



Anderson Valley Community Service District *Proposed Wastewater Project Site Selection* **Summary Report** November 2023

I. Background:

Anderson Valley Community Service District (AVCSD) is located in Boonville, a census designated place in Northern California approximately 60 miles northwest of the City of Santa Rosa and 12 miles southwest of the town of Ukiah. The population of Boonville was 1,018 at the 2020 census.

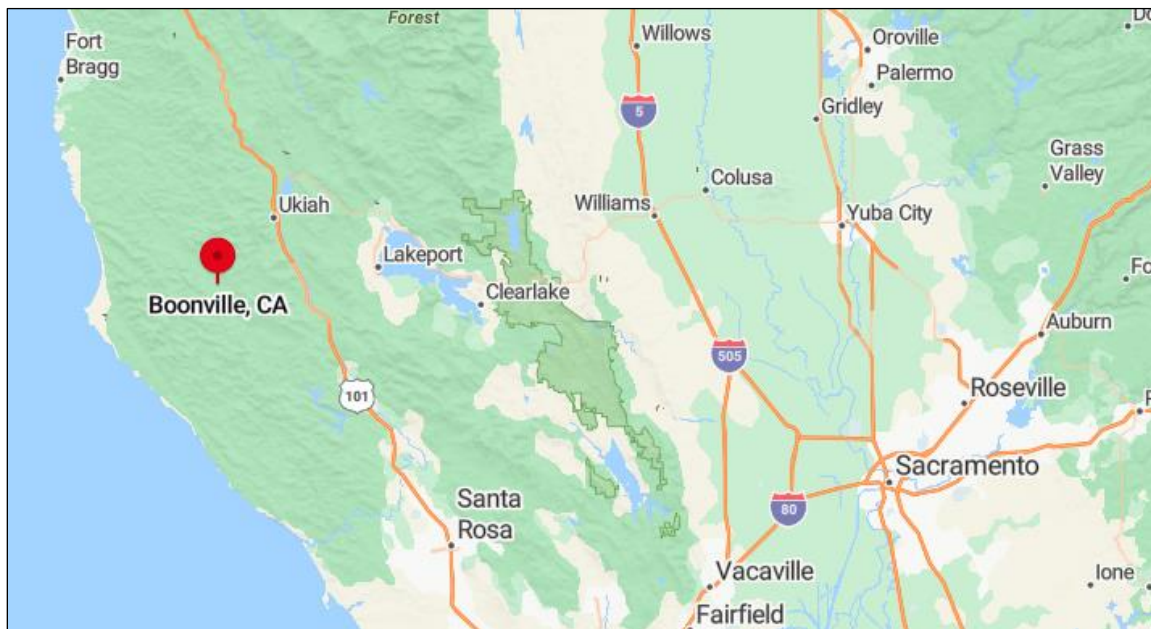


Figure 1: Location Map of Boonville, CA.

In 1974, due to periodic outbreaks of hepatitis in the area, the County of Mendocino Department of Public Health (Health Department) completed a property survey in Boonville to determine if septic system effluent issues were contributing to the spread of disease. The Health Department inspected properties for visible signs of sewage surfacing, sought information from residents about any back-ups in the buildings, and identified wells located between 30' and 50' from septic systems. Historically, the Health Department has classified a community with greater than 5% of residences reporting wastewater disposal problems as a “problem area”. The Health Department visited a total of 146 dwellings and businesses located between Ukiah-Boonville Road and Anderson Creek on both sides of Highway 128 and found that 135 of the units were occupied and of those, 65.1% reported problems with the septic system and 27.4% of the properties had wells located greater than 30' but less than 50' from the septic system.

In many cases the septic systems were nearing the end of their useful life, and the lot sizes prohibit space for a standard replacement leach field. When a septic system fails in these

circumstances, the only alternatives that protect public health are engineered or involve complicated treatment which makes them prohibitively expensive for homeowners. Boonville has been the only community of its size within the county and only one of four communities in the northern district of the state without a municipal wastewater treatment system since the 1980's. For these reasons, the State Water Resource Control Board Division of Financial Assistance (SWRCB DFA) identified Boonville as a community eligible for technical assistance and financial assistance.

In 2016, a blind water quality analysis of samples drawn from residential wells in the densest housing areas revealed alarming levels of E. coli and nitrates in 23 of the 24 wells tested. These findings confirmed that a public health risk still existed.

II. Technical Assistance Overview:

In 2015, AVCSO secured a \$500,000 planning grant for planning and construction of a public wastewater system and hired Brelje & Race Consulting Engineers (BRCE) to manage the planning process including engineering design and environmental review.

The proposed wastewater treatment plant technology includes a Membrane Bioreactor (MBR). Similar MBR systems are in use at Silver Oak Winery, Coppola Winery, Tolowa Dee Ni' Tribe (formerly Smith River), Cher-A-Heights, Trinidad and Healdsburg. This type of system produces a high-quality effluent that is suitable for agricultural and landscape irrigation. Since this is an aerobic system, odor is not an issue with effluent.

Pressurized, seamless piping will preclude inflow and infiltration during high groundwater events. Each parcel is designed with a grinder so the parcel owner can expand living facilities, which are currently limited by county code. The treatment plant will be sized based upon estimated flows of 250 gallons per day per household connection and additional flows for commercial sites based on usage type.

In 2017, the environmental review process began with scoping and Notice of Preparation of Environmental Impacts in compliance with the California Environmental Quality Act (CEQA) at public meetings on October 12, 2017, and November 1, 2018 (Exhibit 1).

Rural Community Assistance Corporation (RCAC) began assisting the community under contract from the SWRCB to provide outreach and community engagement in relation to the proposed project. To ensure the CSD and community of Boonville succeed in their drinking water and wastewater project efforts, RCAC was tasked to assist in the process and guarantee transparency through communication with and integration of all the potentially affected stakeholders. RCAC was also tasked with facilitation of networking opportunities and to function as a neutral party among all stakeholders.

After preliminary evaluation of the project, BRCE identified the need for additional planning funding and an amendment request was submitted to SWRCB DFA for the planning financing agreement. Additional design work was needed to add grinder pumps, address the

disposal of biosolids and sludge, and evaluate potential capacity issues. AVCS D raised concern that the planned wastewater treatment capacity may not meet the future need to develop empty lots, derelict and burned buildings, as well as interest in building ADUs (granny units).

III. Site Selection:

The proposed project boundary would extend from Hutsell Road northerly to the Mountain View Road intersection area, including 99 residential connections, 34 commercial connections, including the fairgrounds, high school, and health center. The project requires all parcels within the boundary to connect (Exhibit 2). There were eleven sites that were initially reviewed as potential locations for the proposed system (Exhibit 3). However, due to parcel size, proximity to private wells, stigmas surrounding sewage treatment or refusal from property owners, a final site was not identified. By 2020, the environmental impact report process was stalled until definitive treatment and disposal site alternatives could be identified.



Figure 2: Location map of initial eleven sites reviewed as potential locations.

In May 2020, the AVCS D board sent out letters (Exhibit 4) to several Boonville parcel owners notifying them of the interest in potentially siting the wastewater treatment plant on their property. AVCS D held a public meeting on December 3, 2020, describing the wastewater project (Exhibit 5).

By January 2021, there had been considerable effort to identify possible parcels with several factors of importance under consideration and owner buy-in as a paramount concern. Soil composition, steep slope or variability of terrain, existing waterways and drinking water wells, and high flood potential are some of the considerations that limited the possibilities. Competing development priorities also proved problematic in identifying a site for the treatment plant. BRCE and AVCS D began to reevaluate potential parcels identified in the past and by May 2021, three locations were identified in order of preference:

1. Valley Views Parcels, 13855 Highway 128 et al
2. Anderson Valley High School
3. Mendocino County Fairgrounds

On May 25, 2021, the Rural Community Assistance Corporation (RCAC) under the Proposition 1 Comprehensive Assistance to Tribal and Small Systems Project Agreement Number D1612801, Assistance Request 6082, facilitated an online public meeting that included a presentation describing the proposed system, a panel discussion and wastewater video tour with Tolowa Dee Ni' Tribe wastewater operators (Exhibit 6).

The typical seasonal ground water level data could not be captured in field studies due to the drought, therefore BRCE worked with a geographical engineer to look for existing well data. AVCS D scheduled a site visit of the Valley Views property and the Anderson Valley High School sites with the interested parties, including staff from the North Coast Region District 1 Water Quality Control Board.

In May 2022, BRCE presented to the SWRCB, a list of eleven disposal sites with hydraulic soil groups from A to D (Exhibit 7). The presentation described the spray irrigation site evaluations for sites 1 and 3, and different suitability factors of site potential use.

The Valley Views site is comprised of eight parcels:

- APN 029-070-29 (5.45 acres)
- APN 029-070-30 (5.77 acres)
- APN 029-070-27 (1.20 acres)
- APN 029-070-28 (2.38 acres)
- APN 029-090-29 (3.86 acres)
- APN 029-090-25 (7,840 sf)
- APN 029-100-14 (10,980 sf)
- APN 029-100-15 (1.50 acres)

A licensed appraiser was hired, and a land appraisal report was provided to the eight parcel owners comprising the Valley Views site, SWRCB DFA, and Mendocino County Planning staff. The value of the Valley Views 20.75-acre parcel came in at \$1,396,000 (Exhibit 8). The

SWRCB DFA approved the eligibility of all the parcels in Valley Views site area which cleared the way to continue negotiations with the owners.

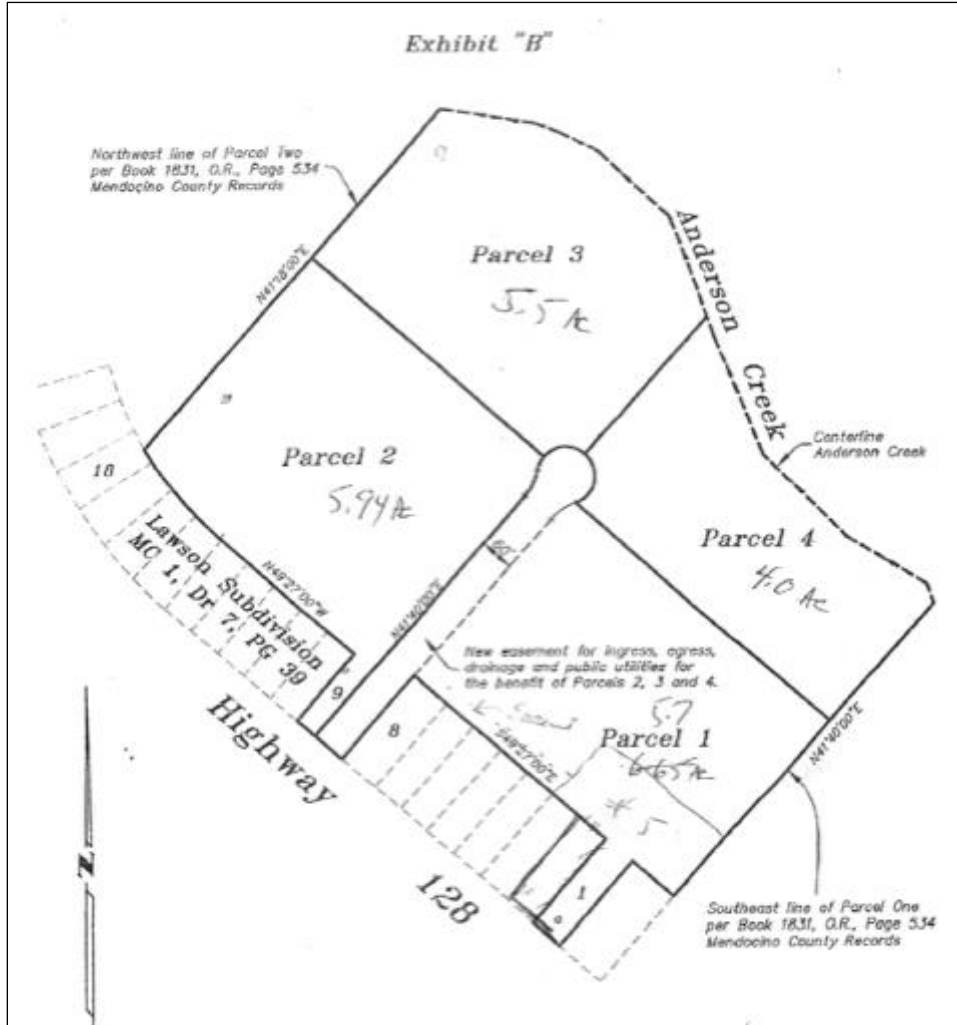


Figure 3: Parcel map of Valley Views site area

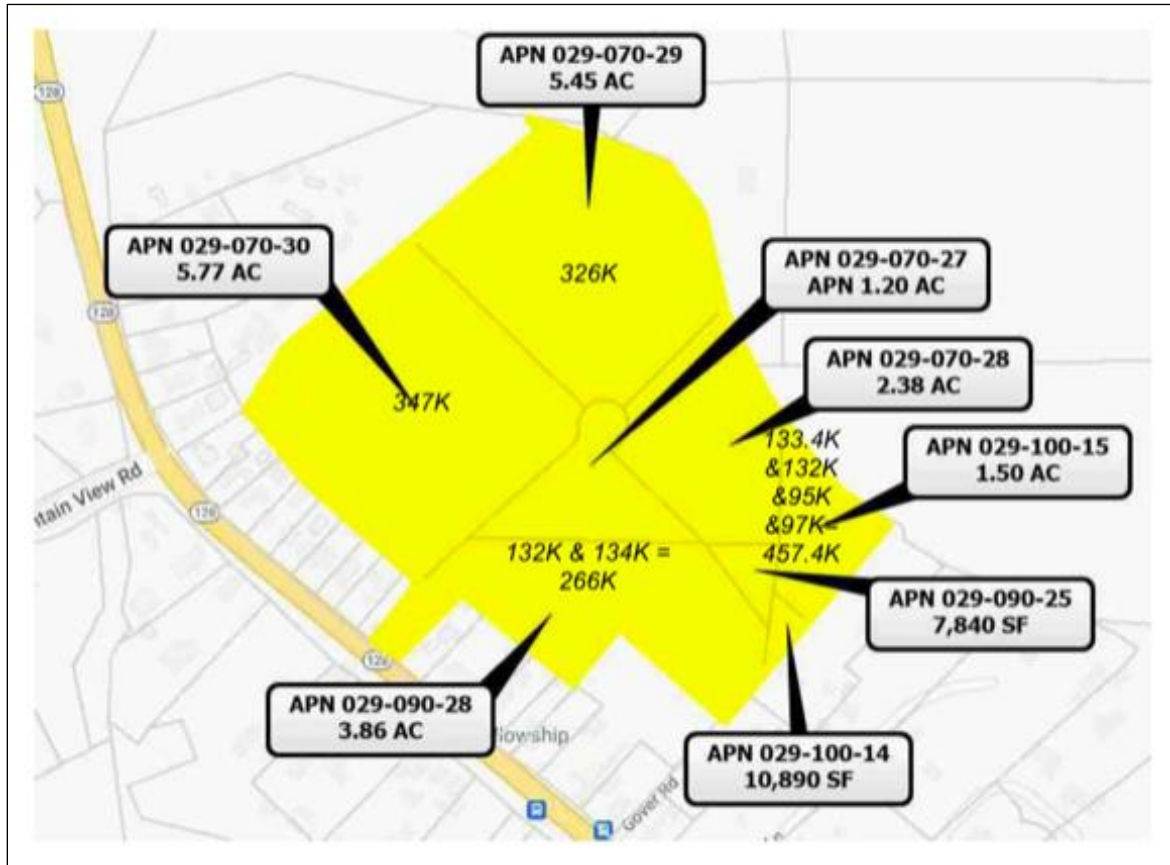


Figure 4: Valley Views parcel locations with appraisal amounts

As groundwater flows into the valley floor for quite some time after rains, late May/ early June were the dates to get the highest readings of “seasonal high ground water.” BRCE subcontracted with a hydrogeologic company and soil testing at the Valley Views site began May 30-31, 2023, for the “free boring” wells, which were set up for monitoring the groundwater. The bored soil samples were sent to a lab for percolation tests and the study results sent to the State for their concurrence as to suitability of the proposed site. On July 6, 2023, BRCE reported the positive preliminary results about the level of the groundwater. The site data showed ground water levels ranged from 11-19’ which indicated there was sufficient depth to groundwater for the leach areas.

In September 2023, the soils analyses reports indicated that site soil permeability did not align with the designed leach field size. Permeability is significant for sizing the leach field so an expansion will be needed from the original 2.5-acre area. AVCS D was advised to purchase as much land as possible with the justification of the soils analysis showing the project needs more land acquisition than originally projected.

IV. Next steps:

The next steps are for BRCE to finalize the assessment of potential sites for the wastewater treatment plant, complete the CEQA process, perform a rate study, conduct a Proposition 218 hearing, activate the district's wastewater service powers through LAFCO, and secure funding to begin construction.

The owners of the Valley Views parcels have agreed to the purchase amount and are aware of the timeframe needed for AVCSO to execute the construction funding agreement and obtain funds to purchase the property.

BRCE has sourced a new 'MBR package plant' company in California – Cloacina. They recommend the company's use of stainless-steel components as they will require less maintenance because they won't have to be coated or protected from rust.

BRCE is developing 10% plans and specifications under the planning grant. The remaining design work is anticipated to be funded under the construction financing agreement with an estimated timeframe of approximately six months for completion after notice to proceed. Full construction bid documents will be produced and the project will be put out to bid according to required procedures.

AVCSO continues to hold public outreach meetings at the Boonville Fire House on the first Thursday of every month at 10:30 am. The meetings are attended by BRCE and other interested parties to provide updates, answer questions, and engage the public regarding the proposed project.

ATTACHMENTS:

Exhibit 1: Notice of Preparation of Environmental Impacts 10/12/17 and 11/01/18

Exhibit 2: Boundary Map of Proposed Wastewater Project

Exhibit 3: List of Eleven Potential Project Location Sites

Exhibit 4: Letters of Interest

Exhibit 5: Public Meeting Transcript 12/03/20

Exhibit 6: Public Meeting Presentation Slides 05/25/21

Exhibit 7: Potential Disposal Site Map with Hydraulic Soil Groups A to D

Exhibit 8: Valley Views Parcels Appraisal Report