

CALAVERAS COUNTY WATER DISTRICT

120 Toma Court □ San Andreas, CA 95249 □ (209) 754-3543 □ www.ccwd.org

REQUEST FOR PROPOSALS (RFP)

FOR ENGINEERING SERVICES TO UPDATE THE ARNOLD SEWER MASTER PLAN

CALAVERAS COUNTY WATER DISTRICT (CCWD)

Issue Date: August 12, 2025

Proposal Due Date: October 9, 2025

1. INTRODUCTION AND BACKGROUND

Calaveras County Water District (CCWD) is soliciting proposals from qualified engineering firms to update the Arnold Sewer Master Plan, originally prepared in 2005 by HDR. Since then, the District has expanded its service area to include the Avery and Millwoods communities, upgraded various system components, and initiated improvements to the Arnold Wastewater Treatment Facility (WWTF) under USDA funding.

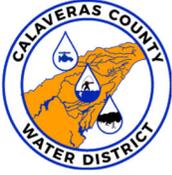
The Arnold WWTF is located between the communities of Arnold and Avery, serving a mountainous, primarily residential area along the Highway 4 corridor. The facility was originally constructed in 1986 and utilizes an extended aeration activated sludge system. Treated effluent is disposed of via spray irrigation and subsurface infiltration beds across approximately 25 acres. Biosolids are treated through aerobic digestion and dewatered using a belt filter press.

The current service area includes approximately 835 Equivalent Single-Family Units (ESFUs). Buildout demand is projected to approach 1,440 ESFUs, based on zoning and growth forecasts from the Calaveras County General Plan. While historic growth has been modest, the plan must account for incremental buildout in residential, commercial, and mixed-use areas.

Recent efforts to improve the WWTF include a USDA-funded capital project that will:

- Install a second clarifier to provide redundancy and operational flexibility;
- Add two new aerobic digesters and upgrade the RAS/WAS pump station;
- Replace outdated electrical service, MCCs, and standby generator;
- Upgrade site yard piping and construct a new electrical building;
- Improve SCADA integration and effluent metering.

The Arnold sewer collection system includes five (5) lift stations, gravity sewers, and force mains. Portions of the system are subject to inflow/infiltration (I/I) during wet weather. The District has implemented GIS-based asset tracking, SCADA telemetry, and Advanced Metering Infrastructure (AMI) to improve monitoring and planning.



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While Avery and Millwoods have been incorporated into the system, nearby legacy systems, specifically Sequoia Woods and Mountain Retreat remain standalone. These rely on aging treatment infrastructure that may not meet long-term regulatory requirements. As part of this master plan, the consultant should evaluate the feasibility of consolidating these two areas into the Arnold sewer system via a new regional force main and pump station along with properties along the new force main alignment that could connect.

The updated Arnold Sewer Master Plan will provide a comprehensive evaluation of system capacity, condition, regulatory compliance, and regional service expansion options, and will include a prioritized 20-year Capital Improvement Plan (CIP) aligned with funding opportunities and operational needs.

2. PROJECT GOALS

- Assess the condition and capacity of the Arnold collection system and lift stations.
- Identify hydraulic bottlenecks and inflow/infiltration (I/I) issues.
- Confirm Arnold WWTF capacity for projected buildout flows. Based on growth projections on Calaveras County General Plan zoning and land use.
- Evaluate the feasibility of consolidating Sequoia Woods and Mountain Retreat via a regional force main.
- Develop and prioritize system improvements and provide a 20-year Capital Improvement Plan (CIP).
- Ensure regulatory alignment with Waste Discharge Requirements (WDR 2014-0153-DWQ). Provide recommendations on permit amendments that could be needed in the future.

3. SCOPE OF SERVICES

Task A – Project Management and Coordination

- Kickoff meeting and monthly progress check-ins.
- Schedule management, budget tracking, and QA/QC documentation.

Task B – Background Review and Data Collection

- Review 2005 Arnold Sewer Master Plan, 2024 Engineering Report and the Sequoia Wood/Mountain Retreat .
- Incorporate updated SCADA, GIS, flow, and maintenance data.
- Align buildout assumptions with County General Plan projections.

Task C – Flow Monitoring and Infiltration and Inflow (I/I) Evaluation



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- Recommend locations and install temporary flow monitoring for dry and wet season monitoring (six locations)
- Identify peak flow conditions and I/I-contributing areas.
- Evaluate dry vs. wet season performance.
- Based on the flow monitoring data and lift station pumping volumes from SCADA, provide recommended system improvements to minimize I/I.

Task D – Collection System and Lift Station Assessment

- Hydraulic modeling of gravity sewers, force mains, and pump stations. Hydraulic modeling to be completed in *SewerGems* software.
- Identify segments and stations approaching or exceeding capacity.
- Evaluate redundancy, condition, and long-term operability of existing lift stations. This should include a site visit to each of the lift station locations.

Task E – WWTF Capacity and Regulatory Review

- Confirm WWTF capacity post-USDA upgrades relative to projected flows.
- Assess regulatory compliance with current WDR.
- Identify any near-term treatment or disposal limitations and recommended permit amendments if any.

Task F – Regional Consolidation Feasibility

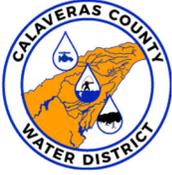
- Analyze options to bring Sequoia Woods and Mountain Retreat into the Arnold system via new forcemain.
- Evaluate alignments, pump station needs, capacity impact on existing system, impact to existing lift stations, and permitting hurdles.

Task G – Capital Improvement Plan

- Develop and prioritize projects based on condition, capacity, risk, and regulatory need.
- Provide detailed 5-, 10-, and 20-year CIP.
- Identify project costs and potential funding opportunities (e.g., SRF, USBR, FEMA, USDA, Section 219).

Task H – Final Report and Deliverables

- Draft and Final Master Plan (Word and PDF formats).
- Appendices include flow data, modeling output, GIS maps, and cost estimates.
- Electronic submittal of GIS shapefiles and hydraulic model files.
- Presentations to both CCWD Engineering Committee and Board.



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4. PROPOSAL CONTENTS

Each proposal should include:

- **Cover Letter** (*2 Pages Maximum*)
- **Project Understanding and Approach** (*3 Pages Maximum*)
- **Detailed Work Plan by Task with Manhours** (*4 Pages*)
- **Schedule with milestones** (*Approximate 12-month duration*)
- **Team qualifications** (*Single Page/Person*)
- **Relevant Project experience** (*4 Pages Maximum*)
- **Fee proposal** (*Submitted as a separate PDF File*)

5. SELECTION CRITERIA

Criteria	Weight
Project understanding & approach	30%
Relevant experience & qualifications	20%
Proposed schedule	20%
Overall value	30%

Consultant proposals will be evaluated by senior level management, engineering and operations staff. Proposals will be evaluated by each reviewer with each proposal receiving a weighted score. Each evaluator's weighted score will be tabulated and the firm with the highest combined score will be selected and recommended to the District Board. If two or more proposals are similarly ranked, and no clear decision can be made, the panel will reconvene to decide which of the top proposals provides the best value District and interviews consultants if necessary to provide additional insight into the selection.

6. SCHEDULE

<u>Milestone</u>	<u>Date (Tentative)</u>
RFP Issued	August 12, 2025
Deadline for Questions	October 1, 2025
Proposals Due	October 9, 2025
Selection & Interviews (if any)	October 20, 2025
Engineer Committee Review	November 4, 2025
Board Approval & Award	November 12, 2025
Project Kickoff	December 1, 2025
Final Master Plan Complete	November 30, 2026



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7. SUBMITTAL INSTRUCTIONS

Proposals shall be submitted electronically to Calaveras County Water District no later than **2:00 p.m., October 9th, 2025**. The Proposal shall assemble as a single Adobe® pdf file. Paginate proposal for two-sided printing at the District office. Paper size limited to 8-1/2"x11" (ANSI B) with figures, drawing, etc. no greater than 11"x17" (ANSI C). Proposals attached to email are limited to 15 megabytes in size. Proposal delivery using a file "cloud" sharing site, or similar, is acceptable provided the District receives a HTTP or FTP link and download instructions. The District will notify the Consultant upon receipt and successful download.

No printed copy of the proposal is required.

Email proposal, or link for file download to the attention of:

Kevin Williams, P.E. District Engineer

EMAIL: kevinw@ccwd.org

PHONE: Office: (209) 754-3184, Cell: (209) 419-3979

Appendix:

- A. 2005 Master Plan, *HDR*
- B. 2024 Engineers report for Arnold WWTP Improvements, *HydroScience*
- C. 2018 Sequoia Woods Mountain Retreat Report of Waste Discharge Technical Report, *CCWD*