Notice of Preparation of a Draft Environmental Impact Report and Public Scoping Session for the Anderson Valley Community Services District Wastewater Collection, Treatment and Disposal Project and Drinking Water System Project

Date:	October 10, 2018
To:	State Clearinghouse, Mendocino County Clerk, Responsible Agencies, Trustee Agencies, Federal Agencies, and Interested Parties
Contact and where to submit comments:	Joy Andrews, General Manager Anderson Valley Community Services District P.O. Box 398 Boonville, CA 95415 (707) 895-2075 water.avcsd@gmail.com
NOP Public Comment Period:	October 10, 2018, to November 9, 2018
Public Scoping Meeting:	November 1, 2018 7:00 p.m. Mendocino County Fairgrounds, Dining Hall 14400 Highway 128 Boonville, CA

Purpose of the Notice of Preparation

Consistent with the California Environmental Quality Act (CEQA), the Anderson Valley Community Services District (AVCSD) is the Lead Agency and is in the process of preparing a Draft Environmental Impact Report (Draft EIR) for the potential development of: 1) a wastewater collection, treatment and disposal system for portions of the Boonville community and 2) a community drinking water system for portions of the Boonville community. The proposed projects are located along Highway 128 in Anderson Valley, Mendocino County. Additional project information can be found at the following website: http://www.avcsd.org/watersewer.php. The proposed wastewater and drinking water service areas are shown on the attached exhibit.

An EIR is a public, informational document used in the planning and decision making process to assess a project's potential environmental effects related to the planning, construction, and operation of a project. An EIR also identifies ways (mitigation measures) to reduce or avoid possible environmental impacts and discloses significant environmental impacts that cannot be avoided, growth-inducing impacts, and significant cumulative impacts of past, present and reasonably foreseeable future projects. An EIR must also identify a range of reasonable alternatives that meet the basic objective of the project and identify the environmentally superior alternative. The EIR for the project will be prepared in accordance with the provisions of the CEQA and the State CEQA Guidelines.

This Notice of Preparation (NOP) is a request for comments from the public and public agencies regarding the scope and content of the environmental information to be included in the project's EIR. Public agencies

are invited to submit comments that are germane to each agency's statutory responsibilities relative to the proposed project.

Project Location

The project location includes a portion of the rural unincorporated community of Boonville in Mendocino County. Boonville lies in Anderson Valley, located approximately 115 miles north of San Francisco and 40 miles southeast of Fort Bragg. State Route 128 bisects the community, running northwest-southeast through Anderson Valley. The total area of Boonville is approximately 5.5 square miles. The attached exhibit shows the project's regional location and proposed service areas within the project area.

Public Scoping Session

In order to assist the public and public agencies in evaluating the project, a Scoping Session will be held on November 1, 2018, at 7:00 p.m. at the Mendocino County Fairgrounds, Dining Hall, 14400 Highway 128, Boonville. Staff from the AVCSD and AVCSD's consultant will attend the session to receive public input, answer questions about the proposed project and provide available information. Information obtained in the scoping session will be used to further develop the scope and content of the EIR.

Public Comment Period for the NOP

The public comment period for the NOP will close at 5:00 p.m. on November 9, 2018. The public will also have the opportunity to comment on the Draft EIR after it is published and will receive a Notice of Availability once it is available. Please send written comments to Joy Andrews, General Manager, Anderson Valley Community Services District, P.O. Box 398, Boonville, CA 95415 or by email to water.avcsd@gmail.com. If you have any questions about this NOP, please contact Joy Andrews, (707) 895-2075.

Background

The Anderson Valley Community Services District (AVCSD) provides municipal services (primarily fire) for the Boonville area of Anderson Valley. While the charter of the AVCSD includes the possibility of developing water or sewer services, it has historically not been provided. Currently, all properties in the project area use domestic wells and septic systems for water supply and wastewater disposal, respectively. Contamination of wells in the community due to proximity to septic systems and other adjacent land uses has spurred AVCSD to investigate potential installation of a community wastewater treatment and disposal system and a water system. Either project could be implemented independently or together.

The AVCSD Board authorized the creation of a citizen committee (the Boonville Planners) to encourage public input and participation in the planning process and assist in the dissemination of project-related information throughout the community. Based on Boonville Planners' input, the AVCSD has proposed a wastewater service area that encompasses the densely populated areas in Boonville along Highway 128 including the business district and fairgrounds. That water service area could extend northerly to include the elementary school. AVCSD has obtained a planning grant from the State of California for preparation of a water and wastewater feasibility report and environmental review for the project.

The population of Boonville was reported as 1,035 in the 2010 United States Census. The local economic industries in the area are tourism and agriculture, with local agriculture mainly comprised of wine grape cultivation. From the 2015 American Community Survey (issued by the United States Census Bureau), the median household income was $37,865 (+/- $8,055) and the mean household income was $54,329 (+/- $18,185). Boonville has an assortment of land uses including residential, commercial, offices, lodging, and other community services.

A NOP was issued for the wastewater system project in September 2017. It was subsequently determined that the two projects should be assessed in one environmental document. This October 2018 NOP is for both the water and wastewater projects.

Existing Wastewater Disposal (Septic Systems)

The residents and commercial entities within the proposed service area currently rely on septic tanks and leach fields on each property for on-site treatment and disposal of wastewater. Many of these systems are non-compliant with current State and County sewage disposal standards due to setbacks, condition and lack of maintenance (owners of the properties are responsible for maintaining their own septic systems). Deficiencies in the systems can lead to disposal of untreated or undertreated waste.

Additionally, proper disposal of septic tank effluent requires leach fields to be appropriately sized, requiring a certain land area depending on the volume of effluent and soil properties. Many of the parcels in downtown Boonville are not large enough to meet current septic system regulations, as described below. The soil type in the community is typically sandy loam. Setback requirements from wells and other restrictions also complicates compliance with current standards.

Existing Drinking Water System

The project area include several small existing public water systems and many private wells. The existing, active public water systems with DDW public water system identification numbers are: Meadow Estates Mutual Water Company (PWS No. 2300506); Anderson Valley High School (PWS No. 2300764); Anderson Valley Elementary School (PWS No. 2300770); and, Anderson Valley Brewing Company (PWS No. 2300901). The majority of the parcels (approximately 80 percent) in Boonville are served by private wells and not an existing public water system. Generally, the supplies derived from private wells in the area are not subject to any treatment, leaving users at risk from groundwater contamination.

Need for Project

Residences and businesses in the Boonville area currently obtain domestic water from individual wells and dispose of wastewater in individual septic systems, typically on small lots. Many of the domestic wells are located very close to on-site sewage disposal systems and appear to be under the influence of subsurface-applied septic tank effluent. Current Mendocino County setback requirements for wells are 50 feet from a septic tank and 100 feet from a leach field making it impractical if not it impossible to meet setback requirements on smaller lots. A 1974 sanitary survey of the central Boonville area by the County of Mendocino Division of Environmental Health found that 11 percent of the properties surveyed had evidence of sewage on the ground surface, 9.6 percent had wells within 30 feet of septic systems, and 27.4 percent had wells between 30 and 50 feet from septic systems (37 percent of the parcels had wells within 50 feet of a septic system)..

The private wells and public water systems in the proposed service areas have several documented water quality problems, the most prominent being iron, manganese, nitrate, and bacteria. Water sampling conducted by AVCSD from wells within the proposed sewer district in winter of 2016 revealed significant drinking water contamination. Out of 23 samples, 70% contained E. coli, 30% had nitrate levels over 10 mg/L nitrate as N, and 61% had concentrations greater than 8 mg/L nitrate as N. The California Code of Regulations Title 22 maximum contaminant level (MCL) permitted in a public water system for nitrate is 10 mg/L nitrate as N. Detections of fecal coliform (E. coli) are not permitted, as they indicate the presence of fecal matter from a warm-blooded animal in the water supply.

Proposed Project

The project is intended to provide wastewater service to central Boonville to eliminate continued use of septic systems in that area and water service to provide safe drinking water to residents within the service areas.

Wastewater System

The project includes wastewater collection, treatment and disposal elements that are described further below. Wastewater service would be provided to residential and non-residential uses within the proposed service area. There are a total estimated 139 connections in the service area—96 single-family residential connections, 6 multi-family residential connections, and 37 non-residential connections. The service area population is estimated to be 460 people. Average dry weather wastewater flows are expected to be approximately 60,000 gallons per day (gpd), but increase to 90,000 gpd during major events located at the County Fairgrounds (normally three times per year).

The proposed wastewater system includes several alternative methods for collection, treatment, disposal of solids produced during treatment and disposal of effluent. Alternatives include the following:

Treatment Component	Alternatives
Collection	Gravity Sewer
	Pressure Sewer with Grinder Pumps
	Pressure Sewer with Septic Tank Effluent Pumps
Influent Treatment	Aerobic Membrane Bioreactor (MBR)
Solids Disposal	Onsite disposal
	Offsite disposal
Effluent Disposal	Subsurface Disposal
	Spray field Disposal

Wastewater Collection

There are two main types of sewer conveyance systems being considered in the project's feasibility study: a gravity sewer system and a pressure sewer system. Under the gravity alternative, wastewater would flow from individual lots through a pipeline via gravity to a main municipal pump station that would pump wastewater to the treatment plant. There are two sub alternative pressure systems: a septic tank effluent pumping (STEP) system; and, a grinder pump pressure system. Each of the pressure systems collect wastewater at individual lots and pump the wastewater into the pressured collection pipeline with individual pumping systems. The STEP system would require periodic pumping of solids from the associated septic tanks at each property while the grinder pump would not. Wastewater would be conveyed from individual lots to the wastewater treatment facility for treatment under all alternatives. The pressure sewer with grinder pump system is the preferred collection system alternative. Stream crossings would utilize existing bridges to cross the stream with ductile iron pipes. Approximately 8,600 feet of collection system would be installed for the pressure system.

Wastewater Treatment

It is anticipated that wastewater would be treated with a small package-type treatment system to tertiary treatment levels. The package treatment system would include two components, an approximately 12-foot by 35-foot flow equalization tank and an approximately 12-foot by 60-foot treatment system. The treatment plant site would be approximately one acre since it will include other components. The wastewater treatment plant is anticipated to be located on APN 029-460-02 just southerly of the airport. Treatment will include disinfection for alternatives that involve surface disposal. The installation of the

wastewater treatment system entails developing the treatment system site and constructing improvements such as an access road, a storage/office/lab building, electrical and potable water utilities, influent flow meter vault, a screenings handling pad, pads for the equalization and treatment systems, and placement and connection of the treatment system tanks.

Wastewater Solids Disposal

Solids handling (the storage and disposal of solids produced during treatment of wastewater) is a key component of the wastewater treatment process. It is estimated that approximately 20 dry tons of biosolids would be produced on annual basis. If disposed of locally, biosolids would be mixed with green waste and produce approximately 240 cubic yards of compost per year. The offsite disposal alternative would consist of hauling liquid sludge to a processing facility for treatment and disposal, requiring approximately 40 8,000-gallon truck trips per year.

Wastewater Disposal

The project includes disposal of the treated wastewater. Several methods and locations for disposal will be evaluated during the feasibility study. Areas being considered for disposal include the airport and APN 029-460-02 to the south of the airport.

Wastewater disposal would be accomplished with either overland disposal by irrigation or a centralized leach field. The centralized leach field would be similar to leach fields used for individual septic tanks but sized for all of the wastewater generated within the service area. Subsurface disposal of effluent will require approximately 22 acres. Overland disposal would utilize above ground spray irrigation for disposal on approximately 26 acres. Overland disposal is the preferred wastewater disposal alternative.

Wastewater Storage

Overland disposal can only occur during the dry season and therefore would require an approximately 13 million gallon storage pond to hold treated effluent over the rainy season. The storage pond is proposed to be located on APN 029-460-02. A synthetic or clay liner would need to be constructed to line the pond to achieving the minimum permeability rate of 10-6 cm/second required by the North Coast Regional Water Quality Control Board. In addition, due to its proximity to the Boonville airport, the Federal Aviation Administration requires that the pond be equipped with a floating cover in order to prevent attracting wildlife.

Drinking Water System

The proposed drinking water system would include a series of well fields, each associated with its own water treatment facilities, a distribution piping network and a site housing two water storage tanks. The proposed water service area is a long, narrow band that runs along both sides of State Route 128 through Boonville proper and both sides of Anderson Valley Way northwesterly to the location of the Boonville Elementary School. Several alternative water service areas have been defined for inclusion in the EIR. The largest service area is included here.

Drinking Water Distribution

The majority of the proposed water connections are located on the main roads. The distribution system would be a tree-like system configuration with a transmission main feeding a number of smaller diameter dead-end distribution mains and service connections. The transmission main would consist of a larger diameter pipe (12-inch) running from the potential water storage tank site on Hutsell Road to SR 128 and continuing north along the highway. Smaller diameter piping (6 and 8-inch) would be used for side streets. Approximately 32,000 linear feet of water main would be installed (including well, treatment and storage lines). Hydrants would be spaced approximately 500 feet apart with a maximum of 250 feet from any point on the street to a hydrant.

There are several creek crossings associated with the water system. Most would be accomplished by hanging the pipelines from existing bridges or by directional drilling under the channel. The water and wastewater lines would be valved on each side of the creek and water/sewer separation requirements would be maintained.

Drinking Water Source and Treatment

A secure water source of approximately 120 gpm (that includes a ten percent contingency allowance) would be required to satisfy the estimated maximum day demand of 152,000 gallons for the largest proposed service area. Additionally, community public water systems using only groundwater are required to have at least two approved sources. The system must also be able to meet its maximum day demand with the highest-capacity source offline. As the project would be considered a community public water system, it would need to meet these requirements. Due to groundwater availability limitations in the area, the groundwater would be derived from approximately four well fields distributed around the community. Each well field would include between one and four wells.

Based on a review of water quality data from the existing public water systems, an iron and manganese removal system will likely need to be installed for most potential groundwater sources. An iron and manganese removal system would likely consist of chemical pre-oxidation with either chlorine or potassium permanganate followed by filtration. A post-filtration disinfection system would also be provided if chlorine was not used in the pre-oxidation process to provide 4-log virus inactivation (where required due to alternate well construction) and ensure a disinfectant residual is present in the distribution system (mains, tanks, etc.) to prevent bacteriological contamination.

The four well fields would include a small treatment building to serve each facility. Raw well water would be pumped into the treatment facility for treatment based on well water quality at that site. Treated drinking water would then be pumped into the water distribution system. Potential well fields include the following:

Well Field	Description
Anderson Valley Elementary School	The existing wells would be inspected, wells test pumped and facilities upgraded, as required.
Meadow View Estates	Up to four new wells would be developed on properties in the Meadow View Estates area, including private parcels, to supplement existing wells operated by the Meadow View Estates Water Company and the Anderson Valley Wellness Center.
West Central Boonville	Approximately four wells would be developed in east Boonville near the wastewater treatment facility, separated from the proposed wastewater treatment and storage facilities by a minimum of 100 feet, consistent with water quality regulations.
Lambert Lane	Approximately three wells would be utilized or developed in this area.
Anderson Valley Way	One well would be developed in this area. This well field is being considered only in the event that production from the other well fields is not sufficient to meet the minimum production requirement.

Drinking Water Storage

The system would need at least 170,000 gallons of storage for domestic purposes. With the inclusion of fire storage volume to supply proposed fire hydrants, the total storage volume required would be 290,000 gallons. A potential gravity tank site has been identified on APN 029-170-18 outside the proposed service areas on Hutsell Road during a review of the terrain surrounding the southerly end of the proposed distribution system. Two tanks would be provided for redundancy and to facilitate maintenance.

Potential Environmental Impacts

The potential for environmental impacts will need to be identified and evaluated before any of the proposed project or potential alternatives are approved. AVCSD has elected to proceed directly to preparing a Draft EIR and not prepare an initial study, as allowed by the CEQA Guidelines (14 CCR 15063).

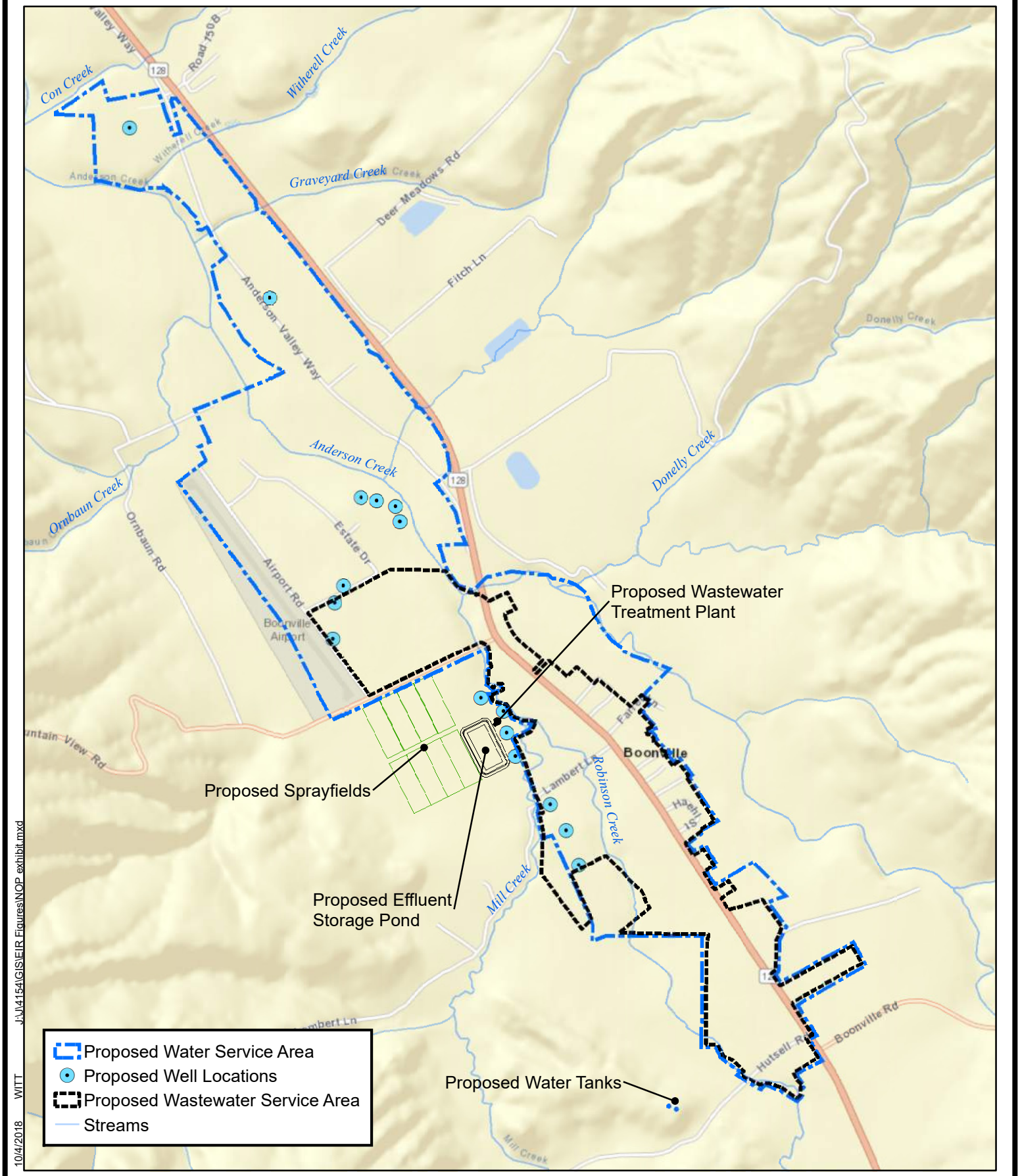
The EIR for the project will provide a clear statement of the environmental impacts associated with the construction and operation of each project alternative considered by the decision makers, responsible and trustee agencies under CEQA, and the public. Specific areas of analysis will include: Aesthetics; Air Quality; Agriculture and Forest Resources; Biological Resources; Cultural and Paleontological Resources; Geology and Soils; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning; Noise; Population and Housing; Public Services/Utilities; Recreation; Tribal Cultural Resources; and, Transportation/Traffic.

Growth Inducement Potential

In 2015, Mendocino County conducted a build-out analysis for Boonville that estimated the maximum build-out of parcels if public utility services (water and/or sewer) were available. With public utilities, the minimum residential lot size requirements could be reduced from the current lot size of 40,000 square feet (sf) to 12,000 sf if water or sewer were available or to 6,000 sf if both services were available. With all lots subdivided to the smallest possible lot size, the number of dwelling units could theoretically increase from 174 units to approximately 813 or 1,441 units, based on one or both services being present. This estimate is the theoretical maximum build-out potential of Boonville parcels based on County evaluation but would require rezoning the community and is therefore not anticipated to occur. Potential funding options for this project typically only permit up to a ten percent allowance to be added to facility capacities to account for uncertainties associated with the planning process and incidental growth. With a ten percent allowance, the estimated population that could be served would be approximately 22 additional residents in the proposed service area. Additional capacity would be provided for the fairgrounds and a similar ten percent increase for commercial uses in the service area.

Other Projects

There are no known projects in the Boonville area that would impact the proposed project.



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Projection: Lambert Conformal Conic
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WASTEWATER AND WATER SERVICE AREAS
NOTICE OF PREPARATION

ANDERSON VALLEY COMMUNITY SERVICES DISTRICT
OCTOBER 2018