clay and is observed to be around 250 feet thick in the vicinity of the site. Driller's logs from four nearby existing wells and wells in the vicinity of the site are consistent with interbedded gravel and clay layers to a depth of around 250 feet. Analysis of well drillers' reports in the Little Lake Valley of similar depth and geologic setting have an average specific capacity of 2.75 gallons per minute/feet.

The values for the hydrologic properties used for calculating the drawdown of the proposed wells are summarized in Table 1. Conditions of the aquifer are assumed to be confined and calculations are based on approximated properties. Calculations were completed using the Theis Equation and results are found under Drawdown Potential.

Table 1
AQUIFER PROPERTIES AND CALCULATION PARAMETERS

Parameter Name	Values			Source
	Well-1	Well-2	Well-3	
Time	180 days	180 days	180 days	6 months or one cycle of no recharge.
Distance to Nearest Structure	400	600	600	Storage facility to the west or mill to the southeast
Distance to Nearby Offsite Well	1,350	1,650	2,200	Nearby offsite well (e0133482 on Figure 3)
1-Mile Radius	5,280	5,280	5,280	1-mile radius (Figure 3)
Pumping Rate (gpm)	18	18	18	Peak pumping volume provided by operator and verified based on the water balance in Attachment A.
Specific Capacity (gpm/ft)	2.75	2.75	2.75	*Ground-Water Resources in Mendocino County* (USGS, 1986) Average value for similar wells in the area.
Transmissivity (sq/ft per day)	5500	5500	5500	AQTESOLV™ Estimated Transmissivity based on given Specific Capacity for a confined aquifer.
Storativity	10^{-5}	10^{-5}	10^{-5}	Lohman, 1972, USGS paper on Groundwater Hydraulics, Estimated value for confined aquifer.

Drawdown Potential

The drawdown or observed reduction in hydraulic head at nearby wells was calculated using the Theis Equation. Drawdown calculations were performed for each of the three proposed wells assuming a pumping rate of 18 gallons per minute (gpm), or approximately one-third of 55 gpm. The combined peak pumping rate of 55 gpm, or 80,000 gallons per day combined for the three proposed wells, was used based on the peak pumping rate as proposed by the operator and verified based on the attached water balance. The peak pumping rate was calculated over a six-month period of no recharge. This is a conservative estimate, as the operator anticipates the peak pumping rate of 80,000 gallons per day (approximately 55 gpm) for the months of July to October and a pumping rate of 40,000 gallons per day (approximately 30 gallons per minute) during the swing season (May, June, and November).

Conservative estimates for transmissivity and storativity of the aquifer under the assumption of confined aquifer conditions were presented in Table 1. The value for transmissivity was sourced using the average specific capacity from wells in the area, which was gathered during the USGS 1986 study of the groundwater resources in Mendocino County. The storativity of the aquifer was conservatively estimated using the same standard approximate values as USGS. Drawdown was calculated at observation distances of 400 feet, 1,350 feet, and 1 mile over a period of 180 days. Table 2 presents the approximate drawdown values over the 180-day simulation period. A graphical representation of drawdown curves is included in Attachment C.

Table 2
ESTIMATED DRAWDOWN AFTER 180-DAYS WITH NO RECHARGE

Location	Estimated Drawdown (feet)		
	Well-1	Well-2	Well-3
Nearest Structure	0.723	0.682	0.682
Nearby Offsite Well	0.599	0.578	0.549
1-Mile Radius	0.459	0.459	0.459

Based on these results, the extraction of groundwater from the proposed wells is not likely to interfere with the production and function of existing nearby wells. The drawdown from each well was calculated to be less than 1 foot at surrounding existing wells using conservative estimates for aquifer characteristics. A composite drawdown curve for the three proposed wells is also included in Attachment C. The estimated drawdown calculated is not likely to interfere with the production and functioning of the nearby wells.

Land Subsidence Potential

Subsidence due to groundwater withdrawal develops principally under two environments. One environment is that of carbonate rocks overlain by unconsolidated deposits. The other environment is young unconsolidated or semi-consolidated clastic sediments of high porosity laid down in alluvial, lacustrine, or shallow marine environments. The facility in not located in an area with a history of land

subsidence. Geologic maps and well completion reports show that underlying materials consist of interbedded layers of gravel and clay. The well completion reports are included in Attachment B.

The calculated drawdown potential demonstrates the minimal effect that extraction has at the nearest structure. Without major groundwater extraction over an extended duration, subsidence of unconsolidated strata cannot occur. It must also be considered that the wells will be actively pumping for only seven months out of the year, allowing for recharge and preventing any permanent impact on groundwater storage. Extraction of groundwater from the proposed well is not likely to cause subsidence that would adversely impact or damage nearby infrastructure.

Conclusion

Based on the findings of this assessment, the three proposed industrial wells to be located on APNs 108-04-011 and 108-04-018 in Mendocino County, California, are not likely to interfere with the production and functioning of existing nearby wells; and are not likely to cause subsidence that would adversely impact or damage nearby infrastructure. The Little Lake Valley Groundwater Basin is classified as a **Low-Priority** groundwater basin under the SGMA and additional approval by the managing GSA is not required.

This Well Impact Report was prepared under the direction of a Professional Geologist. If you have any questions, please feel free to contact John Andrews at jandrews@vestra.com or 530-223-2585.

Sincerely,

VESTRA Resources, Inc.

John Andrews
P.G. 4269

Attachments

CC: Joe Miller/ (jmiller@trlcmill.com)
Bryan Taylor/ (btaylor@trlcmill.com)

Sources of Information

The following are names of the sources and the specific information referenced herein:

1986 U.S. Geological Survey with the California DWR, Ground-Water Resources in Mendocino County. The study was referenced for qualitative and quantitative hydrogeologic properties of the site and the surrounding area.

Well Completion Report Map Application, California Department of Water Resources. This site was accessed in August 2023 and well locations were approximately mapped (see Figure 2 and Figure 3). Well reports were referenced for geologic and hydrologic information and are included with this report as Attachment B.

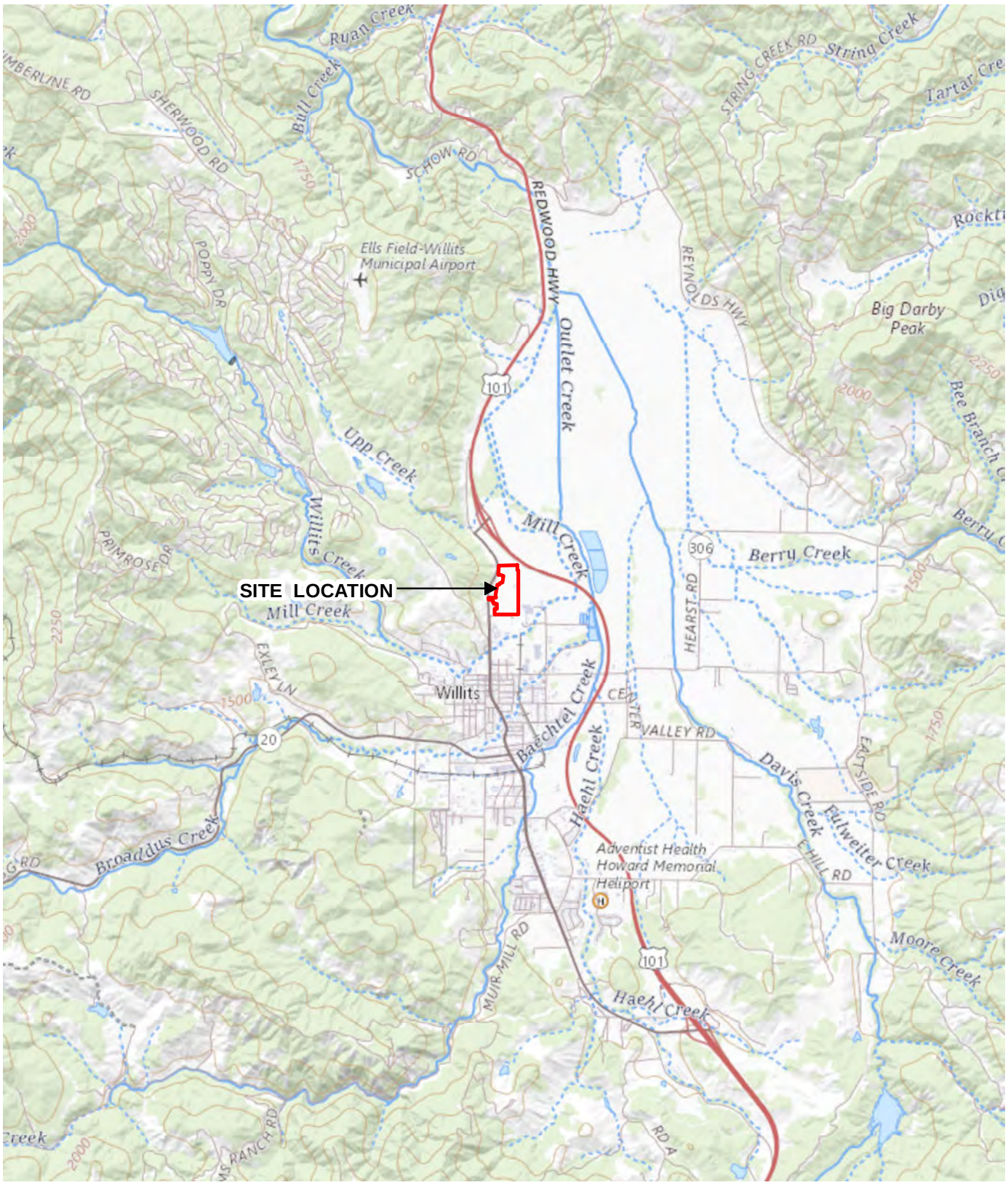
AQTESOLV™ Transmissivity for Specific Capacity. The site was referenced for a formula to approximately calculate transmissivity from a given specific capacity.

1972 Lohman, S.W. Groundwater Hydraulics U.S. Geological Survey Professional Paper. The paper was referenced for estimating a value for storativity of a confined aquifer.

1984 Poland, J.F. Guidebook to studies of land subsidence due to groundwater withdrawal, UNESCO. The paper was referenced for identifying geologic environments susceptible to land subsidence.

2010 Utah Division of Water Rights, Theis Equation Calculation for Aquifer Testing and Well Drawdown. The site was sourced for their methodology of estimating and calculating drawdown potential and their offline excel spreadsheet was used for the calculation and graphical representation.

Figures



0 0.5 1 2 Miles

VESTRA

FIGURE 1
GENERAL SITE LOCATION
SANHEDRIN TIMBER COMPANY
WILLITS, CALIFORNIA

P:\GIS\72104\Willits\Figures\72104_GeneralSiteLocation.mxd

Existing Well
Proposed Well
Nearby Offsite Well
Approximate Parcel Boundary
Existing Log Yard

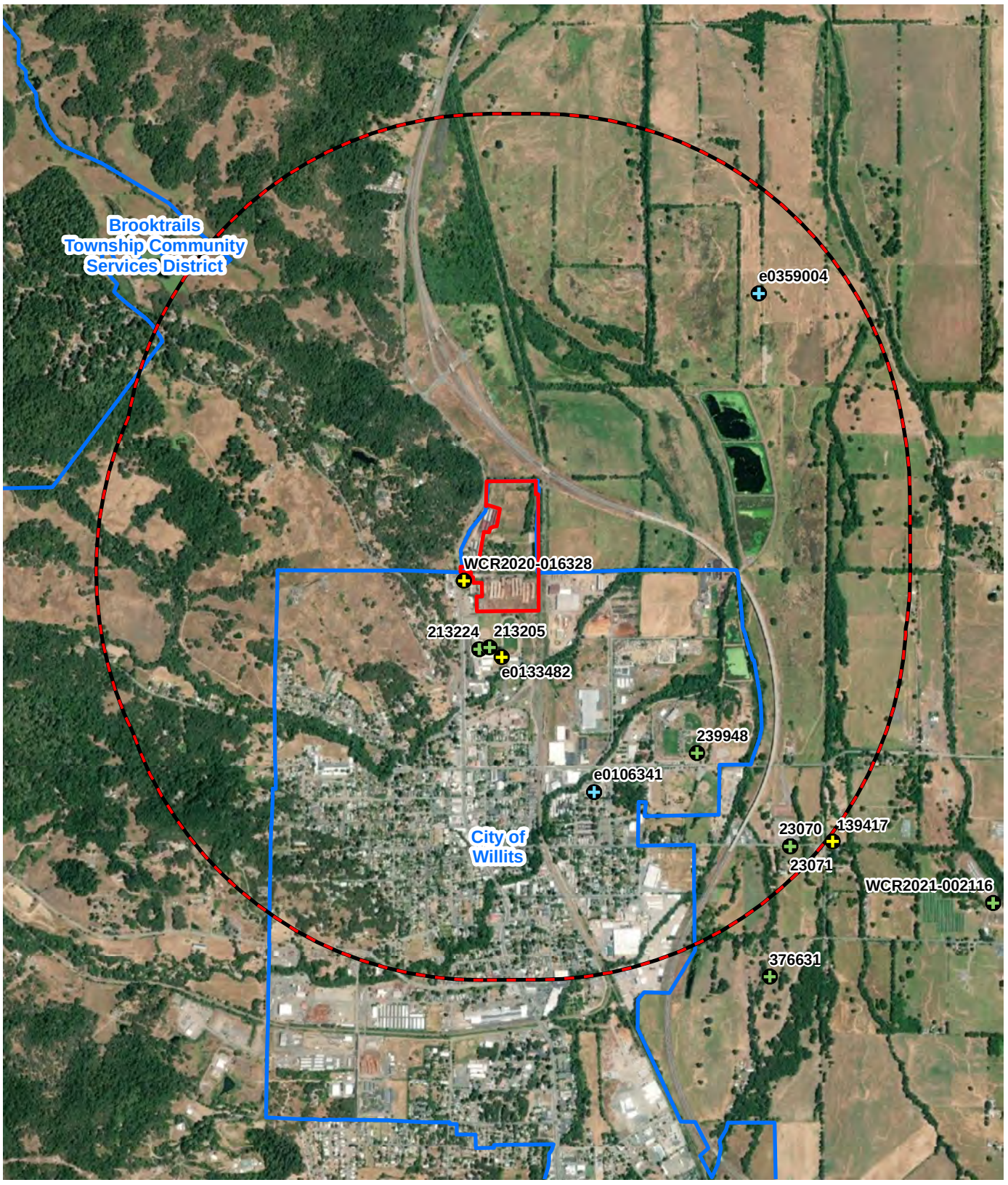
0 175 350 700 Feet

VESTRA

SOURCE: MAXAR 2022 AERIAL PHOTOGRAPH

FIGURE 2
GENERAL SITE LAYOUT
SANHEDRIN TIMBER COMPANY
WILLITS, CALIFORNIA

P:\GIS\72104\Willits\Figures\72104_SiteLayout.mxd



Approximate Industrial Well Location

Approximate Irrigation Well Location

Approximate Public Water Supply Well Location

Approximate Project Area

1-Mile Buffer Around Approximate Project Area

Water District Boundary

N

VESTRA

0 1,000 2,000 4,000 Feet

SOURCE: CALIFORNIA STATE GEOPORTAL 2023; MAXAR 2022 AERIAL PHOTOGRAPH

FIGURE 3
NEARBY WELL LOCATIONS
SANHEDRIN TIMBER COMPANY
WILLITS, CALIFORNIA

P:\GIS\72104\Willits\Figures\72104_WellLocation.mxd

Attachment A

Water Balance

WATER BALANCE

Sanhedrin Willits Log Yard
Proposed Expansion Area
Jul-23 JWA

MONTH	PRECIP	ET	1.5*ET	WATER REQUIRED (1.5 ET - Precip) 0 if negative)
	Inches	Inches	Inches	Inches
10	0.65	3.58	5.37	4.72
11	4.92	1.56	2.34	0
12	4.29	1.74	2.61	0
1	6.21	1.53	2.295	0
2	0.29	2.43	3.645	3.355
3	0.34	3.44	5.16	4.82
4	0.3	4.82	7.23	6.93
5	0.49	5.74	8.61	8.12
6	0.22	5.79	8.685	8.465
Max	0.07	5.92	8.88	**8.81**
8	0.31	5.7	8.55	8.24
9	0.43	4.78	7.17	6.74
Average	1.54	3.92	5.88	**5.02**

WATER REQUIRED	EXPANSION LOG DECK AREA	WATER APPLIED	CONVERSION	FLOW RATE	PERIOD
feet	acres	acre feet/month	a-ft/m to gpm	gpm	
0.734	**10**	7.34	7.43	**54.6**	**Max Month**
0.418	**10**	4.18	7.43	**31.1**	**Yearly Average**

Precip	Zone 4 Monthly ETo Data, Typical years	ITRC
ETo	Zone 4 Monthly ETo Data, Typical years	ITRC

Summary: Need average pumping rate of 55 gpm to accommodate Max Month
Need average pumping rate of 31 gpm to accommodate Average Year

Assumption Total deck and pond area is approximately 10 acres

Evaporation Rate Overall evaporation rate is assumed to be 1.5 time ETo to be conservative. This would include evap from decks and open surfaces such as ponds.

Excess Water Any excess water pumped and applied will infitrate into the subsurface.

Attachment B

Well Completion Reports

State of California

Well Completion Report

Form DWR 188 Submitted 11/24/2020

WCR2020-016328

Owner's Well Number 10963 Date Work Began 11/19/2020 Date Work Ended 11/23/2020

Local Permit Agency Environmental Health Division - Ukiah Office

Secondary Permit Agency Permit Number WW23477 Permit Date 10/01/2020

Well Owner (must remain confidential pursuant to Water Code 13752)

Name E.A. PADULA LUMBER

Mailing Address P.O. BOX 537

City WILLITS State CA Zip 95490

Planned Use and Activity

Activity New Well

Planned Use Water Supply Irrigation - Agriculture

Well Location

Address 106 CASTEEL LN

City WILLITS Zip 95490 County Mendocino

Latitude 39 Deg 25 Min 11.418 Sec N Longitude -123 Deg. 21 Min 16.668 Sec W

Dec. Lat. 39.4198383 Dec. Long. -123.35463

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 005-030-42

Township

Range

Section

Baseline Meridian

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Direct Rotary Drilling Fluid Bentonite

Total Depth of Boring 200 Feet

Total Depth of Completed Well 200 Feet

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 30 (Feet) Date Measured 11/23/2020

Estimated Yield* 20 (GPM) Test Type Air Lift

Test Length 2 (Hours) Total Drawdown (feet)

*May not be representative of a well's long term yield

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	10	BROWN CLAY AND ROAD BASE
10	14	BROWN CLAY AND LARGE GRAVELS
14	20	BROWN AND BLUE CLAY
20	40	BLUE CLAY WITH CEMENTED GRAVELS
40	60	BLUE CLAY
60	80	BLUE CLAY WITH CEMENTED GRAVELS
80	105	BLUE CLAY
105	180	BLUE CLAY WITH SMALL LAYERS OF CEMENTED GRAVELS
180	200	BLUE CLAY

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specifications	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	25	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	25	160	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	160	180	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	180	200	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	WITH CAP

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	20	Bentonite	High Solids		
20	200	Other Fill	See description		8 X 16 SAND

Other Observations:
RECOMMENDED PUMP SETTING: 170'
WATER WELL DRILLER STEVE UNTERSEHER

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	40	10.625
40	200	8.75

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: FISCH BROS DRILLING (Person, Firm or Corporation)

3001 GRAVENSTEIN HWY N	SEBASTOPOL	CA	95472
Address	City	State	Zip

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 11/24/2020 (Date Signed) | 399226 (C-57 License Number)

Attachments

CASTEEL LANE 106.jpg - Location Map

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

						N							W
Latitude Deg/Min/Sec							Longitude Deg/Min/Sec						

TRS:

APN:

WELL (2)

State of California

Well Completion Report

Form DWR 188 Submitted 2/23/2021

WCR2021-002321

Owner's Well Number 11053 | Date Work Began 02/17/2021 | Date Work Ended 02/22/2021

Local Permit Agency Environmental Health Division - Ukiah Office

Secondary Permit Agency | Permit Number WW23968 | Permit Date 01/25/2021

Well Owner (must remain confidential pursuant to Water Code 13752)

Name SANHEDRIN TIMBER LUMBER LLC, JOE MILLER

Mailing Address P.O. BOX 537

City WILLITS State CA Zip 95490

Planned Use and Activity

Activity New Well

Planned Use Water Supply Irrigation - Agriculture

Well Location

Address 23701 N HIGHWAY 101

City WILLITS Zip 95490 County Mendocino

Latitude 39 Deg. 25 Min. 18.23 Sec. N | Longitude -123 Deg. 21 Min. 4.08 Sec. W

Dec. Lat. 39.4217306 Dec. Long. -123.3511333

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 108-040-11

Township 18 N

Range 13 W

Section 07

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Direct Rotary Drilling Fluid Bentonite

Total Depth of Boring 240 Feet

Total Depth of Completed Well 240 Feet

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 20 (Feet) Date Measured 02/22/2021

Estimated Yield* 35 (GPM) Test Type Air Lift

Test Length 2 (Hours) Total Drawdown (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	15	BROWN CLAY
15	25	BROWN CLAY WITH GRAVELS
25	35	BLUE CLAY
35	42	BLUE GRAVELS
42	54	BLUE CLAY
54	57	BLUE GRAVELS
57	70	BLUE CLAY
70	78	BLUE GRAVELS
78	113	BLUE CLAY
113	118	BLUE GRAVELS
118	230	BLUE CLAY
230	240	SHALE

Wel - (2)

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	32	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	32	132	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	132	212	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	212	234	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	234	240	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	20	Bentonite	High Solids		
20	240	Other Fill	See description.		12 X 20 SAND

Other Observations:
RECOMMENDED PUMP SETTING: 220'
WATER WELL DRILLER: WILLIAM SCHWINN

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	20	10.625
20	240	8.75

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: FISCH BROS DRILLING (Person, Firm or Corporation)

5001 GRAVENSTEIN HWY N (Address) | SEBASTOPOL (City) | CA (State) | 95472 (Zip)

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 02/23/2021 (Date Signed) | 399226 (C-57 License Number)

Attachments

HWY 101 NORTH 23701.jpg - Location Map

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

TRS:

APN:

Well-3

State of California

Well Completion Report

Form DWR 188 Submitted 8/31/2021

WCR2021-010956

Owner's Well Number 2-08302021 Date Work Began 08/24/2021 Date Work Ended 08/30/2021

Local Permit Agency Environmental Health Division - Ukiah Office

Secondary Permit Agency Permit Number WW24090 Permit Date 04/13/2021

Well Owner (must remain confidential pursuant to Water Code 13752)

Name SANHEDRIN TIMBER LUMBER, LLC, JOE MILLER

Mailing Address P.O. BOX 537

City WILLITS State CA Zip 95490

Planned Use and Activity

Activity New Well

Planned Use Water Supply Domestic

Well Location

Address 23701 N HIGHWAY 101

City WILLITS Zip 95490 County Mendocino

Latitude 39 Deg. 25 Min. 14.772 Sec. N Longitude -123 Deg. 21 Min. 4.464 Sec. W

Dec. Lat. 39.42077 Dec. Long. -123.35124

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 108-040-11

Township 18 N

Range 13 W

Section 07

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Direct Rotary Drilling Fluid Bentonite

Total Depth of Boring 240 Feet

Total Depth of Completed Well 240 Feet

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 40 (Feet) Date Measured 08/30/2021

Estimated Yield* 5 (GPM) Test Type Air Lift

Test Length 2 (Hours) Total Drawdown (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	23	BROWN CLAY
23	30	BLUE STICKY CLAY
30	32	GRAVELS
32	54	BLUE STICKY CLAY
54	56	CEMENTED GRAVELS
56	74	BLUE STICKY CLAY
74	76	CEMENTED GRAVELS
76	122	BLUE CLAY WITH GRAVELS
122	225	BLUE CLAY
225	240	SHALE

Well-3

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	36	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	36	136	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	136	196	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	196	234	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	234	240	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	20	Bentonite	High Solids		
20	240	Other Fill	See description.		12 X 20 SAND

Other Observations:
RECOMMENDED PUMP SETTING: 220'
WATER WELL DRILLER: WILLIAM SCHWINN

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	20	10.625
20	240	8.75

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: FISCH BROS DRILLING
Person, Firm or Corporation

5001 GRAVENSTEIN HWY N | SEBASTOPOL | CA | 95472
Address | City | State | Zip

Signed: *electronic signature received* | 08/31/2021 | 399226
C-57 Licensed Water Well Contractor | Date Signed | C-57 License Number

Attachments

NORTH HIGHWAY 101 23701.jpg - Location Map

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

TRS:

APN:

State of California

Well Completion Report

Form DWR 188 Submitted 9/8/2021

WCR2021-011445

Well #4

Owner's Well Number 09022021 Date Work Began 08/30/2021 Date Work Ended 09/02/2021

Local Permit Agency Environmental Health Division - Ukiah Office

Secondary Permit Agency Permit Number WW24167 Permit Date 06/04/2021

Well Owner (must remain confidential pursuant to Water Code 13752)

Name E.A. PADULA LUMBER CO., INC.,

Mailing Address P.O. BOX 537

City WILLITS State CA Zip 95490

Planned Use and Activity

Activity New Well

Planned Use Water Supply Irrigation - Agriculture

Well Location

Address 421 N MAIN ST

City WILLITS Zip 95490 County Mendocino

Latitude 39 Deg. 25 Min. 23.5559 Sec. N Longitude -123 Deg. 21 Min. 5.292 Sec. W

Dec. Lat. 39.42321 Dec. Long. -123.35147

Vertical Datum Horizontal Datum WGS84

Location Accuracy Location Determination Method

APN 108-040-18

Township 18 N

Range 13 W

Section 07

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical Specify

Drilling Method Direct Rotary Drilling Fluid Bentonite

Total Depth of Boring 260 Feet

Total Depth of Completed Well 260 Feet

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 40 (Feet) Date Measured 09/02/2021

Estimated Yield* 17 (GPM) Test Type Air Lift

Test Length 2 (Hours) Total Drawdown (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	10	BROWN CLAY
10	19	GRAVELS
19	34	BLUE CLAY
34	39	GRAVELS
39	62	BLUE CLAY
62	70	CEMENTED GRAVELS
70	82	BLUE CLAY
82	94	CEMENTED GRAVELS
94	115	BLUE CLAY
115	119	CEMENTED GRAVELS
119	245	BLUE CLAY
245	260	SHALE

WELL-4

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	36	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	36	136	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	136	236	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	236	256	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	256	260	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	20	Bentonite	High Solids		
20	260	Other Fill	See description		12 X 20 SAND

Other Observations:
RECOMMENDED PUMP SETTING: 240'
WATER WELL DRILLER: WILLIAM SCHWINN

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	20	10.625
20	260	8.75

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: FISCH BROS DRILLING (Person, Firm or Corporation)

5001 GRAVENSTEIN HWY N (Address) | SEBASTOPOL (City) | CA (State) | 95472 (Zip)

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 09/08/2021 (Date Signed) | 399226 (C-57 License Number)

Attachments

MAIN STREET 421.jpg - Location Map

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

TRS:

APN:

ORIGINAL
File with DWR

Page 1 of 2

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. e0133482

DWR USE ONLY — DO NOT FILL IN
18N/13W18
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. WELL #1
Date Work Began 6/21/2011, Ended 7/13/2011
Local Permit Agency Mendocino County PRMD
Permit No. WW21865 Permit Date 2/1/2011

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD Mud Rotary FLUID Bentonite

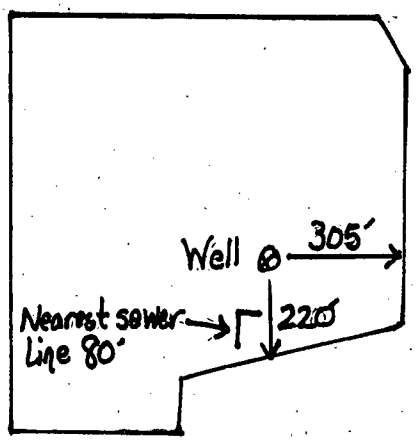
DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	6	Dark brown soil
6	14	Stiff tan clay
14	18	Sandy tan clay
18	26	Sand and large gravel
26	30	Soft tan clay
30	45	Sand and gravel
45	54	Sandy brown clay
54	57	Sand and gravel
57	73	Stiff green clay
73	76	Stiff green clay with embedded gravel
76	80	Cemented sand and gravel
80	86	Stiff tan clay
86	99	Cemented sand and gravel
99	124	Stiff blue clay
124	136	Blue, red and multi-colored sand and fine gravel
136	226	Stiff blue clay
226	257	Gray clay with traces organics
257	262	Organics
262	322	Stiff gray clay with traces of organics

TOTAL DEPTH OF BORING 322 (Feet)
TOTAL DEPTH OF COMPLETED WELL 137 (Feet)

WELL LOCATION

Address 299 N Main Street
City Willits CA
County Mendocino
APN Book 005 Page 060 Parcel 04
Township ____ Range ____ Section ____
Latitude ____ DEG. MIN. SEC. ____ DEG. MIN. SEC.

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)
✓ NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify)
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)
WATER SUPPLY
— Domestic — Public
— Irrigation ✓ Industrial
MONITORING —
TEST WELL —
CATHODIC PROTECTION —
HEAT EXCHANGE —
DIRECT PUSH —
INJECTION —
VAPOR EXTRACTION —
SPARGING —
REMEDIATION —
OTHER (SPECIFY) —

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER N/A (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 12 (Ft.) & DATE MEASURED 7/13/2011
ESTIMATED YIELD 16 (GPM) & TEST TYPE Bailed
TEST LENGTH 10 (Hrs.) TOTAL DRAWDOWN FrmBt (Ft.)
May not be representative of a well's long-term yield.

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	CASING (S) TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	160	9-7/8"								
160	322	7-7/8"								
+3	17		✓				PVC	5	SDR21	
17	57			✓			PVC	5	SDR21	.032
57	77		✓				PVC	5	SDR21	
77	97			✓			PVC	5	SDR21	.032

DEPTH FROM SURFACE Ft.	to Ft.	ANNULAR MATERIAL TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	1	✓			
1	16		✓		
16	137			✓	12x20 SAND

ATTACHMENTS (✓)
— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— Other ____
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT
I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
NAME Weeks Drilling & Pump
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS P.O. Box 176 CITY Sebastopol STATE CA ZIP 95473
Signed Melissa J Lopez WELL DRILLER/AUTHORIZED REPRESENTATIVE
DATE SIGNED 07/20/11
C-57 LICENSE NUMBER 177681

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXTCONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. e0133482

DWR USE ONLY -- DO NOT FILL IN
18N/13W/18
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. WELL #1

Date Work Began 6/21/2011, Ended 7/13/2011

Local Permit Agency Mendocino County PRMD

Permit No. WW21865 Permit Date 2/1/2011

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)

DRILLING METHOD Mud Rotary FLUID Bentonite

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0	6	Dark brown soil
6	14	Stiff tan clay
14	18	Sandy tan clay
18	26	Sand and large gravel
26	30	Soft tan clay
30	45	Sand and gravel
45	54	Sandy brown clay
54	57	Sand and gravel
57	73	Stiff green clay
73	76	Stiff green clay with embedded gravel
76	80	Cemented sand and gravel
80	86	Stiff tan clay
86	99	Cemented sand and gravel
99	124	Stiff blue clay
124	136	Blue, red and multi-colored sand and fine gravel
136	226	Stiff blue clay
226	257	Gray clay with traces organics
257	262	Organics
262	322	Stiff gray clay with traces of organics

TOTAL DEPTH OF BORING 322 (Feet)

TOTAL DEPTH OF COMPLETED WELL 137 (Feet)

WELL OWNER

WELL LOCATION

Address 299 N Main Street

City Willits CA

County Mendocino

APN Book 005 Page 060 Parcel 04

Township ____ Range ____ Section ____

Latitude ____ DEG. MIN. SEC. ____ DEG. MIN. SEC.

LOCATION SKETCH

NORTH / WEST / EAST / SOUTH

Illustrate or Describe Distance of Wellfrom Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

✓ NEW WELL

MODIFICATION/REPAIR
— Deepen
— Other (Specify)

— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
— Domestic — Public
— Irrigation ✓ Industrial

— MONITORING
— TEST WELL
— CATHODIC PROTECTION
— HEAT EXCHANGE
— DIRECT PUSH
— INJECTION
— VAPOR EXTRACTION
— SPARGING
— REMEDIATION
— OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER N/A (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 12 (Ft.) & DATE MEASURED 7/13/2011

ESTIMATED YIELD 16 (GPM) & TEST TYPE Bailed

TEST LENGTH 10 (Hrs.) TOTAL DRAWDOWN FrmBt (Ft.)

May not be representative of a well's long-term yield.

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
97	117		✓				PVC	5	SDR21	
117	137			✓			PVC	5	SDR21	.032

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	1	✓			
1	16		✓		
16	137			✓	12x20 SAND

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— Other ____

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Weeks Drilling & Pump
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

P.O. Box 176 ADDRESS Sebastopol CITY CA STATE 95473 ZIP

Signed Melissa G Lopez WELL DRILLER/AUTHORIZED REPRESENTATIVE 07/20/11 DATE SIGNED 177681 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXTCONSECUTIVELY NUMBERED FORM

18N/13W-18M

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 213224

Notice of Intent No. 6911

Local Permit No. or Date 5/28/85

State Well No.

Other Well No.

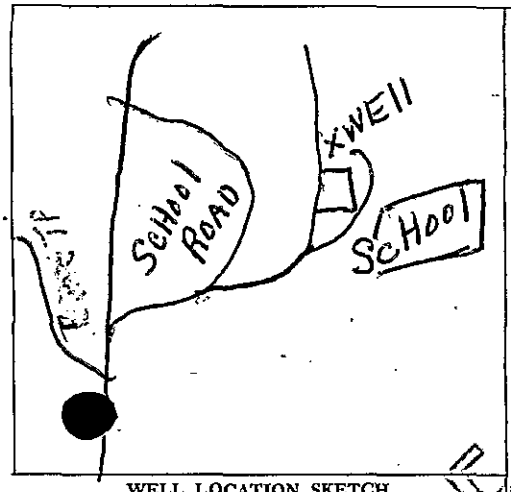
(2) LOCATION OF WELL (See instructions):

County MENDOCINO Owner's Well Number

Well address if different from above

Township 18N Range 13W Section

Distance from cities, roads, railroads, fences, etc. CITY OF Willits Hi SCHOOL EAST OF 101 HWY.



WELL LOCATION SKETCH

(3) TYPE OF WORK:

New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:

Domestic [ ]
Irrigation [X]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:

Rotary [ ] Reverse [ ]
Cable [ ] Air [X]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:

Yes [ ] No [X] Size:
Diameter of bore 12 in.
Packed from ft. to ft.

(7) CASING INSTALLED:

Steel [ ] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:

Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:

Was surface sanitary seal provided? Yes [ ] No [ ] If yes, to depth ft.
Were strata sealed against pollution? Yes [ ] No [ ] Interval ft.
Method of sealing

(10) WATER LEVELS:

Depth of first water, if known DRY ft.
Standing level after well completion ft.

(11) WELL TESTS:

Was well test made? Yes [ ] No [ ] If yes, by whom?
Type of test Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes [ ] No [ ] If yes, by whom?
Was electric log made? Yes [ ] No [ ] If yes, attach copy to this report

(12) WELL LOG:

Total depth 410 ft. Depth of completed well ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	2	TOP SOIL
2	18	YELLOW CLAY
18	26	YELLOW GRAVEL & SAND
26	30	SAND
30	36	BLUE GRAVEL & CLAY
36	410	BLUE CLAY

SEP 3 1985

Work started 5/28 19 85 Completed 6/14 19 85

WELL DRILLER'S STATEMENT:

00380

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief

SIGNED (Well Driller)

NAME R & B DRILLING (Person, firm, or corporation) (Typed or printed)

Address 580 MIAMI DR.

City UKIAH CA. Zip 95482

License No. 242680 Date of this report 7/1/85

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

18N/13W - 18M

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 213205

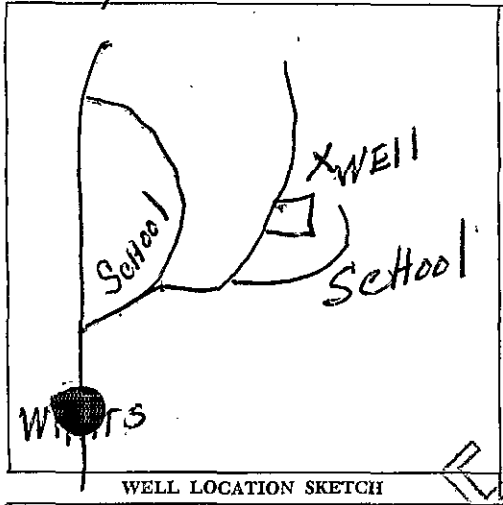
Notice of Intent No. 6911
Lot [redacted] et No. or Date 5/28/85

State Well No.
Other Well No.

(12) WELL LOG: Total depth 325 ft. Depth of completed well 325 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	6	YELLOW CLAY
6	22	YELLOW CLAY + GRAVEL
22	35	YELLOW GRAVEL (WATER)
35	75	BLUE GRAVEL + CLAY
75	85	BLUE GRAVEL (WATER) (LOSH)
85	120	SAND
120	280	GRAVEL + CLAY (WATER
280	325	CLAY

(2) LOCATION OF WELL (See instructions):
County MENDOCINO Owner's Well Number
Well address if different from above
Township 18 N Range 13 W Section
Distance from cities, roads, railroads, fences, etc. CITY OF WILLITS AT HI SCHOOL EAST SIDE 101 Hy.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [ ]
Irrigation [X]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [ ] Reverse [ ]
Cable [ ] Air MUD [X]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [X] No [ ] Size SEA
Diameter of bore 12 IN.
Packed from 20 to 325 ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
AB	325	8 5/8	8

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
35	90	1/4 X 2
120	325	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 20 ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ft.
Method of sealing CEMENT

(10) WATER LEVELS:
Depth of first water, if known 22 ft.
Standing level after well completion 80 ft.

(11) WELL TESTS:
Was well test made? Yes [X] No [ ] If yes, by whom? R+B Drilling
Type of test Pump [ ] Bailer [ ] Air lift [X]
Depth to water at start of test 100 ft. At end of test 80 ft
Discharge 20 gal/min after 8 hours Water temperature
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

SEP 3 1985

Work started 6/14 19 85 Completed 6/22 19 85

WELL DRILLER'S STATEMENT: 00380
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief
SIGNED Ralph T Brown (Well Driller)
NAME R+B DRILLING (Person, firm, or corporation) (Typed or printed)
Address 580 MILANI DR.
City UKIAH CA Zip 95482
License No. 242280 Date of this report 7/1/85

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. e0106341

DWR USE ONLY — DO NOT FILL IN
18N13W18
STATE WELL NO./ STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. WELL #1
Date Work Began 2/11/2010, Ended 2/19/2010
Local Permit Agency Mendocino County Environmental
Permit No. WW21719 Permit Date 2/3/2010

GEOLOGIC LOG

ORIENTATION (✓) ✓ VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DRILLING METHOD Mud Rotary FLUID Bentonite

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain, size, color, etc.*
0 12	Sticky brown clay
12 15	Brown sand and gravel
15 60	Blue and gray clays
60 65	Sand with fine gravels
65 75	Blue clay
75 77	Sand and gravel
77 84	Blue clay
84 97	Multi-colored sand and gravel
97 103	Blue clay

TOTAL DEPTH OF BORING 103 (Feet)
TOTAL DEPTH OF COMPLETED WELL 102 (Feet)

WELL OWNER

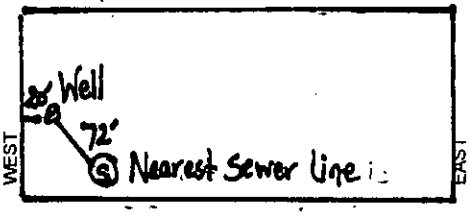
CITY STATE ZIP

WELL LOCATION

Address 160 Lenore Avenue
City Willits CA
County Mendocino
APN Book 005 Page 201 Parcel 23-00
Township ____ Range ____ Section ____
Latitude ____ DEG. MIN. SEC. ____ DEG. MIN. SEC.

LOCATION SKETCH

NORTH



SOUTH

Illustrate or Describe Distance of Wellfrom Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

✓ NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify)
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)
WATER SUPPLY
— Domestic ✓ Public
— Irrigation — Industrial
MONITORING —
TEST WELL —
CATHODIC PROTECTION —
HEAT EXCHANGE —
DIRECT PUSH —
INJECTION —
VAPOR EXTRACTION —
SPARGING —
REMEDIATION —
OTHER (SPECIFY) —

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER N/A (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 23 (Ft.) & DATE MEASURED 2/19/2010
ESTIMATED YIELD 30 (GPM) & TEST TYPE Bailed
TEST LENGTH 2 (Hrs.) TOTAL DRAWDOWN 30 (Ft.)
May not be representative of a well's long-term yield.

CASING (S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 103	11"								
+2 62		✓				PVC	5	SDR21	
62 102			✓			PVC	5	SDR21	.032

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 2	✓			
2 50		✓		
50 102			✓	3/8 GRAVEL

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analysis
— Other ____
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.
NAME Weeks Drilling & Pump (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
P.O. Box 176 ADDRESS Sebastopol CITY CA STATE 95473 ZIP
Signed Melissa G Lopez WELL DRILLER/AUTHORIZED REPRESENTATIVE
02/23/10 DATE SIGNED
177681 C-57 LICENSE NUMBER

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXTCONSECUTIVELY NUMBERED FORM

18N/13W 18M

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 239948

Notice of Intent No.
Local Permit No. or Date

State Well No.
Other Well No.

(2) LOCATION OF WELL (See instructions):

County Mendocino Owner's Well Number #1
Well address if different from above Little League Field
Township East Commercial St. Range Section Willits
Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:

New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:

Domestic ☐
Irrigation ☒
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:

Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:

Yes ☒ No ☐ Size Fine Pea
Diameter of bore 12¼
Packed from 50 to 225 ft.

(7) CASING INSTALLED:

Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	221	8 5/8	.188

(8) PERFORATIONS:

Type of perforation or size of screen Hi Cap Screens

From ft.	To ft.	Slot size
80	90	.070
130	150	.070
160	170	.070
180	215	.070

(9) WELL SEAL:

Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Sand grout on pack

(10) WATER LEVELS:

Depth of first water, if known ft.
Standing level after well completion 22 ft.

(11) WELL TESTS:

Was well test made? Yes ☒ No ☐ If yes, by whom? Weeks
Type of test Pump ☐ Bailer ☒ Air lift ☐
Depth to water at start of test 22 ft. At end of test 30 ft
Discharge 90 gal/min after 4 hours Water temperature cool
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG:

Total depth 240 ft. Depth of completed well 221 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	1	Clayee topsoil
1	11	Sandy brown clays
11	15	Stiff brown clays
15	16	Brown sand and gravel
16	21	Stiff brown clay
21	30	Sandy brown clays
30	41	Sandy blue clay
41	77	Stiff blue clay with embedded large gravel
77	93	Blue sand and gravel
93	127	Stiff blue clay
127	133	Blue sand and gravel
133	140	Stiff blue clay
140	152	Blue sand and gravel
152	160	Stiff brown clay
160	169	Brown sand and gravel
169	179	Stiff brown clay
179	208	Brown sand and gravel
208	222	Stiff brown clay
222	230	Brown sand and gravel
230	240	Stiff brown clay

RECEIVED MAY 9 1984

Work started 1/24 19 84 Completed 1/31 19 84

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Gerald G. Thompson, By: Ward Thompson 98
(Well Driller)
NAME WEEKS DRILLING AND PUMP COMPANY 98
(Person, firm, or corporation) (Typed or printed)
Address P. O. Box 176
City Sebastopol, CA Zip 95472
License No. C57-177681 Date of this report Feb. 3, 1984

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

18N 13W-17M

ORIGINAL
File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. 1
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
No 23070

State Well No.
Other Well No. CONFIDENTIAL LOG

13752

(1) N A

(2) LOCATION OF WELL:
County MENDOCINO Owner's number, if any—
R. F. D. or Street No.
EAST VALLEY RD.
1 MILE E. OF WILLITS

(3) TYPE OF WORK (*check*): New well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*): Domestic ☐ Industrial ☐ Municipal ☐ Irrigation ☐ Test Well ☑ Other ☐

(5) EQUIPMENT: Rotary ☑ Cable ☐ Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☑ DOUBLE ☐
From 0 ft. to 140 ft. Diam. 13" 3/16" Gage of Wall

If gravel packed
Diameter of Bore 20" from 0 ft. to 140 ft.

Type and size of shoe or well ring BULLNOSE
Describe joint WELDED
Size of gravel: PEA

(7) PERFORATIONS:
Type of perforator used TORCH
Size of perforations 6 in., length, by 3/16 in.
From 100 ft. to 140 ft. 40 Perf. per row 6 Rows per ft.

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☐ Yes ☑ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☑ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:
Depth at which water was first found ft.
Standing level before perforating ft.
Standing level after perforating 8 ft.

(10) WELL TESTS:
Was a pump test made? ☐ Yes ☑ No If yes, by whom? BAILER
Yield: 100 gal./min. with 0 ft. draw down after hrs.
Temperature of water COOL Was a chemical analysis made? ☐ Yes ☑ No
Was electric log made of well? ☐ Yes ☑ No

(11) WELL LOG:
Total depth 140 ft. Depth of completed well 140 ft.
Formation: *Describe by color, character, size of material, and structure.*

ft. to ft.	
0 to 3	TOP SOIL
3 to 15	BROWN CLAY
15 to 60	BLUE CLAY
60 to 70	COURSE SAND
70 to 140	COURSE GRAVEL

Work started 8 SEP 1956 Completed 12 SEP 1956

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME WEEKS DRILLING CO. (Person, firm, or corporation) (Typed or printed)
Address 155 WEEKS WAY
SEBASTOPOL, CALIF.
[SIGNED] Jerry Thompson (Well Driller)
License No. 12154 Dated APR 1957

95689 3-54 50M QUIN ® SPO DWR FORM NO. 246 (REV. 3-54)

18N13W-17M

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No. 1
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
Nº 23071
State Well No.
Other Well No.

(:
N
A:

(2) LOCATION OF WELL:
County MENDOCINO Owner's number, if any—
R. F. D. or Street No.
EAST VALLEY RD
1 MILE E. OF WILLITS

(3) TYPE OF WORK (*check*):
New well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☑ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☑
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☑ DOUBLE ☐

From 0 ft. to 208 ft. 12" Diam. 3/16 Gage or Wall

If gravel packed: Diameter of Bore 20 from 0 ft. to 208 ft.

Type and size of shoe or well ring BULLNOSE
Size of gravel: PEA
Describe joint WELDED

(7) PERFORATIONS:
Type of perforator used TORCH
Size of perforations 6 in., length, by 3/16 in.

From ft.	to ft.	Perf. per row	Rows per ft.
70	90	20	6
110	130	20	6
150	170	20	6
190	208	18	6

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☐ Yes ☑ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☑ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:
Depth at which water was first found ft.
Standing level before perforating ft.
Standing level after perforating 15 ft.

(10) WELL TESTS:
Was a pump test made? ☐ Yes ☑ No If yes, by whom? BAILER
Yield: 100 gal./min. with 0 ft. draw down after hrs.
Temperature of water COOL Was a chemical analysis made? ☐ Yes ☑ No
Was electric log made of well? ☐ Yes ☑ No

(11) WELL LOG:
Total depth 208 ft. Depth of completed well 208 ft.
Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft.	Formation
0	6	TOPSOIL
6	15	BROWN CLAY
15	60	BLUE CLAY
60	208	COURSE GRAVEL

Work started 13 SEP 1956 Completed 19 SEP 1956

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME WEEKS DRILLING CO.
(Person, firm, or corporation) (Typed or printed)
Address 155 WEEKS WAY
SEBASTOPOL CALIF
[SIGNED] Jerry Thompson
Well Driller
License No. 121567 Dated 8 APR, 1957

CORRECTED

File Original with DWR

State of California

Well Completion Report

No. e0359004

Page 1 of 2

Owner's Well Number Well #1

Date Work Began 09/26/2017 Date Work Ended 10/13/2017

Local Permit Agency Mendocino County Environmental Health Division

Permit Number WW 23166 Permit Date 9/25/17

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Direct Rotary Drilling Fluid Polymer mud

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	2	Organic black gray loam
2	10	Sandy brown clays, some small gravel
10	26	Greenish clays with some brown
26	56	Dark blue gray stiff clay
56	114	Sand gravel, rounded, multi-colored
114	118	Sand gravel, rounded, multi-colored, with clay
118	121	Sand gravel, multi-colored
121	125	Mottled green brown sandy clay
125	132	Brown clayey sand, gravel
132	141	Cleaner sand gravel
141	147	Brown clayey sand gravel
147	155	Greenish clayey sand
155	160	Sand gravel
160	168	Clayey sand, gravel
168	174	Brown, multi-colored sand gravel
174	178	Gray clay
178	185	Clayey sand gravel
185	195	Clean multi-colored sand, gravel
195	200	Blue clayey sand gravel

Total Depth of Boring 200 Feet

Total Depth of Completed Well 200 Feet

Well Owner

Well Location

Address 1110 Sewer Plant Road

City Willits County Mendocino

Latitude 39 Deg. 25 Min. 53 Sec. N Longitude 123 Deg. 20 Min. 23 Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 108 Page 030 Parcel 06

Township 18N Range 13W Section 7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply

☐ Domestic ☑ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 16 (Feet) Date Measured 10/17/2017

Estimated Yield * 400 (GPM) Test Type Constant Rate

Test Length 24.0 (Hours) Total Drawdown 3 (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	20	26	Conductor	Steel	3/8	20		
20	200	18 1/2						
0	60		Blank	PVC Sch. 80	SDR17	8		
60	65		Blank	PVC Sch. 40	SDR21	8		
65	115		Screen	PVC Sch. 40	SDR21	8	Milled Slots	0.032
115	125		Blank	PVC Sch. 40	SDR21	8		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	50	Cement	
50	57	Bentonite	
57	117	Filter Pack	#6 Sand
117	121	Bentonite	
121	150	Filter Pack	#6 Sand
150	155	Bentonite	

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Weeks Drilling & Pump Company

Person, Firm or Corporation

P.O. Box 176 Address Sebastopol City CA State 95473 Zip

Signed [signature] C-57 Licensed Water Well Contractor 12/14/17 Date Signed 177681 C-57 License Number

DWR 188 REV. 1/2006

CORRECTED

File Original with DWR

State of California

Well Completion Report

No. e0359004

Page 2 of 2

Owner's Well Number Well #1

Date Work Began 09/26/2017 Date Work Ended 10/13/2017

Local Permit Agency Mendocino County Environmental Health Division

Permit Number WW 23166 Permit Date 9/25/17

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Direct Rotary Drilling Fluid Polymer mud

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	2	Organic black gray loam
2	10	Sandy brown clays, some small gravel
10	26	Greenish clays with some brown
26	56	Dark blue gray stiff clay
56	114	Sand gravel, rounded, multi-colored
114	118	Sand gravel, rounded, multi-colored, with clay
118	121	Sand gravel, multi-colored
121	125	Mottled green brown sandy clay
125	132	Brown clayey sand, gravel
132	141	Cleaner sand gravel
141	147	Brown clayey sand gravel
147	155	Greenish clayey sand
155	160	Sand gravel
160	168	Clayey sand, gravel
168	174	Brown, multi-colored sand gravel
174	178	Gray clay
178	185	Clayey sand gravel
185	195	Clean multi-colored sand, gravel
195	200	Blue clayey sand gravel

Total Depth of Boring 200 Feet

Total Depth of Completed Well 200 Feet

Well Owner

Well Location

Address 1110 Sewer Plant Road

City Willits County Mendocino

Latitude 39 Deg. 25 Min. 53 Sec. N Longitude 123 Deg. 20 Min. 23 Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 108 Page 030 Parcel 06

Township 18N Range 13W Section 7

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well

○ Modification/Repair

○ Deepen

○ Other

○ Destroy

Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply

☐ Domestic ☑ Public

☐ Irrigation ☐ Industrial

○ Cathodic Protection

○ Dewatering

○ Heat Exchange

○ Injection

○ Monitoring

○ Remediation

○ Sparging

○ Test Well

○ Vapor Extraction

○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 16 (Feet) Date Measured 10/17/2017

Estimated Yield * 400 (GPM) Test Type Constant Rate

Test Length 24.0 (Hours) Total Drawdown 3 (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
125	145		Screen	PVC Sch. 40	SDR21	8	Milled Slots	0.032
145	160		Blank	PVC Sch. 40	SDR21	8		
160	190		Screen	PVC Sch. 40	SDR21	8	Milled Slots	0.032
190	200		Blank	PVC Sch. 40	SDR21	8		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
155	200	Filter Pack	#6 Sand

Attachments

☐ Geologic Log

☐ Well Construction Diagram

☐ Geophysical Log(s)

☐ Soil/Water Chemical Analyses

☑ Other Site Map

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

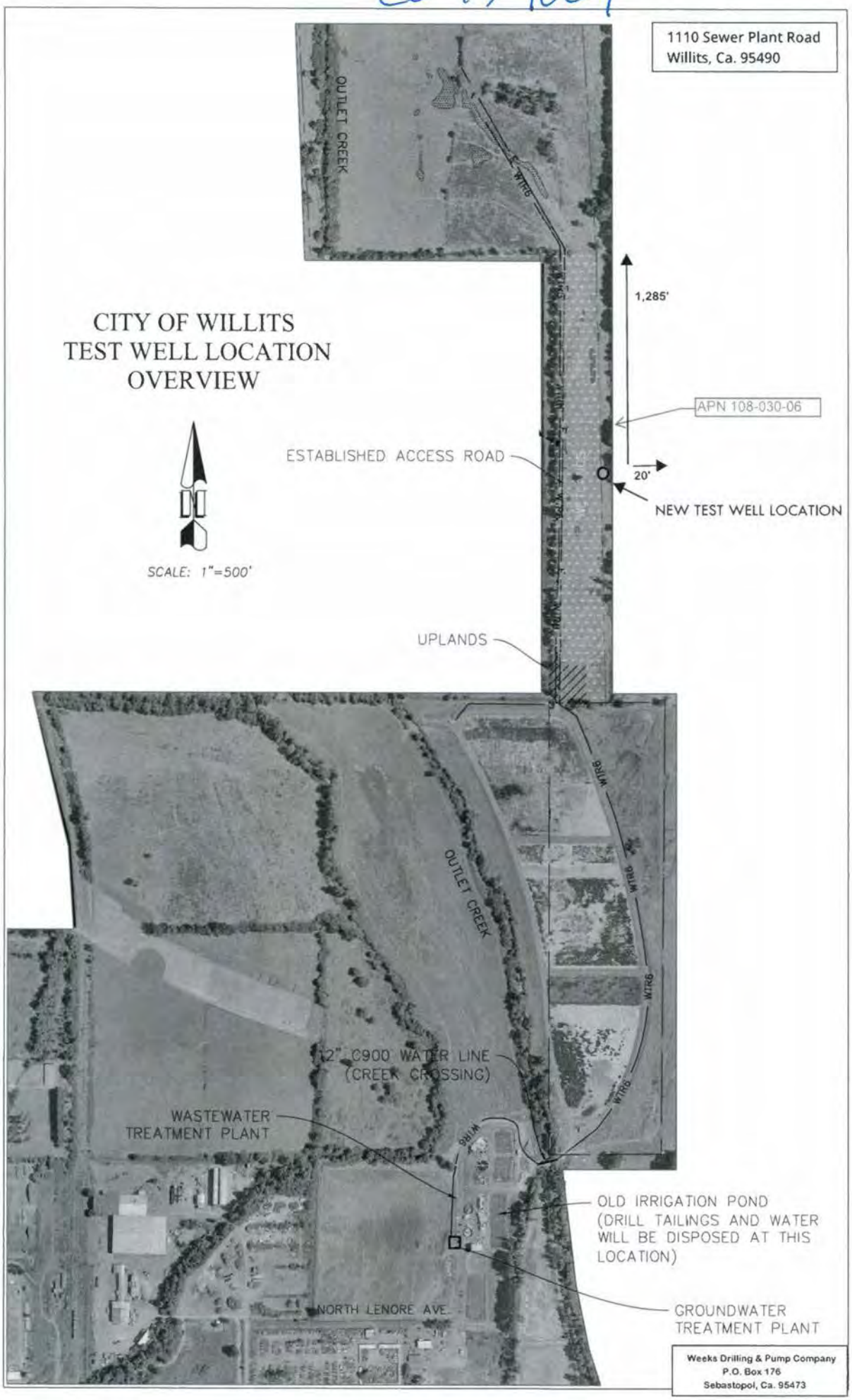
Name Weeks Drilling & Pump Company (Person, Firm or Corporation)

P.O. Box 176 (Address) Sebastopol (City) CA (State) 95473 (Zip)

Signed (C-57 Licensed Water Well Contractor) 12/14/17 (Date Signed) 177681 (C-57 License Number)

DWR 188 REV. 1/2006

e0359004


1110 Sewer Plant Road
Willits, Ca. 95490
OUTLET CREEK
W1T6
1,285'
CITY OF WILLITS
TEST WELL LOCATION
OVERVIEW
APN 108-030-06
ESTABLISHED ACCESS ROAD
20'
NEW TEST WELL LOCATION
SCALE: 1"=500'
UPLANDS
W1T6
W1T6
OUTLET CREEK
W1T6
W1T6
12" C900 WATER LINE
(CREEK CROSSING)
WASTEWATER
TREATMENT PLANT
W1T6
OLD IRRIGATION POND
(DRILL TAILINGS AND WATER
WILL BE DISPOSED AT THIS
LOCATION)
NORTH LENORE AVE.
GROUNDWATER
TREATMENT PLANT
Weeks Drilling & Pump Company
P.O. Box 176
Sebastopol, Ca. 95473

18N/13W-17

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do Not Fill In
No. 139417
State Well No. _____
Other Well No. CONFIDENTIAL LOG Water Code Sec. 13752

(2) LOCATION OF WELL:

County Mendo Owner's number, if any
Township, Range, and Section T18N R9E S17
Distance from cities, roads, railroads, etc. 1/4 MI NORTH OF Center Valley Rd

(3) TYPE OF WORK (check):

New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [ ] Industrial [X] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [ ]
Cable [X]
Other [ ]

(6) CASING INSTALLED:

STEEL: OTHER:
SINGLE [X] DOUBLE [ ]

From ft.	To ft.	Diam.	Gage or Wall
0	45	12	.250
65	135	12	.250
155	165	12	.250

Size of shoe or well ring: None

If gravel packed

Diameter of Bore	From ft.	To ft.
16	0	165

Size of gravel: Pea
Describe joint BUTT Weld

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
45	65	.100	slot	screen
65	135	6	3	1/8 x 3
135	165	.100	slot	screen

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [X] No [ ] To what depth 45 ft.
Were any strata sealed against pollution? Yes [ ] No [X] If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing Grout

(9) WATER LEVELS:

Depth at which water was first found, if known 45 ft.
Standing level before perforating, if known ft.
Standing level after perforating and developing 30 ft.

(10) WELL TESTS:

Was pump test made? Yes [X] No [ ] If yes, by whom? Neil Dunken
Yield: 250 gal./min. with 54 ft. drawdown after 4 hrs.
Temperature of water Cool Was a chemical analysis made? Yes [ ] No [X]
Was electric log made of well? Yes [ ] No [X] If yes, attach copy

(11) WELL LOG:

CONFIDENTIAL LOG Water Code Sec. 13752

Total depth 200 ft. Depth of completed well 165 ft.
Formation: *Describe by color, character, size of material, and structure*

ft. to	ft.
0-1	Sand & Gravel Fill
1-20	Brown clay slt
20-39	Blue & Brown clay mix
39-45	Blue Clay
45-64	Brown cemented Gravel
64-69	Blue & Brown clay mix
69-120	Brown Clay & Embedded Gravel
120-135	Blue clay & Embedded Gravel
135-155	Blue clay with Gravel lenses
155-200	Sticky Blue Clay

CONFIDENTIAL LOG Water Code Sec. 13752

Work started 19 , Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Dave Giese Well Drilling
(Person, firm, or corporation) (Typed or printed)
Address 200 Cobalt Ln Ukiah, Calif.
[SIGNED] Dave Giese
(Well Driller)
License No. 304165 Dated 10-26, 1976

SKETCH LOCATION OF WELL ON REVERSE SIDE

Log# 376631

ORIGINAL
File Original, Duplicate and Triplicate with the
DIVISION OF WATER RESOURCES
P. O. BOX 1079
SACRAMENTO 5, CALIFORNIA

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA—DEPARTMENT OF PUBLIC WORKS

DIVISION OF WATER RESOURCES

M07-07-01 M7-050-2.3

Plots in 19F
Do Not Fill In 74
State Well No. 18N 13W 19B1
Other Well No. 1-000010 I
Region CONFIDENTIAL
Water Code Sec. 13752

(1) DRILLER: (person, firm, or corporation)
Name WEARS PUMP WELL + EQUIP. CO.
Address [illegible]
[illegible]

OWNER:
Name
Address

(2) Proposed Use (Check)
Domestic ☐ Industrial ☐
Irrigation ☒ Test Well ☐
Municipal ☐ Other ☐

Equipment
Rotary ☒
Cable ☐
Dug Well ☐
Other ☐

(3) CASING:
440 ft. of in. W./ga. casing 440 left in well
240 " 10 " 10 " "
200 " 12 " IN WELL
Type and size of shoe or well ring BULL NOSE.

(4) PERFORATIONS: 3/16" SLOTS
Type of perforator used TORCH

Perforated ft.	to ft.	holes per in.
440	420	6 AROUND
400	380	" "
360	340	" "
320	300	1" LONG.
280	260	" "
240	220	" "
194	178	" "

Diameter of perforations in., length in.

(5) WATER LEVELS:
Was electric log made of well? ☐ Yes ☒ No If yes, attach copy.
Depth at which water was first found ft.
Standing level before perforating ft.
Standing level after perforating ft.
Note your observation of any change in water level while drilling
Was a surface sanitary seal provided? NO

(6) WELL PUMPING TEST:
Capacity 200 gal./min. 200 ft. draw down
Was well gravel packed? YES
Were any strata sealed against pollution? NO
Temperature Was a chemical analysis made? NO Attach copy
If abandoned was well capped?

(7) TYPE OF WORK (check):
New well ☒ Reconditioning of well ☐
Deepening existing well ☐

(8) LOCATION OF WELL:
County MENDOCINO.
R. F. D. or Street No. SEC, T.T.R.

(9) WELL LOG:
Total depth of well 454 ft.

Formation: Mention size of water gravel—

ft.	to ft.	Formation
0	14	TOPSOIL
14	16	FINE SAND
16	23	CLAY
23	27	FINE SAND
27	29	BLUE CLAY
29	56	COURSE SAND
56	58	BLUE CLAY
58	79	COURSE GRAVEL
79	82	BLUE CLAY
82	152	COURSE GRAVEL
152	174	BLUE CLAY
174	196	SAND + GRAVEL
196	232	BLUE CLAY
232	249	SAND + GRAVEL
249	320	FINE SAND COURSE
320	345	BR. " "
345	350	GREY " "
350	362	MULTI COLORED SAND
362	372	YELLOW SANDY CLAY
372	418	BLUE CLAY
418	430	BR. SAND COURSE
430	444	BR. SANDY CLAY W/ GRAVEL
444	454	BLUE CLAY W/ GRAVEL

Work started 8-4 1952. Completed 8-21 52
Date of Report 11-1- 52

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

[SIGNED] [signature]
Well Driller

By

License No. 121567 Classification C-57

Dated 11-7- 52

46370 7-51 30M QUIN SPO

State of California

Well Completion Report

Form DWR 188 Auto-Completed 4/19/2021

WCR2021-002116

Owner's Well Number 11044 | Date Work Began 02/09/2021 | Date Work Ended 02/15/2021

Local Permit Agency Environmental Health Division - Ukiah Office

Secondary Permit Agency | Permit Number WW23978 | Permit Date 02/12/2021

Well Owner (must remain confidential pursuant to Water Code 13752)

Name XXXXXXXXXXXXXXXXXXX

Mailing Address XXXXXXXXXXXXXXXXXXX

XXXXXXXXXXXXXXXXXXX

City XXXXXXXXXXXXXXXXXXX | State XX | Zip XXXXX

Planned Use and Activity

Activity New Well

Planned Use Water Supply Irrigation - Agriculture

Well Location

Address 1660 CENTER VALLEY RD

City WILLITS | Zip 95490 | County Mendocino

Latitude 39 Deg. 24 Min. 26.87 Sec. N | Longitude -123 Deg. 19 Min. 39.06 Sec. W

Dec. Lat. 39.4074639 | Dec. Long. -123.3275167

Vertical Datum | Horizontal Datum WGS84

Location Accuracy | Location Determination Method

APN 103-070-04

Township 18 N

Range 13 W

Section 17

Baseline Meridian Mount Diablo

Ground Surface Elevation

Elevation Accuracy

Elevation Determination Method

Borehole Information

Orientation Vertical | Specify

Drilling Method Direct Rotary | Drilling Fluid Bentonite

Total Depth of Boring 200 Feet

Total Depth of Completed Well 200 Feet

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level 40 (Feet) | Date Measured 02/15/2021

Estimated Yield* 50 (GPM) | Test Type Air Lift

Test Length 2 (Hours) | Total Drawdown (feet)

*May not be representative of a well's long term yield.

Geologic Log - Free Form

Depth from Surface Feet to Feet		Description
0	2	GRAVEL
2	18	BLUE CLAY
18	70	GRAVELS
70	105	CEMENTED GRAVELS
105	130	BLUE CLAY
130	162	BLUE GRAVELS
162	200	BLUE CLAY

Casings

Casing #	Depth from Surface Feet to Feet		Casing Type	Material	Casings Specificatons	Wall Thickness (inches)	Outside Diameter (inches)	Screen Type	Slot Size if any (inches)	Description
1	0	72	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	72	152	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	152	172	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			
1	172	192	Screen	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563	Milled Slots	0.032	
1	192	200	Blank	PVC	OD: 5.563 in. | SDR: 21 | Thickness: 0.265 in.	0.265	5.563			

Annular Material

Depth from Surface Feet to Feet		Fill	Fill Type Details	Filter Pack Size	Description
0	50	Bentonite	High Solids		
50	200	Other Fill	See description.		8 x 16 sand

Other Observations:
RECOMMENDED PUMP SETTING: 180'
WATER WELL DRILLER: WILLIAM SCHWINN

Borehole Specifications

Depth from Surface Feet to Feet		Borehole Diameter (inches)
0	50	10.625
50	200	8.75

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name: FISCH BROS DRILLING (Person, Firm or Corporation)

5001 GRAVENSTEIN HWY N (Address) | SEBASTOPOL (City) | CA (State) | 95472 (Zip)

Signed: *electronic signature received* (C-57 Licensed Water Well Contractor) | 02/17/2021 (Date Signed) | 399226 (C-57 License Number)

Attachments

CENTER VALLEY ROAD 1660.jpg - Location Map

DWR Use Only

CSG #	State Well Number	Site Code	Local Well Number

N — Latitude Deg/Min/Sec

W — Longitude Deg/Min/Sec

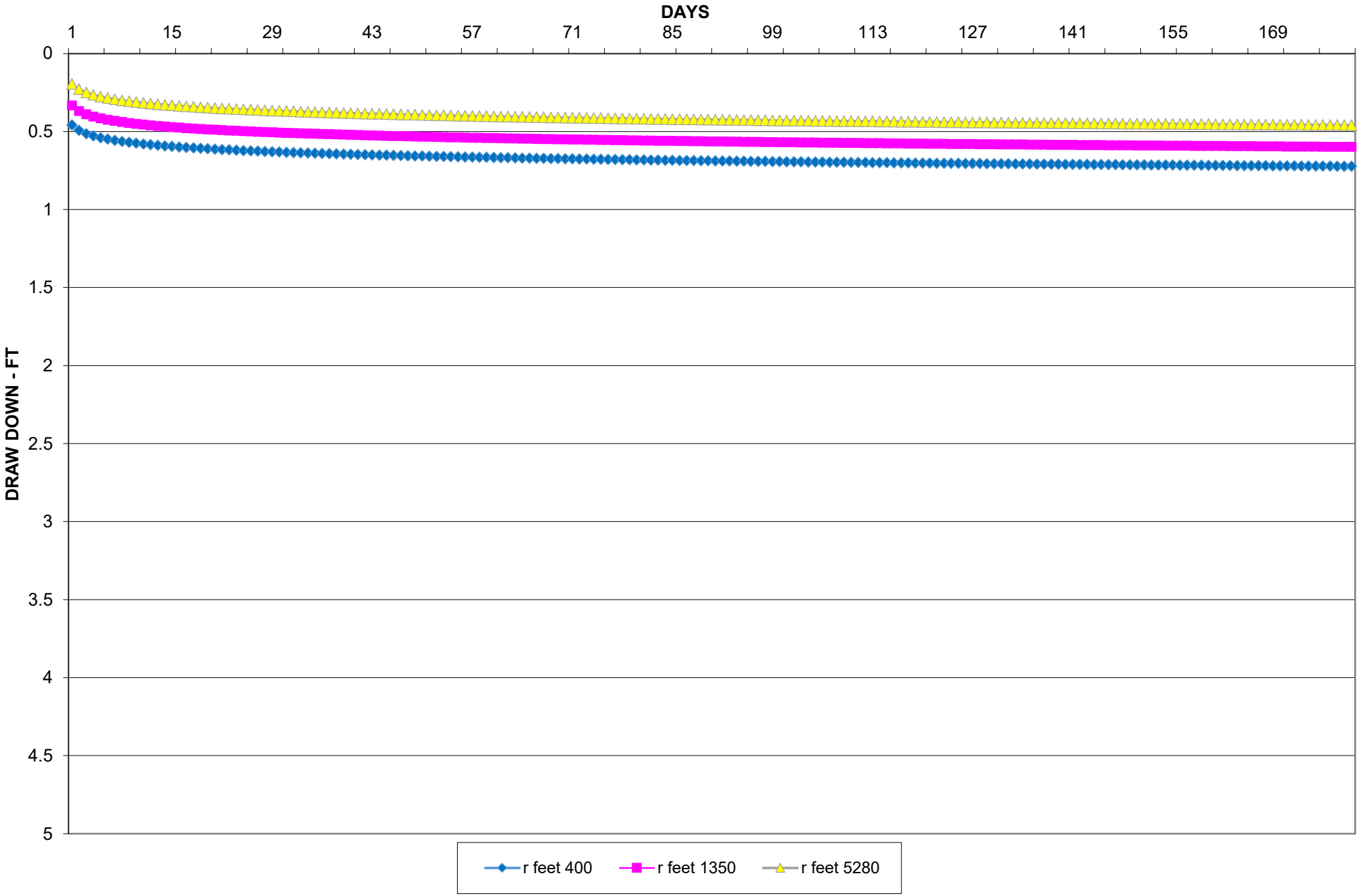
TRS:

APN:

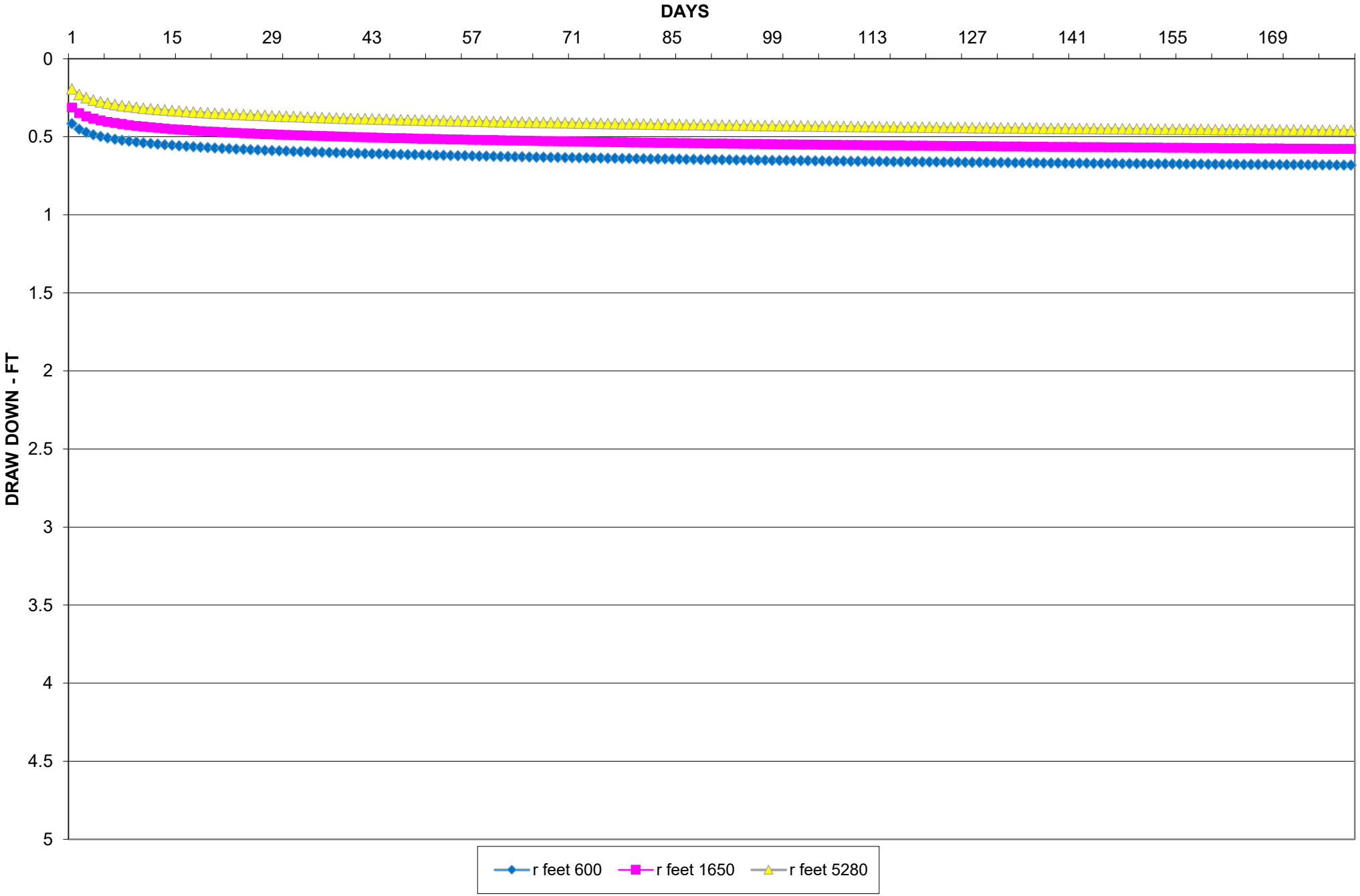
Attachment C

Drawdown Curves

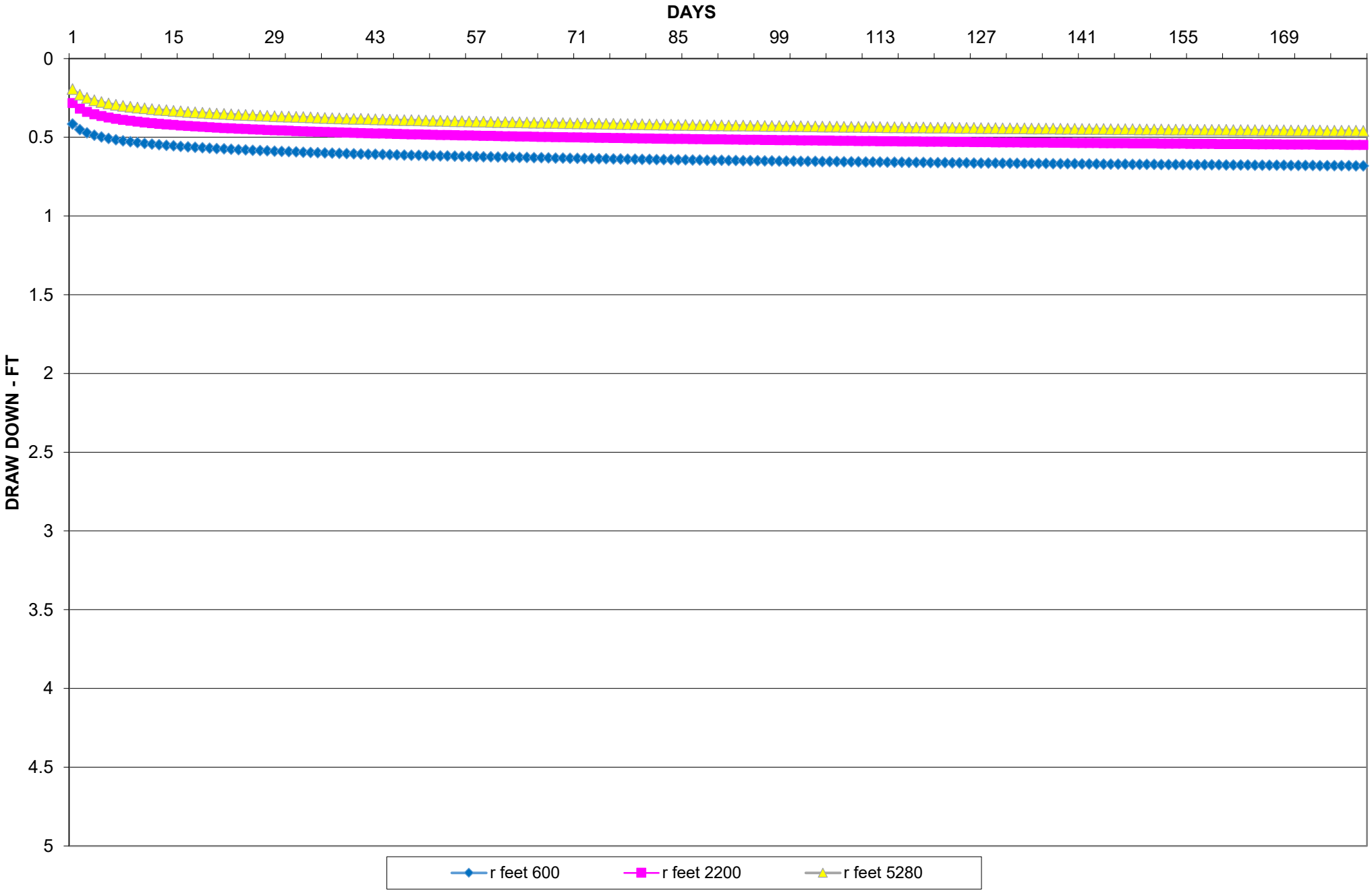
WELL-1
WELL DRAWDOWN THEIS ANALYSIS
SANHEDRIN WILLITS LOG YARD EXPANSION AREA
AUGUST 2023



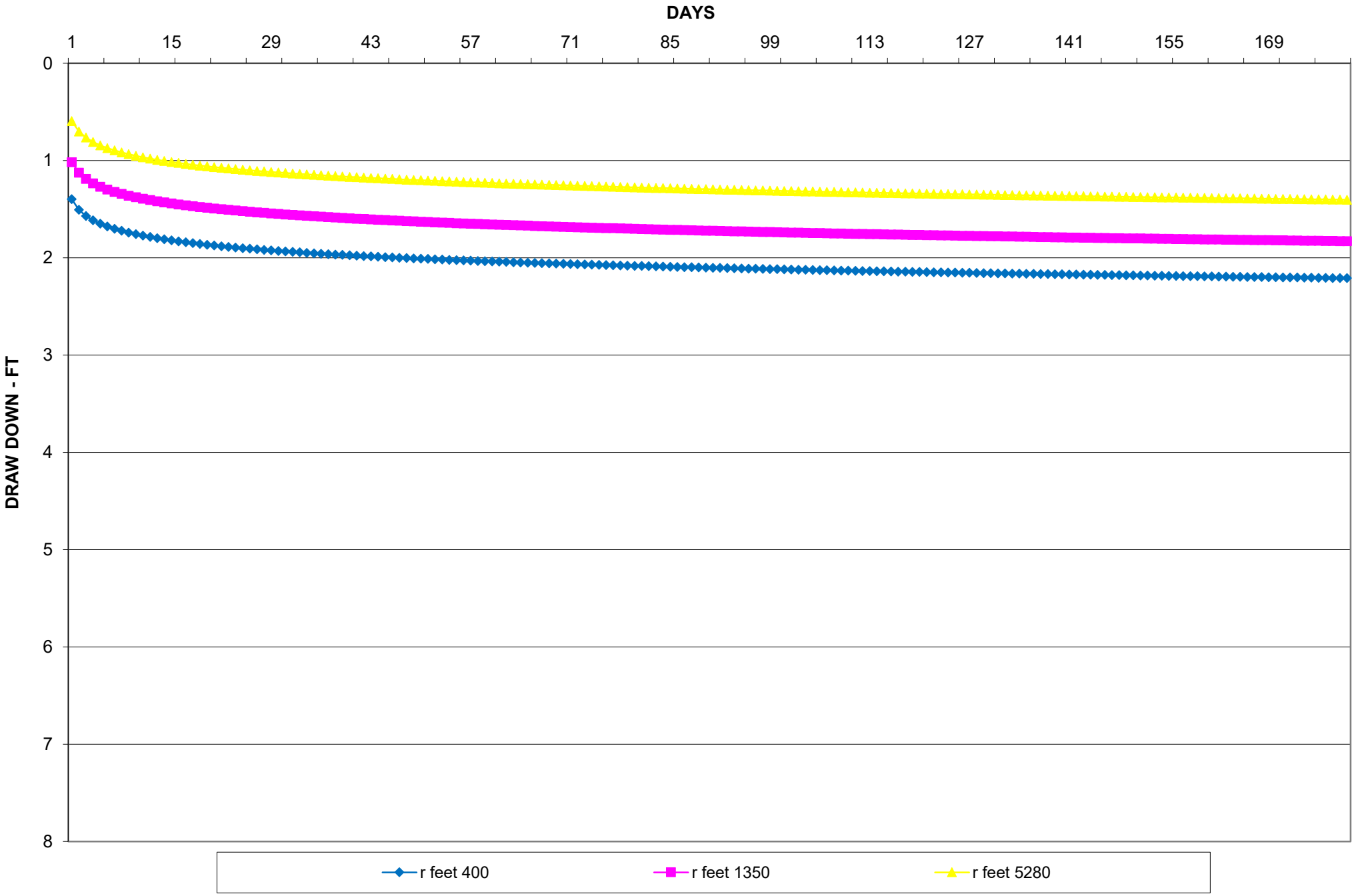
WELL-2
WELL DRAWDOWN THEIS ANALYSIS
SANHEDRIN WILLITS LOG YARD EXPANSION AREA
AUGUST 2023



WELL-3
WELL DRAWDOWN THEIS ANALYSIS
SANHEDRIN WILLITS LOG YARD EXPANSION AREA
AUGUST 2023



COMPOSITE (PROPOSED WELLS 1, 2, AND 3)
WELL DRAWDOWN THEIS ANALYSIS
SANHEDRIN WILLITS LOG YARD EXPANSION AREA
AUGUST 2023



APPENDIX J

Environmental Noise Assessment

Environmental Noise Assessment

Sanhedrin Timber Company Entitlements Project

Willits, California

BAC Job # 2023-159

Prepared For:

LACO Associates

Rebecca Dalske, Sr. Planner / Project Manager
1072 North State Street
Ukiah, CA 95482

Prepared By:

Bollard Acoustical Consultants, Inc.

Paul Bollard, President

March 11, 2024

CEQA Checklist

NOISE AND VIBRATION – Would the Project Result in:	NA – Not Applicable	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies?				**X**	
b) Generation of excessive groundborne vibration or groundborne noise levels?				**X**	
c) For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?	**X**				

Introduction & Project Description

The Sanhedrin Timber Company Entitlements Project (project) site is located at 23701 North North Main Street in Willits, California. The project proposes to expand an existing log yard operated by North Fork Lumber located adjacent to the south. A General Plan Amendment and Zone Change is required to change the project site zoning from commercial to industrial. Figures 1 and 2 show the project vicinity and proposed site plan, respectively.

The majority of log deliveries occur during the summer period, generally between the hours of 6 am and 5 pm. During this period, logs are *delivered to the Site* on approximately 50 to 60 incoming log trucks per day (up to a max of 65 to 70 incoming trucks per day). During the summer period, logs are *transported from the Site* on approximately 15 to 20 outbound lumber trucks per day, (up to a max of approximately 25 outbound trucks per day).

During the winter period of December 1 to March 30, hours of operation are typically from 7 am to 4 pm, up to five (5) days per week. Incoming log deliveries during the winter period are minimal, up to approximately 15 incoming log trucks per day in isolated circumstances. During the winter period, logs are transported from the Site on approximately 25 to 30 outbound lumber trucks per day. Intermittent truck trips for hauling bark are not significant enough to increase the daily truck averages over the incoming and outgoing load forecasts described herein.

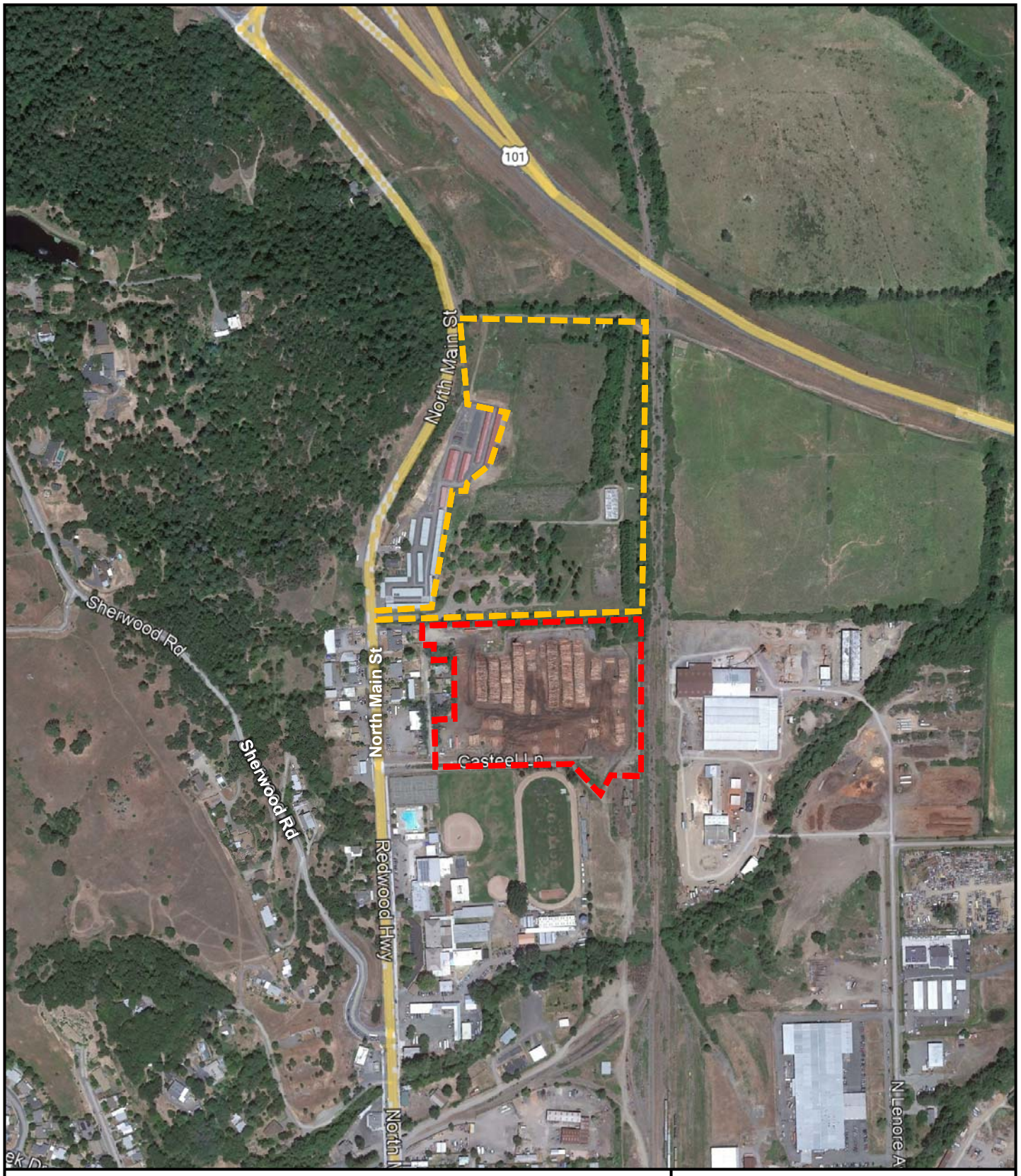
The forecasted truck trips and operating hours are consistent with the existing operation. With implementation of the proposed project, it is anticipated that truck trips per day to and from the expanded log yard will average towards the upper end of the ranges provided with more consistency.

Due to the Site's proximity to the Willits High School and existing residences (on land with Limited Industrial zoning designations), the City of Willits has requested that a noise study be prepared to evaluate if the proposed project would impact the existing noise environment at these sensitive receptors. In response to that request, Bollard Acoustical Consultants, Inc. (BAC) was retained by the project applicant to prepare this noise assessment.

The purposes of this assessment are to quantify the existing noise environment, to identify potential noise impacts at existing sensitive receptors in the project vicinity resulting from the project, and to develop appropriate noise mitigation measures where impacts are identified.

This assessment specifically focuses on the noise generation resulting from the extension of existing log storage operations occurring on the existing site to the south into the project site. Based on BAC's conversations with North Fork Lumber representative (Victor Hollister), it is BAC's understanding that the primary noise generation of the facility will be log and lumber trucks arriving at the site, being either loaded or unloaded with logs using a heel boom or front end log loader, and the trucks departing the site.

The project would not require substantive construction activities beyond some vegetation removal, utility work, site grading (including pond construction), and removal of dilapidated tennis courts and a storage building. Construction activities would be short-term in duration and would occur during daytime hours.



Legend

Existing Log Yard

Project Area

N

Scale (Feet)

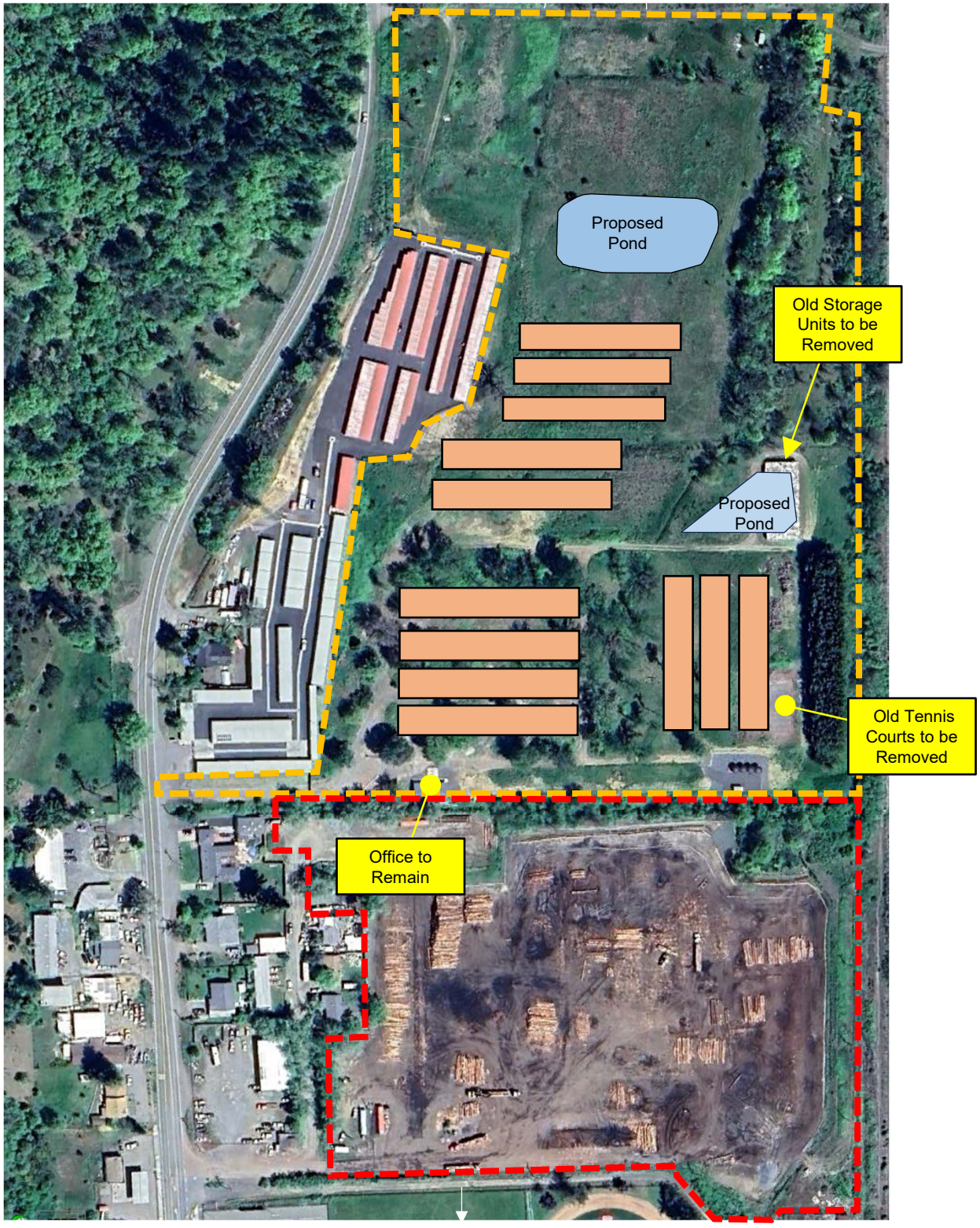
0 250 500

Project Area

Sanhedrin Timber Company
Entitlements Project
Willits, California

Figure 1

BOLLARD
Acoustical Consultants



Legend

- Project Area
- Existing Log Yard
- Log Storage Areas (approximate)

N

Scale (Feet)

0 150 300

Site Plan

Sanhedrin Timber Company
Entitlements Project
Willits, California

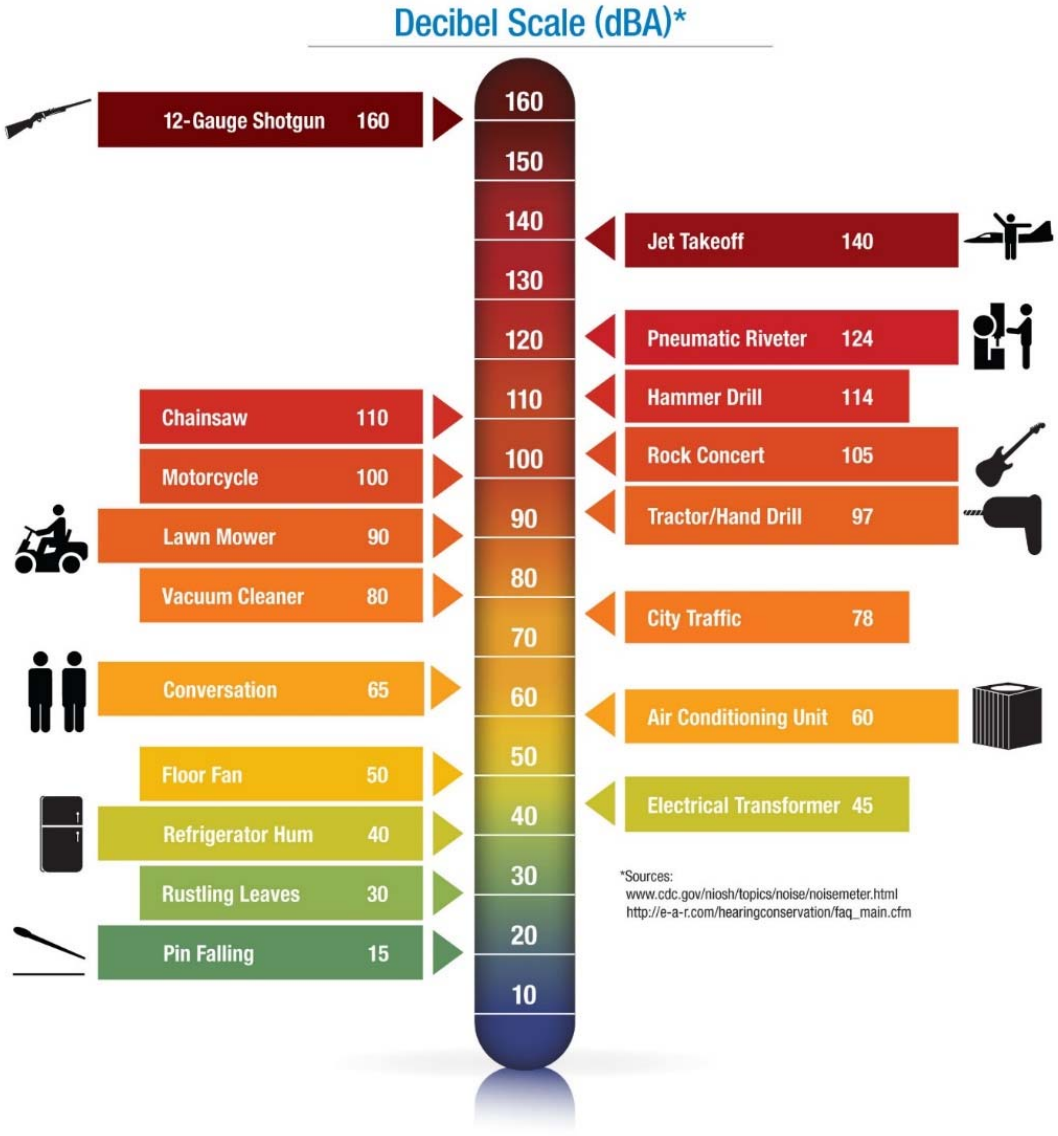
Figure 2

BOLLARD Acoustical Consultants

Noise Fundamentals and Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard, and thus are called sound. Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in levels (dB) correspond closely to human perception of relative loudness. Appendix A contains definitions of Acoustical Terminology used in this report. Figure 3 shows common noise levels associated with various sources.

Figure 3
Typical A-Weighted Sound Levels of Common Noise Sources



The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by weighing the frequency response of a sound level meter by means of the standardized A-weighing network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels in decibels.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}) over a given time period (usually one hour). The L_{eq} is the foundation of the Day-Night Average Level noise descriptor, L_{dn} or DNL, and shows very good correlation with community response to noise.

The Day-Night Average Level (DNL) is based upon the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10 p.m. to 7 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment. DNL-based noise standards are commonly used to assess noise impacts associated with traffic, railroad, and aircraft noise sources.

Vibration Fundamentals & Terminology

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities. In terms of RMS velocities, vibration levels below approximately 65 VdB are typically considered to be below the threshold of perception (FTA 2018).

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance.

Existing Ambient Noise and Vibration Environment

Existing Sensitive Land Uses in the Project Vicinity

Sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound or vibration could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise and/or vibration can be disruptive to these activities.

BAC utilized aerial imagery and site inspections to identify the locations of the nearest representative potentially affected sensitive receivers to the project area. It is important to note that it is not necessary to evaluate impacts at every residence or sensitive receiver in the project vicinity. Rather, sensitive receivers with similar noise exposure are typically grouped, with one or more representative receiver(s) selected to be applicable to the larger group. This approach was applied to this analysis.

Since sound decreases with distance, it is also normally unnecessary to model receivers at considerable distances from the project area, particularly if there are closer receivers in the same general direction which are to be analyzed. If no noise impacts are identified at closer receivers, it can normally be concluded that a similar finding would occur at the more distant receivers. Conversely, if impacts are identified at closer receivers, often times mitigation implemented for those closer receivers would benefit the more distant receivers as well, depending on the type of mitigation.

The sensitive land uses which would potentially be affected by the Project consist primarily of the interior and exterior areas of nearby residential uses, many of which are located in close proximity to the North Main Street, and the interior office and classroom areas of Willits High School (school playgrounds are not considered to be sensitive). Figure 4 shows the locations of representative sensitive receptors evaluated as part of this study.

Existing Ambient Noise Environment within the Project Vicinity

The existing ambient noise environment at the project site is defined primarily by local traffic on the North Main Street, by activities at Willits High School and existing operations at the North Fork Lumber Company log yard. To quantify the existing ambient noise level environment at the project site, BAC conducted a long-term (48-hour) noise level surveys at three locations on January 15th and 16th, 2024. The ambient noise survey locations are shown in Figure 4. Photographs of the noise survey locations are provided in Appendix B.

Larson-Davis Laboratories (LDL) precision integrating sound level meters were used to complete the ambient noise level surveys. The meters were calibrated immediately before and after use with an LDL Model CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

The long-term ambient noise level survey results are summarized in Table 1. The detailed results of the ambient noise survey are contained in Appendix C in tabular format and graphically in Appendix D.

Legend

- Overall Study Area (Existing Log Yard + Project)
- Short-Term Lumber Operations Noise Measurement Locations
- # Long-Term Ambient Noise Measurement Locations
- # Representative Sensitive Receptor Locations

N

Scale (Feet)

0 250 500

Noise Measurement and Sensitive Receptor Locations

Sanhedrin Timber Company Entitlements Project

Figure 4

BOLLARD Acoustical Consultants

Table 1
Summary of Long-Term Noise Survey Measurement Results[1]

				Average Hourly Noise Levels [dBA]			
				Daytime[3]		Nighttime[4]	
Site[2]	Description	Date	DNL [dBA]	Leq	Lmax	Leq	Lmax
A	North P/L of High School	1/15/2024	59	59	76	50	64
		1/16/2024	64	61	78	57	68
		Average	**62**	**60**	**77**	**54**	**66**
B	Entrance at North Main St	1/15/2024	51	50	67	43	63
		1/16/2024	54	54	70	45	63
		Average	**53**	**52**	**69**	**44**	**63**
C	Near North Proposed P/L	1/15/2024	76	67	72	69	72
		1/16/2024	74	67	74	68	71
		Average	**75**	**67**	**73**	**69**	**72**

Notes
1. Detailed summaries of the noise monitoring results are provided in Appendices C and D.
2. Long-term noise survey locations are identified on Figure 4.
3. Daytime hours: 7:00 a.m. to 10:00 p.m.
4. Nighttime hours: 10:00 p.m. to 7:00 a.m.

Source: Bollard Acoustical Consultants, Inc. (2024)

Table 3 indicates that the measured ambient noise conditions varied depending primarily on proximity to North Main Street, with DNL values ranging from 53 dBA to 75 dBA. Daytime average noise levels ranged from 52-67 dBA Leq with daytime maximum noise levels ranging from 69 to 77 dBA Lmax.

Existing Ambient Vibration Environment within the Project Vicinity

Operations at the existing log yard generate nominal levels of vibration in the immediate areas where the logs are being loaded and unloaded, but BAC staff observations indicated that those vibrations dissipate rapidly and were imperceptible at off-site locations. As a result, the baseline vibration environment at existing sensitive receptors in the immediate project vicinity is considered to be negligible.

Criteria for Acceptable Noise and Vibration Exposure

Standards for acceptable noise and vibration exposure in the City of Willits are contained within the City's General Plan and City Code. In cases where the General Plan or Code do not contain specific numerical standards for assessing project noise or vibration impacts, applicable federal criteria are applied.

State

California Environmental Quality Act (CEQA

The State of California has established regulatory criteria that are applicable to this assessment. Specifically, Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines are used to assess the potential significance of impacts pursuant to local General Plan policies,

Municipal Code standards, or the applicable standards of other agencies. According to Appendix G of the CEQA guidelines, the project would result in a significant noise or vibration impact if the following were to occur:

A. Generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

B. Generation of excessive groundborne vibration or groundborne noise levels?

C. For a project located within the vicinity of a private airstrip or 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, would the project expose people residing or working in the project area to excessive noise levels?

It should also be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. However, CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

CEQA criteria A requires that the evaluation of project impacts consider the increases in ambient noise levels which would result from a project. Because neither the City of Willits General Plan nor City Code contain specific numeric thresholds for use in evaluating impacts related to project noise increases, thresholds developed based on research conducted by the Federal Interagency Commission on Noise (FICON) are utilized. Those criteria are described below.

Federal Interagency Commission on Noise (FICON)

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of Project-related noise level increases. The criteria shown in Table 2 was developed by FICON as a means of developing thresholds for impact identification for Project-related noise level increases. The FICON standards have been used extensively in recent years in the preparation of the noise sections of Environmental Impact Reports that have been certified in many California cities and counties.

The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State of California. For example, the California Department of Transportation (Caltrans) requires a Project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers Project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a very conservative approach to impact assessment for this Project.

Table 2
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project (DNL)	Change in Ambient Noise Level Due to Project Resulting in Significant Impact
<60 dB	+5.0 dB or more
60 to 65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more[1]

Notes

5. It should be noted that FICONs Federal Agency Review of Selected Airport Noise Analysis Issues (1992) report does not identify a 1.5 dBA increase as a threshold of significance, but rather, an increase that warrants further analysis. However, for purposes of this analysis, a 1.5 threshold is utilized to assess the significance of Project-related noise increases at sensitive locations currently exposed to ambient noise environments exceeding 65 dB DNL.

Source: Federal Interagency Committee on Noise (FICON) research

Based on the FICON research, as shown in Table 2, a 5 dB increase in noise levels due to a Project is required for a finding of significant noise impact where ambient noise levels without the Project are less than 60 dB DNL. Where pre-Project ambient conditions are between 60 and 65 dB DNL, a 3 dB increase is considered the standard to determine significance. Finally, in areas already exposed to higher noise levels, specifically pre-Project noise levels in excess of 65 dB DNL, a 1.5 dB increase is considered to be the threshold of significance.

Because the project is not located in the vicinity of either public or private use airports, no impacts would be identified relative to CEQA criteria “C”.

Local

City of Willits General Plan Noise Element (1992)

The City of Willits General Plan Noise Element sets forth guidance in the form of policies and implementation measures for determining land use compatibility with respect to varying noise environments. The following applicable policies are contained within the City of Willits General Plan Noise Element:

Noise Policies

4.210 The City seeks to maintain ambient noise levels of 55 dBA CNEL in existing residential areas.

4.230 All noise sensitive land uses in areas with ambient noise levels in excess of 60 dBA shall require acceptable mitigation of noise impacts as a condition of approval.

4.240 Application processing procedures may require the submittal of appropriate acoustical data so that the noise impacts of proposed uses can be properly evaluated and mitigated.

4.250 Noise from all noise sources should be maintained at levels that will not adversely affect adjacent properties or the community, especially during the evening and early morning hours.

4.260 Noise created by temporary activities necessary to provide construction or required services should be permitted for the shortest duration possible and limited to time periods that will have the least possible adverse effect on surrounding land uses.

4.270 Uses should be located where they will be most acoustically compatible with elements of the man-made and natural environment.

Noise Implementation Measures

4.320 Utilize natural terrain to screen structures from major arterials or other noise sources.

4.330 Monitor known noise problems and evaluate complaints regarding new noise sources in order to develop the most practical solutions.

4.340 Should complaints regarding undesirable noise levels increase significantly, the City shall consider an ordinance providing for the control of excessive noise-generating activities.

4.360 Encourage the use of landscaping and vegetation as noise buffers.

City of Willits Zoning Code (1982)

The following applicable policies are contained within the City of Willits Zoning Code, Section 17.50.050 Performance of standard regulations:

The following performance standard regulations shall apply to all uses of property:

C. Noise. At the points of measurement specified in Section 17.50.040, subsections A and B, the maximum sound-pressure level radiated in each standard octave band by any use or facility (other than transportation facilities or temporary construction work) shall not exceed the values for octave bands lying within the several frequency limits given in Table 3 after applying the correction shown in Table 4. The sound-pressure level shall be measured with a sound level meter and associated octave band analyzer, conforming to standards prescribed by the American Standards Association. American Standard Sound Level Meters for Measurement of Noise and Other Sounds, Z24.3-1944, American Standards Association, Inc., New York, N.Y. and American Standard Specifications for an Octave Band Filter Set for the Analysis of Noise and Other Sounds, Z24.10-1953, American Standards Association, Inc., New York, N.Y., shall be used.

Table 3
City of Willits Zoning Code, Section 17.50.050 Table I

Frequency Range Containing Octave Bands in Cycles Per Second	Octave Band Sound-Pressure Level in Decibels re 0.0002 dyne/cm 2
20-300	60
300-2400	40
above 2400	30

Source: Willits Code of Ordinances, Zoning, Chapter 17.50, Table I.

If the noise is not smooth and continuous and is not radiated between the hours of 10 p.m. and 7 a.m., one or more of the corrections in Table 4 shall be applied to the octave band levels given in Table 3.

Table 4
City of Willits Zoning Code, Section 17.50.050 Table II

Type or Location of Operation or Character of Noise	Correction [dB]
1. Daytime operation only	+5
2. Noise source operate less than:	
a. Twenty percent of any one-hour period	+5
b. Five percent of any one-hour period (apply one of these corrections only)	+10
3. Noise of impulsive character, such as hammering	-5
4. Noise of periodic character, such as humming or screeching	-5
5. Property is located in one of the following zoning districts and is not within 500 feet of any R district:	
a. Any C district or M-L district	+5
b. Any A district or M-H district	+10

Source: Willits Code of Ordinances, Zoning, Chapter 17.50, Table II.

Because project operations reportedly occur primarily during daytime hours, the +5 dB correction to the Table 3 standards would apply per item 1 in Table 4. Because proposed project operations could occur more than 20% of any one-hour period, no offset to the Table 3 standards would be applied per item 2 in Table 4. Because existing project operations were not observed to generate impulsive sound or sounds consisting of screeching or humming, no offset to the Table 3 standards would be applied to the proposed project per items 3 or 4 in Table 4. Finally, because the existing residences located nearest to the project site are located within the Limited Industrial (ML) zoning district, a +5 dB offset would be applied per item 5 in Table 4. The resulting noise level standards would be the standards identified in Table 3 plus 10 dB.

Project Impacts and Mitigation Measures

Thresholds of Significance

Based on CEQA guidelines and adopted City of Willits General Plan and Municipal Code noise standards, noise impacts at noise-sensitive areas of existing uses in the project vicinity are considered significant if the following were to result from the project:

- Noise generated by proposed log yard operations would exceed 55 dB DNL at exterior activity areas of residential uses where baseline ambient conditions are currently below 55 dB DNL.
- proposed log yard operations would exceed 45 dB DNL within classrooms or other noise-sensitive interior spaces of the Willits High School.
- Increases in exterior ambient noise levels of 5 dBA or more where baseline ambient conditions at sensitive receptor locations are currently below 60 dB DNL.
- Increases in exterior ambient noise levels of 3 dBA or more where baseline ambient conditions at sensitive receptor locations are currently between 60 and 65 dB DNL.
- Increases in exterior ambient noise levels of 1.5 dBA or more where baseline ambient conditions at sensitive receptor locations are currently above 65 dB DNL.
- The noise level standards of Table 3 plus 10 dBA if ambient levels are below the Table 3 thresholds.
- Discernible vibration levels at off-site sensitive receptor locations.

Impact Evaluation

The proposed project would generate noise from the following sources: trucks arriving and departing the site, and log loading and unloading. These on-site noise sources are evaluated below.

Impact 1: Vibration generated by the project

Operations at the project site essentially consist of the loading of logging trucks with logs which have been stored at the project site or the unloading of logging trucks with logs which are to be stored at the project site. BAC staff conducted observations of such activities on January 15th, 2024. During that site visit, no significant sources of vibration were observed to be present and vibration levels at off-site locations were evaluated as being imperceptible during the log-loading operations. Because activities and equipment to be used at the proposed Sanhedrin Timber Company expansion site (project site) would reportedly be identical to operations currently occurring at the existing log yard operation to the south, vibration generated at the proposed expansion site are similarly predicted to be imperceptible at off-site sensitive receptor locations. As a result, this impact is considered ***less than significant***.

Mitigation for Impact 1: ***None Required***

Impact 2: Noise Generated during Logging Truck Loading and Unloading Operations and On-Site Circulation Relative to City of Willits Noise Standards.

BAC staff conducted a site visit and noise level measurements of existing logging truck loading operations and on-site truck circulation at the North Fork Lumber Company's existing log yard on January 15th, 2024. Equipment utilized for that noise survey was similar to that utilized for the ambient noise survey described previously in this report. Photographs A and B in Appendix B depict the noise survey locations during the truck loading operations.

The noise survey results indicate that the log-loading operations generated average and maximum noise levels of approximately 75 dBA Lmax and an average noise level of 62 dBA Leq at a reference distance of 100 feet from the loading operation. According to the Sanhedrin representative, the noise generation of the truck unloading operation is comparable to the noise generation of the truck loading operation as the same equipment is utilized for the same duration of time. Relative to the log loading operations, the noise-generation of the slow-moving, on-site truck circulation was essentially negligible.

The noise survey results were projected to the nearest sensitive receptor locations identified on Figure 4 using industry standard sound propagation algorithms (i.e., 4.5 dBA decrease in noise per doubling of distance for mobile noise sources and 6 dBA decrease per doubling of distance for stationary noise sources). Distances from the sensitive receptors to the nearest areas of the project site where operations would occur were scaled from aerial imagery. The resulting sound levels at the sensitive receptor locations are provided in Table 5.

Table 5
Predicted Project-Generated Noise Levels at Nearby Representative Sensitive Receptors
Sanhedrin Timber Company Entitlements Project – Willits California

Receptor	Distance to loading area	shielding	Leq	Lmax	DNL
1	1300	0	40	53	38
2	1400	0	39	52	37
3	300	-10	42	55	40
4	300	0	52	65	50
5	700	-10	35	48	33
6	1400	-5	34	47	32

Source: Bollard Acoustical Consultants, Inc. (BAC) 2024

As indicated in Table 5, noise generated by the project would be well below the City's 55-60 dB DNL range considered acceptable for residential development. In addition, average hourly (Leq) and maximum (Lmax) noise levels would be below sound levels generated by operations at the North Fork Lumber Company existing log yard due to the project site being generally farther from the existing residences than the current operations. Given the elevated ambient conditions in the project vicinity resulting from existing traffic on North Main Street, it is not feasible to assess compliance with the City's noise level standards contained within Table 3. Nonetheless, because project-generated noise levels would be below levels considered acceptable for residential and school uses, this impact is considered ***less than significant.***

Mitigation for Impact 2: ***None Required***

Impact 3: Noise Generated during Logging Truck Loading and Unloading Operations and On-Site Circulation Relative to Baseline Ambient Conditions.

The project-generated noise levels identified in Table 5 were compared against baseline ambient conditions at the nearest representative sensitive receptor locations to determine the extent by which the proposed project would result in adverse increases in ambient conditions at those residences. Baseline ambient conditions at each representative receptor location were computed using the noise survey results presented in Table 1 and adjusting those data based on the relative distances from those receptors to ambient noise sources. The project-generated increases in ambient noise levels at the nearest sensitive receptor locations are provided in Table 6.

Table 6
Predicted Project-Generated Noise Level Increase at Nearby Representative Sensitive Receptors
Sanhedrin Timber Company Entitlements Project – Willits California

	ambient			Project			Ambient + Project			Increase		
Receptor	Day Leq	Day Lmax	DNL	Day Leq	Day Lmax	DNL	Day Leq	Day Lmax	DNL	Day Leq	Day Lmax	DNL
1	67.0	73.0	75.0	39.7	52.7	37.7	67.0	73.0	75.0	0.0	0.0	0.0
2	53.5	59.5	61.5	39.1	52.1	37.1	53.6	60.2	61.5	0.2	0.7	0.0
3	66.0	83.0	68.0	42.5	55.5	40.5	66.0	83.0	68.0	0.0	0.0	0.0
4	60.0	77.0	62.0	52.5	65.5	50.5	60.7	77.3	62.3	0.7	0.3	0.3
5	69.3	86.3	71.3	35.1	48.1	33.1	69.3	86.3	71.3	0.0	0.0	0.0
6	66.0	83.0	68.0	34.1	47.1	32.1	66.0	83.0	68.0	0.0	0.0	0.0

Source: Bollard Acoustical Consultants, Inc. (BAC) 2024

As indicated in Table 6, the project-generated increase in baseline ambient noise exposure is predicted to be negligible at the nearest noise-sensitive receptors. Specifically, the project-generated noise level increases are predicted to range from 0.0 to 0.7 dBA at the nearest sensitive receptors, which is well below the project thresholds of significance. This result is based on the fact that the project site is located further from the nearest sensitive receptor locations and due to elevated ambient conditions caused by traffic on North Main Street. Because the project-generated noise level increase is predicted to be less than 1.5 dBA at the nearest sensitive receptors, this impact is considered to be ***less than significant.***

Mitigation for Impact 3: ***None Required***

Conclusions and Recommendations

This analysis concludes that noise and vibration generated by the proposed project operations would be satisfactory relative to applicable City of Willits and CEQA noise criteria. As a result, no noise or vibration mitigation measures would be warranted for this project provided operations at the project site would be similar to operations currently occurring at the existing facility to the south.

This concludes BAC's analysis of the potential noise impacts related to the Sanhedrin Timber Company Entitlements Project in Willits California. Please contact BAC at (530) 537-2328 or paulb@bacnoise.com if you have any comments or questions regarding this report.

Appendix A
Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.

Legend

A Site ST-1 Facing North

B Site ST-2 Facing North

C Site ST-3 Facing South

D Site ST-4 Facing North

Noise Survey Photographs

Sanhedrin Timber Company
Entitlements Project
Willits, California

Appendix B-1

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Legend

A Site LT-1 Facing South

B Site LT-2 Facing West

C Site LT-2 Facing South

D Site LT-3 Facing South

Noise Survey Photographs

Sanhedrin Timber Company
Entitlements Project
Willits, California

Appendix B-2

BOLLARD Acoustical Consultants

Appendix C-1
Long-Term Ambient Noise Monitoring Results, Site A
Sanhedrin Timber Entitlements Project - Willits, California
Monday, January 15, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	43	60	39	37
1:00 AM	39	54	37	36
2:00 AM	43	64	38	37
3:00 AM	43	67	38	36
4:00 AM	43	63	39	37
5:00 AM	47	66	41	37
6:00 AM	59	78	47	43
7:00 AM	64	84	61	52
8:00 AM	61	80	58	51
9:00 AM	64	84	56	49
10:00 AM	62	82	54	49
11:00 AM	61	83	51	46
12:00 PM	58	83	51	46
1:00 PM	52	74	49	45
2:00 PM	56	86	49	45
3:00 PM	52	65	50	45
4:00 PM	54	72	50	45
5:00 PM	53	67	51	47
6:00 PM	54	82	49	46
7:00 PM	50	68	47	44
8:00 PM	51	77	44	40
9:00 PM	45	62	42	39
10:00 PM	46	63	45	40
11:00 PM	43	60	40	38

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	64	45	59	59	39	50
Lmax (Maximum)	86	62	76	78	54	64
L50 (Median)	61	42	51	47	37	40
L90 (Background)	52	39	46	43	36	38

Computed DNL, dB	59
% Daytime Energy	93%
% Nighttime Energy	7%

GPS Coordinates
39°25'6.97"N
123°21'12.27"W

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Appendix C-2
Long-Term Ambient Noise Monitoring Results, Site A
Sanhedrin Timber Entitlements Project - Willits, California
Tuesday, January 16, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	42	62	38	37
1:00 AM	41	61	38	37
2:00 AM	42	64	38	37
3:00 AM	44	74	38	37
4:00 AM	43	63	39	37
5:00 AM	56	78	43	38
6:00 AM	66	89	59	50
7:00 AM	63	84	57	50
8:00 AM	69	100	59	54
9:00 AM	64	86	60	49
10:00 AM	63	85	54	48
11:00 AM	54	70	51	48
12:00 PM	60	82	54	50
1:00 PM	58	78	53	50
2:00 PM	59	84	55	51
3:00 PM	58	74	56	53
4:00 PM	58	79	55	51
5:00 PM	60	89	53	50
6:00 PM	53	68	51	49
7:00 PM	53	73	50	48
8:00 PM	51	66	49	45
9:00 PM	48	61	45	42
10:00 PM	47	63	43	41
11:00 PM	46	62	42	40

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	69	48	61	66	41	57
Lmax (Maximum)	100	61	78	89	61	68
L50 (Median)	60	45	53	59	38	42
L90 (Background)	54	42	49	50	37	39

Computed DNL, dB	64
% Daytime Energy	82%
% Nighttime Energy	18%

GPS Coordinates
39°25'6.97"N
123°21'12.27"W

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Appendix C-3
Long-Term Ambient Noise Monitoring Results, Site B
Sanhedrin Timber Entitlements Project - Willits, California
Monday, January 15, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	42	62	40	37
1:00 AM	38	55	37	35
2:00 AM	42	65	38	36
3:00 AM	41	65	37	34
4:00 AM	43	64	39	36
5:00 AM	44	67	39	36
6:00 AM	47	67	41	37
7:00 AM	51	75	44	41
8:00 AM	50	67	44	41
9:00 AM	52	69	46	42
10:00 AM	50	68	45	41
11:00 AM	50	67	44	40
12:00 PM	50	66	46	42
1:00 PM	50	67	45	42
2:00 PM	51	71	46	42
3:00 PM	50	67	46	42
4:00 PM	51	75	46	41
5:00 PM	50	66	47	44
6:00 PM	50	63	48	45
7:00 PM	48	65	47	42
8:00 PM	46	64	43	39
9:00 PM	44	63	41	38
10:00 PM	43	63	40	38
11:00 PM	41	60	38	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	52	44	50	47	38	43
Lmax (Maximum)	75	63	67	67	55	63
L50 (Median)	48	41	45	41	37	39
L90 (Background)	45	38	41	38	34	36

Computed DNL, dB	51
% Daytime Energy	89%
% Nighttime Energy	11%

GPS Coordinates
39°25'12.94"N
123°21'14.61"W

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Appendix C-4
Long-Term Ambient Noise Monitoring Results, Site B
Sanhedrin Timber Entitlements Project - Willits, California
Tuesday, January 16, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	40	62	36	34
1:00 AM	39	62	35	34
2:00 AM	40	63	35	33
3:00 AM	39	64	35	33
4:00 AM	41	62	36	33
5:00 AM	46	65	38	34
6:00 AM	49	68	43	40
7:00 AM	52	72	48	42
8:00 AM	51	69	47	43
9:00 AM	51	75	45	42
10:00 AM	50	67	45	41
11:00 AM	52	67	48	42
12:00 PM	58	82	54	49
1:00 PM	54	71	50	47
2:00 PM	55	71	52	47
3:00 PM	56	69	54	51
4:00 PM	56	75	54	52
5:00 PM	56	74	54	52
6:00 PM	55	69	52	51
7:00 PM	52	65	51	50
8:00 PM	49	63	50	48
9:00 PM	49	64	48	47
10:00 PM	47	63	48	46
11:00 PM	47	59	48	46

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	58	49	54	49	39	45
Lmax (Maximum)	82	63	70	68	59	63
L50 (Median)	54	45	50	48	35	39
L90 (Background)	52	41	47	46	33	37

Computed DNL, dB	54
% Daytime Energy	93%
% Nighttime Energy	7%

GPS Coordinates
39°25'12.94"N
123°21'14.61"W

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Appendix C-5
Long-Term Ambient Noise Monitoring Results, Site C
Sanhedrin Timber Entitlements Project - Willits, California
Monday, January 15, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	71	72	71	68
1:00 AM	70	72	70	67
2:00 AM	70	72	70	65
3:00 AM	69	71	69	64
4:00 AM	69	71	69	65
5:00 AM	68	71	68	64
6:00 AM	67	74	67	64
7:00 AM	62	70	60	53
8:00 AM	57	70	55	49
9:00 AM	60	71	60	56
10:00 AM	63	70	63	58
11:00 AM	64	72	64	61
12:00 PM	64	71	64	61
1:00 PM	63	69	62	60
2:00 PM	63	71	63	61
3:00 PM	63	71	63	61
4:00 PM	61	70	61	58
5:00 PM	69	74	69	62
6:00 PM	72	75	72	71
7:00 PM	72	75	72	70
8:00 PM	71	73	71	69
9:00 PM	71	73	71	69
10:00 PM	71	72	71	69
11:00 PM	70	72	71	69

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	72	57	67	71	67	69
Lmax (Maximum)	75	69	72	74	71	72
L50 (Median)	72	55	65	71	67	69
L90 (Background)	71	49	61	69	64	66

Computed DNL, dB	76
% Daytime Energy	50%
% Nighttime Energy	50%

GPS Coordinates
39°25'25.54"N
123°21'11.92"W

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Appendix C-6
Long-Term Ambient Noise Monitoring Results, Site C
Sanhedrin Timber Entitlements Project - Willits, California
Tuesday, January 16, 2024

Hour	Leq	Lmax	L50	L90
12:00 AM	70	72	70	66
1:00 AM	69	72	69	67
2:00 AM	69	71	69	65
3:00 AM	68	71	68	65
4:00 AM	67	70	67	63
5:00 AM	66	70	66	62
6:00 AM	66	72	66	63
7:00 AM	64	75	63	57
8:00 AM	59	71	58	54
9:00 AM	61	70	61	57
10:00 AM	63	70	63	60
11:00 AM	63	72	61	55
12:00 PM	65	89	60	56
1:00 PM	60	69	59	54
2:00 PM	60	71	58	53
3:00 PM	60	71	59	55
4:00 PM	60	79	59	55
5:00 PM	67	72	65	58
6:00 PM	72	76	72	68
7:00 PM	72	78	72	70
8:00 PM	71	74	72	68
9:00 PM	70	73	70	63
10:00 PM	69	72	70	65
11:00 PM	68	71	69	63

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	72	59	67	70	66	68
Lmax (Maximum)	89	69	74	72	70	71
L50 (Median)	72	58	63	70	66	68
L90 (Background)	70	53	59	67	62	64

Computed DNL, dB	74
% Daytime Energy	56%
% Nighttime Energy	44%

GPS Coordinates
39°25'25.54"N
123°21'11.92"W

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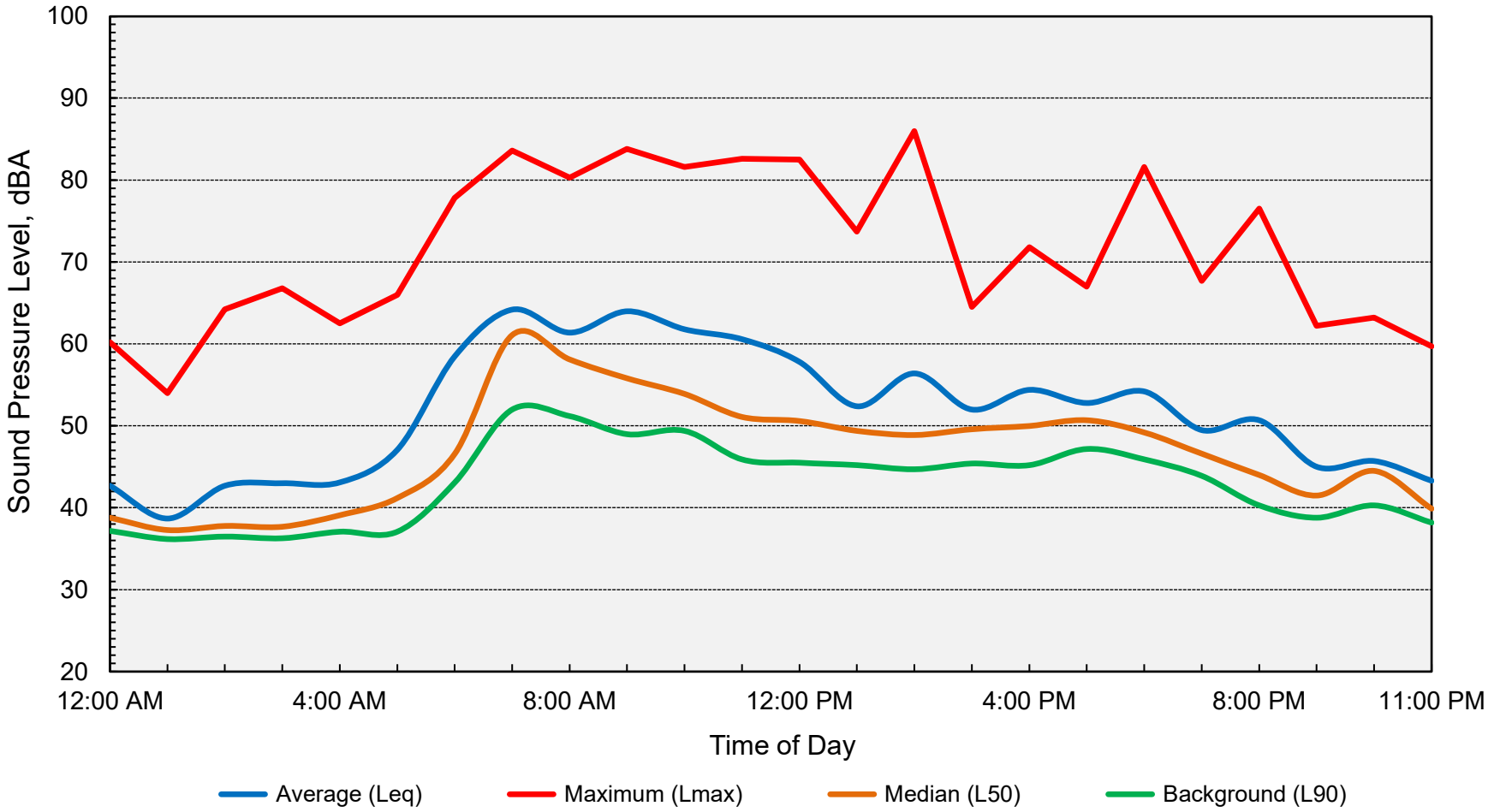
Appendix D-1
Long-Term Ambient Noise Monitoring Results, Site A
Sanhedrin Timber Entitlements Project - Willits, California
Monday, January 15, 2024



Computed DNL = 59 dB

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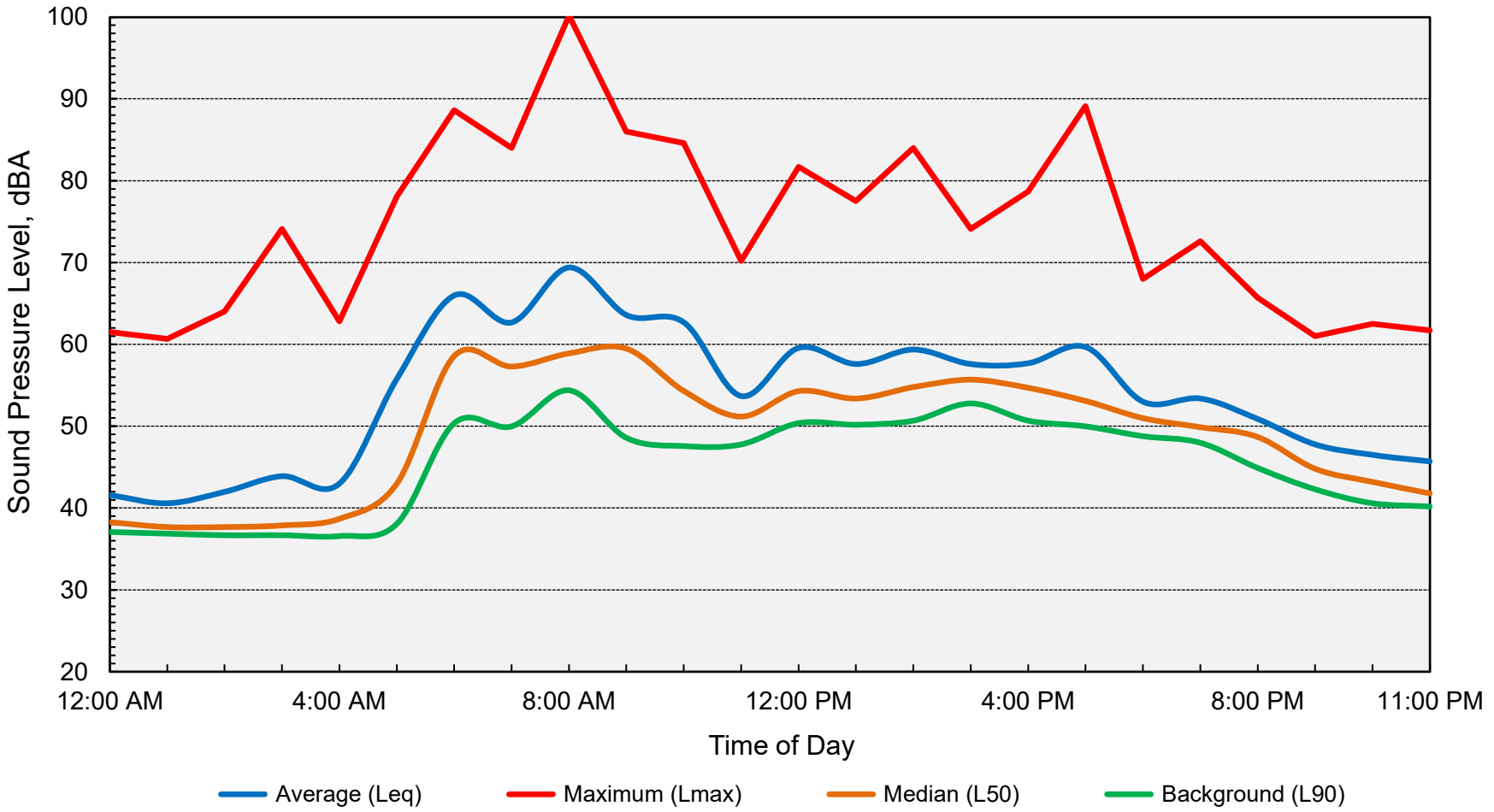
Appendix D-2
Long-Term Ambient Noise Monitoring Results, Site A
Sanhedrin Timber Entitlements Project - Willits, California
Tuesday, January 16, 2024



Computed DNL = 64 dB

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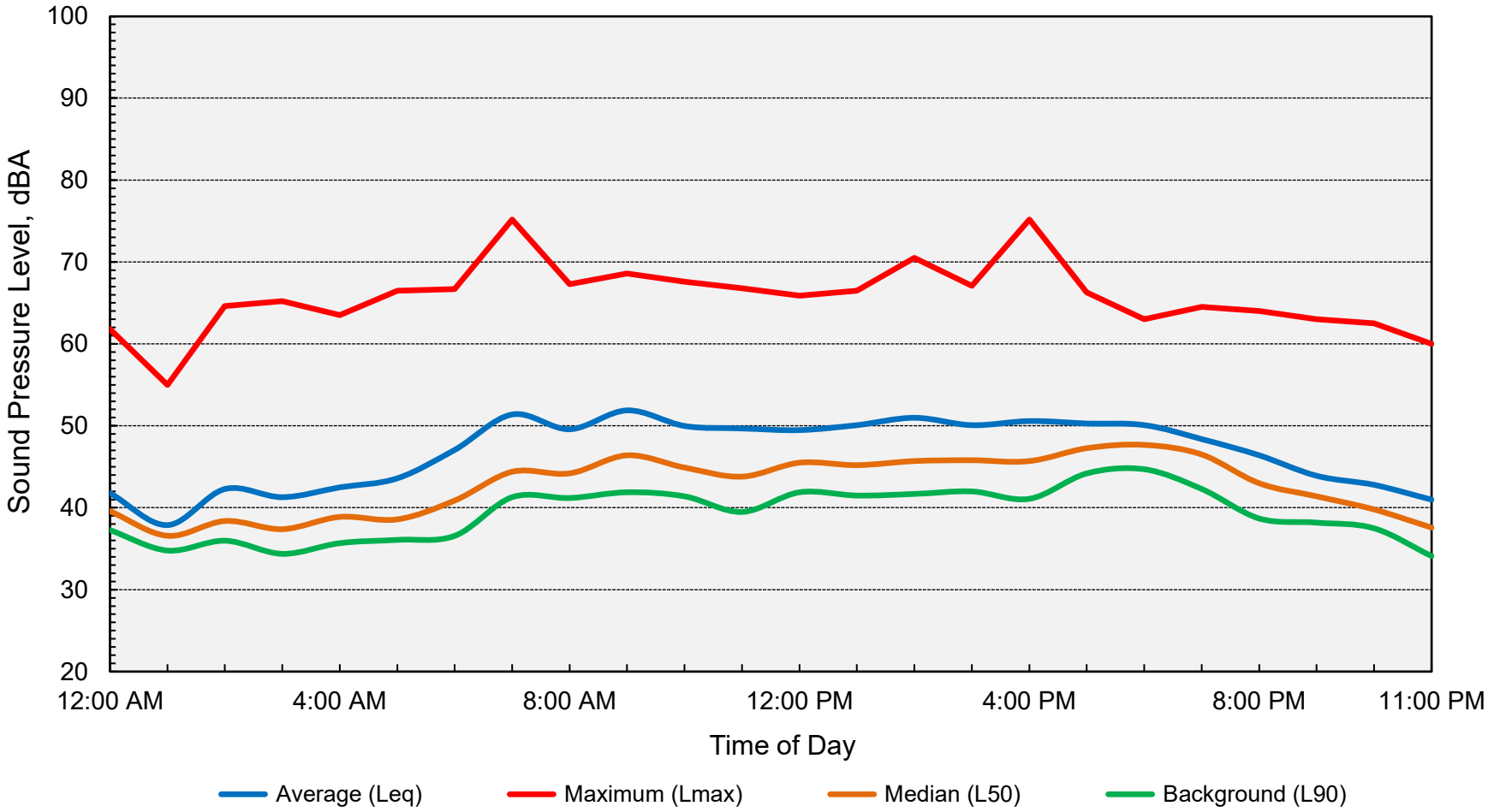
Appendix D-3
Long-Term Ambient Noise Monitoring Results, Site B
Sanhedrin Timber Entitlements Project - Willits, California
Monday, January 15, 2024



Computed DNL = 51 dB

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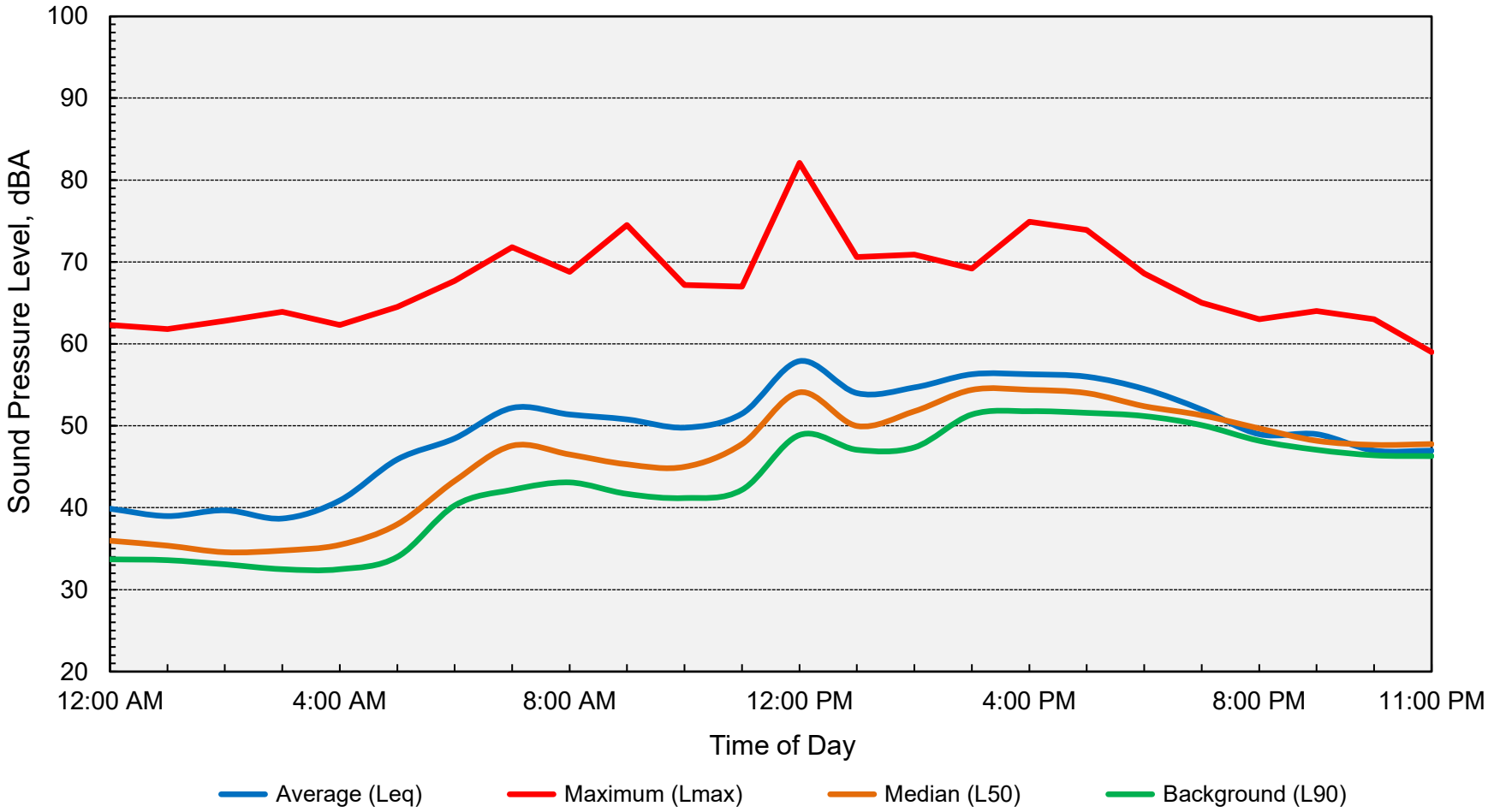
Appendix D-4
Long-Term Ambient Noise Monitoring Results, Site B
Sanhedrin Timber Entitlements Project - Willits, California
Tuesday, January 16, 2024



Computed DNL = 54 dB

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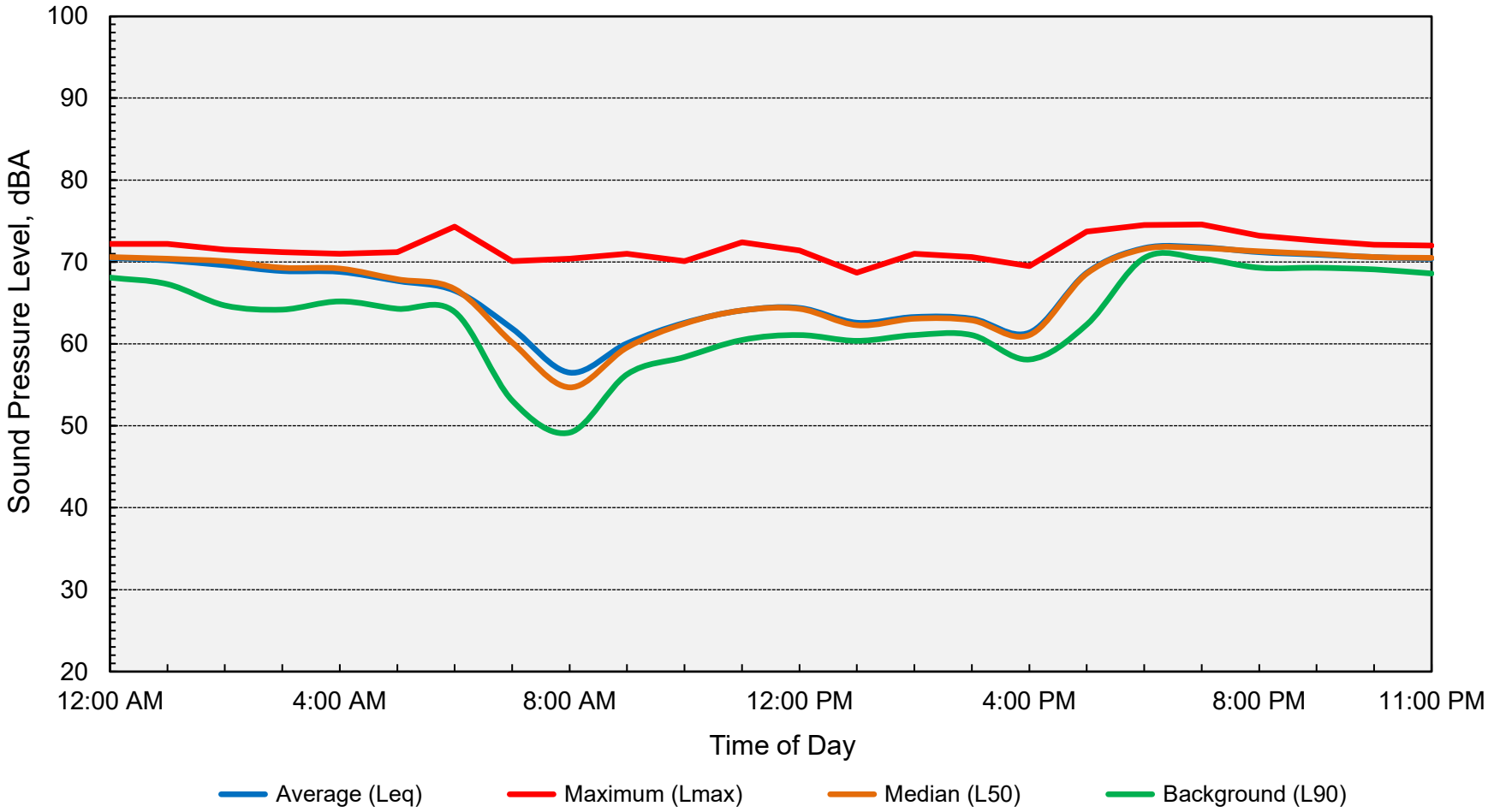
Appendix D-5
Long-Term Ambient Noise Monitoring Results, Site C
Sanhedrin Timber Entitlements Project - Willits, California
Monday, January 15, 2024



Computed DNL = 76 dB

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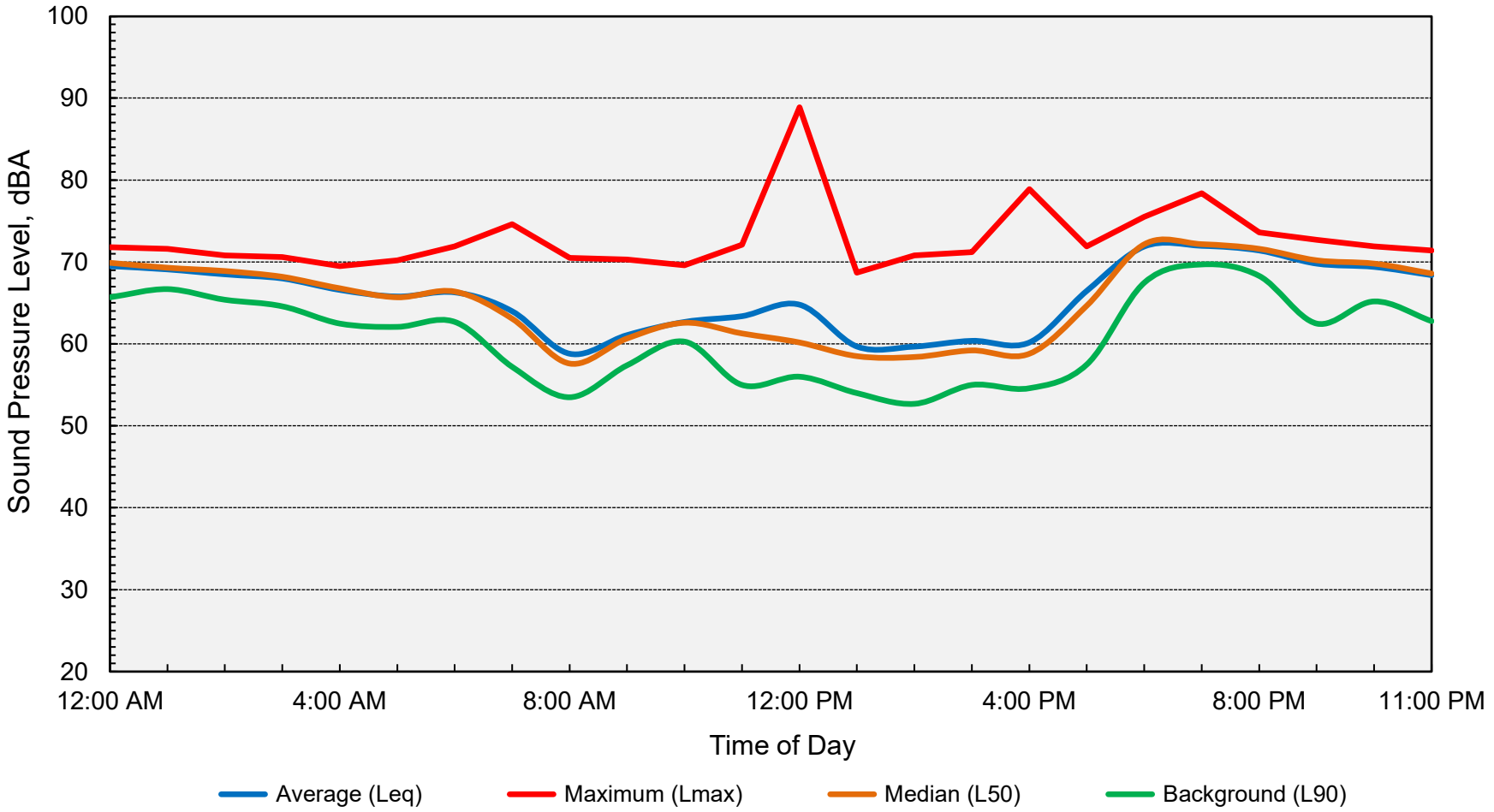
Appendix D-6
Long-Term Ambient Noise Monitoring Results, Site C
Sanhedrin Timber Entitlements Project - Willits, California
Tuesday, January 16, 2024



Computed DNL = 74 dB

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APPENDIX K

Little Lake Fire District Correspondence

LITTLE LAKE FIRE DISTRICT

74 E. Commercial St.● Willits, California 95490
(707)459-6271 ● Fax (707)459-7898

William Carter
Fire Chief

March 17, 2023

Subject: Hydrant Flow and Pressure Requirements

To: Russell Dorval

Thanks for getting back to us. Chief Carter had prepared calculations aimed at the best outcome for fire suppression efforts. I will also answer some of your questions regarding the last email to Chief Carter dated 03/06/2023 at 1447 hours.

- The Flow calculations would require a minimum of 1500 (gpm) at 20 psi.
- The duration would be approximately 6 hours.
- The type of hydrant would need to be a standard municipal hydrant with (2) 2 ½ inch outlets and (1) 4 ½ inch outlet. Hydrant spacing would need to be 600 feet apart.

Additionally it is essential that backup power to the fire pump be in place in case of an unforeseen power outage and or local PSPS (Public Safety Power Shutoff). The backup power would need to guarantee the fire pump would remain in proper working order for fire suppression efforts.

Sincerely,

Eric Alvarez,
Fire Marshal / Division Chief