

Project Proposal: Schoch Road

**Salinas Valley Disadvantaged Community
Drinking Water and Wastewater Planning Project**

Introduction

The Schoch Road project area is in rural Monterey County north of Salinas. Thirty-three homes are served by six state and local small water systems and approximately eleven homes are on private domestic wells. Reported water quality deficiencies include consistent nitrate (as NO₃) concentration over the maximum contaminant level (MCL) (since 1986 in some locations). The area is less than a mile from an existing Cal Water Service water line and a shorter distance from a new Cal Water main to be constructed in 2018. All of the residences have on-site septic systems.

The Community Engineering Corps (CECorps) selected the Schoch Road project as a participating project for evaluation by the Engineers Without Borders-Kansas City Professional Chapter team. Kevin Koines was the Project Lead and Jennifer Thomas the Engineer of Record. A Design Report was submitted to the Environmental Justice Coalition for Water (EJCW) in June 2017. The report was distributed to the Salinas Valley Disadvantaged Community (DAC) Drinking Water and Wastewater Planning Project Team (Project Team) and Technical Advisory Committee (TAC) for review and comments. The CECorps Report was submitted as a deliverable for this grant.

If there are substantive changes, this Project Proposal will be updated to incorporate additional comments from the Project Team and TAC occurring prior to October 30 when the final plan will be submitted for Greater Monterey County Regional Water Management Group approval. The proposed solution for the community, including selection of a preferred water service provider, preliminary scope of work, schedule and budget will be updated, if appropriate, during this process. However, on-going community engagement and technical assistance will be required subsequent to the grant expiration in order to continue progress towards a solution to water quality problems for the community.

The Schoch Road property owner and the CECorps recommendation support a plan for consolidation with either Cal Water or CalAm water public utilities for a new source of potable water. Cal Water is supportive of this project and interested in participating. It should be noted that Cal Water may not be prepared to apply for funding towards the cost of improvements to connect the system. CalAm has expressed a willingness to apply for grant funding. The Project Team has also had preliminary discussions with the City of Salinas and Monterey County about their serving as a project sponsor on behalf of Cal Water.

Project: Schoch Road Water Project

Physical addresses:

Multiple addresses on Schoch Road and White Road, Salinas, CA 93906
Generally bounded by Highway 101, Martines and Harrison Roads to the north of Salinas in Monterey County

General geographic location:

Unincorporated North Monterey County near Salinas east of Highway 101

Water System Type: Local small water systems (6) and private individual wells

Water System Name and Identification Number:

El Camino Real WS# 33 2710108
El Camino Real WS# 34 2700508
El Camino Real WS# 35 2701218
El Camino Real WS# 37 2701920
El Camino Real WS# 43 2702282
White Road WS# 01 2700805

Wastewater: On-site septic systems for individual owners

Other:

APNs: Multiple parcels
Area Designation: Bolsa Knolls
Zoning Designation: Low Density Residential- 1 unit/acre
Planning Area: Greater Salinas
Fire District: Monterey County Regional Fire District

1. Project Summary

Ownership:

Multiple owners

Services:

Water and Wastewater (individual on-site septic systems)

Connections: Six state and local small water systems with 33 residential connections; approximately eleven homes assumed to utilize individual domestic wells.

Known violations or restrictions:

Records available through the Monterey County Environmental Health Bureau (EHB) show nitrate concentration above the maximum MCL for drinking water at multiple water system locations, generally increasing over time. The concentration has exceeded the MCL at certain systems since 1986. Information is unavailable for individual private wells.

2. Project Background

The Schoch Road Project Area was selected as a high priority project by the Project Team and the Technical Advisory Committee (TAC) due to water quality concerns. The primary water quality issue is nitrate contamination.

The Schoch Road Project Area is a rural, low density residential neighborhood located north of Salinas in unincorporated Monterey County. Adjoining land uses consist mainly of agricultural and suburban residential. Light industrial and food processing uses and larger residential parcels are located nearby. The community boundary for the project has not been clearly defined since outreach efforts are continuing. The project boundary will depend on the outcome of community engagement and the property owners' level of interest.

EJCW conducted a water and wastewater needs assessment in 2016, identifying water and wastewater concerns of residents in suspected disadvantaged communities. Five out of five households on Schoch Road completed the assessment. Three reported that "water quality" is a "severe" or "very severe" problem. All five reported using bottled water for drinking and three out of the five said they used tap water for cooking.

EJCW facilitated bottled water deliveries beginning in 2016 under the SWRCB Emergency Drinking Water Program to all 5 homes on the property. Responsibility for bottled water deliveries was recently transferred to the Coalition for Urban/Rural Environmental Stewardship (CURES), a project funded by Monterey County agricultural interests as part of a Settlement Agreement with the SWRCB's Office of Enforcement and the Central Coast Regional Water Resources Quality Control Board.

Monterey County Public Works and Monterey One Water (the renamed Monterey Regional Water Pollution Control Agency, a joint powers agency and wastewater treatment provider) are conducting a feasibility study for expansion of the service area for wastewater treatment connections and services. The Bolsa Knolls area, which includes the Schoch Road community, is within the conceptual plan study area. The study has involved discussions with LAFCO regarding expansion of the municipal service area.

No applications for funding for this project are currently in progress. Discussions with Cal Water regarding this project and other potential consolidations may be instrumental in moving forward to a financing application.

3. CECorps Recommendations

The CECorps team considered the feasibility of several alternatives to address water quality concerns and completed cost estimates for each alternative. The preferred alternative is for consolidation with the Cal Water-Salinas water systems. The recommendation was based on feasibility and cost of development and/or annual operations and management expense. Cost estimates were prepared for each of these consolidation alternatives as the distances to the tie-in point are different. The second alternative is for a community water treatment facility and two new wells. This alternative would have the highest capital costs. Wellhead Treatment, the third alternative, would result in the highest projected monthly cost per household. Point of entry treatment costs were also projected; however, permanent treatment systems of this type are not currently permitted by the State or County. It should be noted that interim Point of Use/Point of Entry guidelines are under review by the County and may be adopted within the next year.

The recommended alternatives are briefly summarized and CECorps report references are cited.

Alternative 1: Consolidation with Cal Water or Cal Am Water Systems

Consolidation is the preferred alternative. It would connect the Schoch Road project area to either Cal Water at Harrison and Martines Roads (under the extension to be completed in 2018) or to the CalAm main at Ralph Lane. In general, it could be assumed that the design and installation of service lines, fire hydrants, individual meters and appurtenances for the mains would be similar for either provider. The exception would be the diameter and length of the main.

Reference: CECorps Report pages 11-15

Alternative 2: Community Treatment Facility

Under Alternative 2, a new community treatment facility, two new wells, water storage, emergency generators and new distribution mains would be constructed to replace the existing drinking water systems and private wells. A separate parallel system utilizing untreated water would be installed for fire flows. The new well locations would depend on the availability of appropriate sites and suitability based on currently available data such as land use and distance from other wells, septic systems and additional front and rear setbacks required by the Monterey County for this zoning designation. The probable depth for the wells would be approximately 600 feet. Refer to the CECorps report for additional detail.

Reference: CECorps Report pages 15-17

Other Options

The CECorps team evaluated Wellhead and Point of Entry (POE) Treatment options as the third and fourth alternatives, respectively. The Wellhead Treatment alternative would be limited to the six small water systems and would not provide treatment for the homes that are on private wells. It is the most expensive option in terms of estimated monthly cost per household.

Reference: CECorps Report Page 17

POE Treatment was the least costly option in terms of estimated project development budget. However, POE systems are not currently approved under Monterey County ordinances. The County is reviewing new state regulations and considering guidelines for permitting. One proposal is to require an operations and maintenance program for each applicant. The program is likely to include scheduled water sampling, record keeping and reporting, and maintenance by an approved manager. The added compliance costs cannot be determined at this time. This alternative should be revisited when the County's draft guidelines are available.

Reference: CECorps Report pages 18-19

4. CECorps Cost Estimates

An analysis of the CECorps team projections for capital costs and annual operations and maintenance expenses for each of the alternatives is summarized in Tables 5 and 6 of the CECorps Report, page 19. Estimates may not identify all potential development costs and can be anticipated to understate certain categories such as permits and fees, administration, well abandonment, backflow prevention devices etc. that will be affected by project sponsor expenses and individual owners' choices. It is expected that estimates will be revisited when the community narrows the alternatives to one or two preferences. One factor that may influence monthly household costs related to Alternatives 1 A and 1B will be whether financing is available as a grant or loan. An amortized loan would result in a surcharge to the household. It should be noted that operations and maintenance costs for Alternative 4 do not include compliance costs should the County consider approval of POE treatment systems. Potential costs are currently unidentified and requirements will need to be evaluated for financial feasibility.

Alternative 1A- Consolidation with Cal Water

Capital cost estimate \$1,305,000

Annual operations and maintenance included in utility rates

Monthly cost per household estimated at \$52.67 (not including surcharge, if any)

Alternative 1B- Consolidation with Cal Am

Capital cost estimate \$2,035,000

Annual operations and maintenance included in utility rates

Monthly cost per household estimated at \$39.22 (not including surcharge, if any)

Alternative 2: Community Treatment

Capital cost estimate \$3,370,000

Annual operations and maintenance \$128,000

Monthly estimated cost per household estimated at \$242.42

Alternative 3: Wellhead Treatment

Capital cost estimate \$2,583,000

Annual operations and maintenance \$189,000

Monthly cost per household estimated at \$357.95

Alternative 4: Point of Entry Treatment

Capital cost estimate \$340,000

Annual operations and maintenance \$39,000

Monthly cost per household \$73.86 (see discussion in Section 3 above)

Refer to CECorps Report Page 19

5. Community Involvement

Approval of Alternative

The Schoch water system owner and households contacted to date are interested in exploring the costs and feasibility of connecting to a larger system for water service and other options. Community outreach to neighboring water systems and those relying on state/local small water systems will be necessary in order to determine the community boundary. Final selection of an alternative is not expected prior to plan finalization.

Willingness to Proceed

The residents of the systems are interested in proceeding with discussions regarding consolidation. EJCW will continue a dialogue with the families and complete outreach to the larger community concerning opportunities and development constraints for the alternatives. Financing options will need particular attention as the cost to individual owners could affect their willingness to proceed.

Financial Participation

It is unclear whether any financial contribution would be available from the property owners towards the cost of a potential project. The owners' ability and willingness to apply for conventional or below market rate financing will need to be explored further. USDA and other grant programs may be available to defray the cost of connecting to new services. Participants would need to be provided with well abandonment, backflow prevention device installation, lateral connection and any other capital or ongoing cost estimates that may not be fully funded by grants or loans in sufficient detail to make informed decisions.

Under CPUC utility consolidation scenarios, the residents would be charged the CPUC-approved water service rates in effect at the time of connection if the Cal Water or CalAm consolidation alternative is selected. A surcharge would be required for amortized loan expenses if costs are not fully grant funded. Cal Water and CalAm have Low Income Ratepayer Assistance Programs available to income eligible customers.

Operations and maintenance costs, in addition to capital costs, would be expected to determine the rate structure for any other alternative. Post development rates would depend upon the cost to finance the project, reserve allocations, and operating and maintenance expenses for the option chosen. A rate study may be necessary to establish a reasonable rate to cover debt service and expenses for any alternative to a Cal Water or CalAm consolidation.

The County of Monterey has not been approached specifically about financing this project. The Project Team has discussed a general application for Community Development Block Grant funds be used for lateral connection costs for qualifying households. Due to uncertainties around the federal budget allocation, which is the source of program funding, alternative resources should continue to be explored.

The County may be able to assist with the development of water infrastructure improvements through facilitation of funding applications. Should the community decide to proceed with a consolidation plan, it may be necessary to have a project sponsor or fiscal agent for the state and federal programs that offer favorable terms. The County of Monterey and other qualifying entities should be contacted to determine potential participation.

6. Capacity

A state certified operator is not required with the current number of connections for any of the six small water systems. Monterey County EHB would likely require a source capacity assessment and the Fire District would evaluate storage capacity and fire flows under a consolidation plan and alternatives requiring permits.

Cal Water and CalAm are public utilities regulated by the CPUC and the State. Each has extensive experience managing water and wastewater systems in Monterey County and throughout the state. An assessment of the production and storage capacity would be required in order for the Schoch Road households to connect to the CalAm system. The system expansion plan and capacity assessment would be subject to approval. The CPUC reviews the financial stability of regulated utilities and establishes a rate structure that is adequate for operations, capital improvements, projected repair costs and emergency reserves.

7. TAC Recommendation

The Technical Advisory Committee reviewed and approved the recommendation to designate the Schoch Road Project Area as a high priority community. The CECorps Report for this community is included in this plan. At its October 2017 meeting, the TAC reviewed the draft Salinas Valley Water and Wastewater Plan. The Project Team is receiving comments from the TAC prior to its adoption by the Greater Monterey County Regional Water Management Group (anticipated in early November 2017).

8. Institutional Barriers

Local Agency Formation Commission (LAFCO)

There are no known LAFCO barriers to the preferred alternative. According to LAFCO staff, approval will not be required for a consolidation with Cal Water or CalAm Water Company. Consultation with LAFCO would be necessary under certain other connection categories, such as incorporation into the service area expansion under study by Monterey One Water and the County for wastewater treatment services.

California Public Utilities Commission (CPUC)

Consolidation with Cal Water or CalAm would require approval of the CPUC. This matter has been discussed with Cal Water staff and the CPUC. The CPUC review has not been determined to be a significant barrier to consolidation. According to Cal Water staff, it has experience with system consolidations and would expect a fairly routine process in this circumstance.

Sponsorship

There are limited choices for sponsorship of funding applications. The County of Monterey has applied for funding as the applicant for Community Development Block Grant and SRF funds to assist public water systems as noted in other project proposals. However, County staff has indicated that a similar level of support would require consultation with the County Administrator's Office and approval by the Board of Supervisors. The City of Salinas may be another possible project sponsor. Securing an appropriate sponsor, applicant and fiscal agent is a major barrier for disadvantaged communities such as Schoch Road. The

Project Team discussed this challenge at both the April 2017 and October 2017 TAC meetings.

Monterey County Environmental Health Bureau (EHB)

The County EHB Drinking Water Program regulates the six local small systems in the Schoch Road area. EHB policy is to support consolidation with larger municipal and public water systems, discouraging new mutual water systems. As such, it is anticipated that consolidation with either Cal Water or CalAm would be most acceptable alternative to the County.

It should be noted that EHB is the permitting entity for new well construction, plan review and approval for water system expansions or consolidations for systems with less than 200 connections. In addition, EHB oversees transfers of smaller systems and any well abandonments. Proposed modification or amendment of a local small system permit would also require EHB approval. Should the option of consolidation with Cal Water or CalAm move forward, EHB staff would be expected to take the lead in preparing a CEQA finding of exemption for Public Health and Safety. A non-exempt determination would result in a referral to RMA-Planning.

County Resource Management Agency (RMA)-Planning Department and Public Works

The County of Monterey would act as lead agency for NEPA and non-exempt CEQA determinations for Schoch Road due to its location in the unincorporated area of the County. Environmental Health Bureau staff has been supportive of an early determination of categorical exemption under CEQA based on Public Health and could, potentially, take responsibility for preparing or facilitating the necessary environmental determination documents as noted above. Planning Department staff would be responsible for circulating documents, notifying the State Clearinghouse and working with the Recorder's Office to record the Notice of Determination. If an application for USDA, CDBG or SRF funding is considered, preparation of documentation and studies in accordance with NEPA will be incorporated in the project schedule and budget.

Note: In a recent call with SWRCB, Cal Water and representatives of the Project Team, the SWRCB explained that the agency may take on a lead environmental review role for certain grant funded consolidation projects involving CPUC regulated utilities such as Cal Water or CalAm. Prior to submittal of a funding application under Prop 1 TA or FFAST, the Project Team will obtain clarification regarding the criteria under which the SWRCB is authorized to undertake the environmental lead agency responsibilities.

RMA-Planning would be the lead agency for any proposed amendments to existing permits for affected properties or systems.

An application to Public Works for an Encroachment Permit would be necessary to install the connecting pipelines and other improvements in the County's Road Rights of Way to

facilitate the consolidation or for distribution pipelines. Plans with proposed trenching details would be needed. Typically, right-of-way easements would be in place prior to final approval of plans to install a pipeline extension and a connection to services.

The Planning and Building Departments would need to review and approve any grading, new or revised water efficiency improvement plans, electrical, plumbing and structural modifications or new construction permit requests. Sign-offs from other County departments, including the Water Resources Agency are coordinated by the RMA.

Monterey County Regional Fire District

Fire protection services for the Schoch Road project area are provided by the Monterey County Regional Fire District. Compliance with the District's specific fire protection requirements will be a condition of consolidation approval and community treatment options. Consolidation plans with either water supplier would need to include fire hydrant spacing per California Fire Code. The specific fire flow and storage requirements would depend upon the supplier's existing and planned expansion capacity.

9. Other Barriers

Language / Cultural

Some residents have limited English language skills and are primary Spanish or other language speakers. Outreach and needs assessment efforts to date have been conducted by bi-lingual staff with EJCW. Consumer health advisories relating to drinking water are provided in English and Spanish.

Technical, Managerial and Financial Issues

The six local small water systems are privately owned and operated under permits from Monterey County EHB. The County does not require a certified water or wastewater operator under current permitting for these systems. Owners of homes on individual domestic wells are responsible for their own well testing (voluntary), repair and maintenance costs.

With Alternative 1 - Consolidation, Cal Water or CalAm would assume responsibility for operating and maintaining the new system upon completion. Cal Water and CalAm are regulated by the CPUC and the State. The CPUC monitors the financial health of the utility and sets rates. Compliance with California Public Health, Fire and Water Codes, other regulations and the provisions of the federal Safe Drinking Water Act are monitored through regulatory agencies at the state level. Consolidation with Cal Water or CalAm would potentially offer the best opportunity to meet TMF of the alternatives considered due to their extensive regional presence and significant financial and management oversight by the CPUC.

The Community Treatment alternative would offer another consolidation option. However, due to high projected development and monthly household costs, it is unlikely that this alternative would be viable from a financial feasibility perspective. Wellhead Treatment and POE Treatment present similar challenges due to cost and financial feasibility for the former and potential technical and managerial issues for the latter.

10. Potential Funding Sources

The Schoch Road project would be considered potentially eligible as a consolidation under State Revolving Fund/Proposition 1 Guidelines as it is likely to meet disadvantaged community criteria and would result in safe drinking water for residents. The project would be assigned to Category A-Immediate Health Risk for nitrate in excess of MCL. The project would likely meet two other factors for priority over other projects in the same category: disadvantaged community status and as a project resulting in consolidation or extension of service to a disadvantaged community not served by a public water system.

This project is a potential candidate for Prop 1 Technical Assistance funding for pre-development activities including community outreach, environmental studies, and other pre-development work. Should the community decide in favor of an option besides the preferred Alternative 1-Consolidation, then additional TA to include legal and TMF assistance should be pursued to fully explore legal options for entity formation and to develop TMF elements such as a rate study and capital improvement plan. Funding for implementation and connection to main supply lines could be potentially eligible for CDBG or USDA grant or loan programs. These options will be explored further.

The Greater Monterey County Regional Water Management Group is applying for Integrated Regional Water Management (IRWM) Disadvantaged Community Involvement Funding in conjunction with the other Central Coast IRWM Regions. The Greater Monterey Regional Water Management Group portion of the application includes project development assistance for a limited number of disadvantaged community projects that are not receiving or are not eligible for Prop 1 Technical Assistance. If the application is successful, the Regional Water Management Group and the Project Team will evaluate and select individual projects for participation. The Schoch Road project is not currently included in the regional IRWM Plan. However, the Regional Water Management Group has adopted a process for adding projects to the plan and as a project that would meet water supply objectives Schoch Road should be considered for inclusion. Future IRWM project review would occur during each application cycle using the rating and ranking criteria established by the Regional Water Management Group for the next IRWM Implementation grant. As the project area is not currently owned by a qualifying agency under IRWM guidelines, an agency sponsor and program proponent would likely be needed in order for to qualify. This issue will be included in further discussions with the County of Monterey.

Depending upon the outcome of the Monterey One Water wastewater treatment study, the community and Monterey One water could potentially apply for Clean Water SRF funding to resolve any potential wastewater system deficiencies.

11. Project Team Recommendations

The Project Team considered Schoch Road to be a high priority project and selected it for referral to the CECorps for an engineering evaluation. The Project Team supports the CECorps recommendation consolidation with Cal Water or CalAm subject to community preferences. Input from the TAC will be taken into consideration after their review is complete and comments are submitted. EJCW plans to continue stakeholder engagement through the IRWM Disadvantaged Community Involvement Program or Prop 1 TA. The immediate goals are to identify a potential project sponsor and reach consensus among community members on the preferred long-term solution. This project may be a candidate for a FFAST application once a grant sponsor is identified.

12. Action Plan

The Project Team will engage County officials and potential funding organizations and community members with the goal of identifying a funding source for planning activities. As described previously, EJCW will also expand community engagement efforts with the goal of reaching more property owners in the Schoch Road project area. See Action Plan below.

LAFCO - No action required at present. Monitor progress of Monterey One Water in service area expansion planning in late 2017 to mid-2018.

CPUC - If Cal Water or CalAm is selected as the provider, then an application should be submitted to the CPUC for the expanded service area.

Consolidation - Maintain contact with Cal Water and CalAm Water Companies. Continue community outreach.

Permitting - On hold

Referral to Potential Partners - Continue discussions with County, the Regional Water Management Group and Monterey One Water to determine financial and managerial participation and project prioritization for the IRWM Disadvantaged Community Involvement Grant Program.

Other:

EJCW will continue a dialogue with the property owners, Cal Water, CalAm, and the County EHB regarding water system options over the next few months. Based on the outcome of discussions, the project will be considered for referral for Prop 1 TA, a potential FFAST application and/or IRWM Disadvantaged Community Involvement (DACI). Budget projections will be refined with input from the TAC and the CECorps team, if available. Should the adjacent water system members decline to participate, the project area boundary will be revised.

13. Schedule:

Continue discussions with County officials and water purveyors	Nov 2017 – Mar 2018 (if Prop 1 TA or DACI Funding is available)
Determine community boundary based on response from community engagement activities as implemented	Jan.- March 2018 (if Prop 1 TA or DACI funding is available)
Conduct Median Household Income Survey	Apr – July 2018 Subject to continued funding
Submit FFAST application / planning grant	TBD

14. Budget

There are a number of variables that would result in significant cost differentials between alternatives. As noted previously, the estimates from the CECorps report will need to be revised to more accurately reflect anticipated costs associated with the alternatives. It is expected that the TAC may provide input regarding development costs factors specific to Monterey County. The budget will be updated to reflect any recommended changes. Therefore, the estimates below should be considered placeholders until updates are complete.

Consolidation, the recommended alternative, if selected by the Schoch Road community would be in the range of \$ 1,305,000 to \$2,035,000 for capital costs.

The CECorps Team estimated costs of approximately \$3,370,000 for Alternative 2-Community Treatment Facility; \$2,583,000 for Alternative 3-Wellhead Treatment; and \$340,000 for Alternative 4-Point of Entry Treatment.

At such time as a potential solution is chosen by the community, the budget projection will be refined. Consolidation cost estimates will depend upon a number of factors that have not been fully defined at this time. For the technical application for SRF and other programs, an Engineering Report will be required to include more detailed cost estimates and alternatives analysis.