

EXECUTIVE SUMMARY

1. Introduction

1.1 Project Background

In October 2014, the Regional Water Management Group for the Greater Monterey County Integrated Regional Water Management (IRWM) Region received grant funds from the State Water Resources Control Board (State Water Board) to develop an integrated plan to address drinking water and wastewater needs of disadvantaged communities in the Salinas Valley. The funds were appropriated by the California Legislature through Assembly Bill (AB) 1630 (Alejo), from fines and penalties from the Waste Discharge Permit Fund.

The Salinas Valley on California's Central Coast is one of the most productive agricultural regions in the world. However, intensive fertilizer use over several decades has led to nitrate pollution in the region's groundwater basins. In response to nitrate concerns, the Legislature enacted Chapter 1 of the Second Extraordinary Session of 2008 (SBX2 1, Perata). SBX2 1 required the State Water Board, in consultation with other agencies, to prepare a report to the Legislature to better understand the sources of nitrate contamination and to identify solutions for nitrate-contaminated groundwater used for drinking. In 2010, the State Water Board contracted with the University of California, Davis (UC Davis) to conduct an independent study focusing on nitrate in the groundwater of the Salinas Valley and Tulare Lake Basin. The UC Davis report, *Addressing Nitrate in California's Drinking Water* (March 2012), found that 10 percent of the 2.6 million people in the Salinas Valley and Tulare Lake Basin rely on drinking water that may contain levels of nitrate that are above the State drinking water standards set by the State Water Board.

In June of 2012, in response to the UC Davis report, the Governor's office convened a Drinking Water Stakeholder Group to develop an understanding of the challenges faced by small communities impacted by nitrate-contaminated groundwater, and to identify promising solutions. Among the Stakeholder Group's recommendations were the following: "A) Identify water supply needs and potential opportunities for promoting and incentivizing sustainable local drinking water solutions for disadvantaged communities in unincorporated areas. B) Directly target funding for IRWMs (or other entity where appropriate) to develop an inventory of need and a plan for local solutions (including shared solutions) for disadvantaged communities in unincorporated areas in each hydrologic region of the state.... Begin with the Salinas Valley." AB 1630, appropriating funds to the Greater Monterey County IRWM Regional Water Management Group, was the direct result of those recommendations.

1.2 Objectives of the Plan

The purpose of this planning effort has been to identify affordable and sustainable safe drinking water and wastewater solutions for disadvantaged communities in unincorporated areas of the Salinas Valley, with a goal of identifying projects and programs that will create long-term reliability, while optimizing the ongoing operation and maintenance (O&M) and management costs for small water and wastewater systems. The following objectives, and associated tasks, were identified for the planning effort:

1. Identify disadvantaged communities within the planning region, with a specific focus on small disadvantaged communities in unincorporated areas.
2. Identify drinking water and wastewater problems.

3. Develop a comprehensive inventory and database of the disadvantaged communities with water and wastewater problems and create maps to illustrate the location of each community in relation to each other and to larger utilities.
4. Prioritize the communities in terms of water resource need.
5. Identify potential solutions for (at minimum) each “high priority” community.
6. Work with each community to determine preferred solution(s).
7. Develop conceptual project descriptions and cost estimates for the “high priority” communities to include in the Greater Monterey County IRWM Plan project list.
8. Identify potential funding sources for the proposed projects and for broader regional solutions.

The core Project Team for this planning effort consisted of the Greater Monterey County IRWM Program Director and members of the Regional Water Management Group – specifically, Environmental Justice Coalition for Water (EJCW), Rural Community Assistance Corporation (RCAC), and San Jerardo Cooperative, Inc. – plus the consulting group Nilsen and Associates. The Project Team was assisted by a Technical Advisory Committee (TAC) consisting of representatives from the State and Regional Water Boards, local agencies, environmental justice organizations, engineers, water utilities, academic institutions, and individual community representatives.

1.3 Regulatory/Legislative Context and Related Studies and Reports

The regulatory and legislative context, including the Safe Drinking Water Act, the Human Right to Water, and the Clean Water Act, are summarized. In addition, brief synopses are provided for the following related studies and reports: *Disadvantaged Community Water Study for the Tulare Lake Basin, Kings Basin Disadvantaged Community Pilot Project Study, State Water Board Report: Recommendations Addressing Nitrate in Groundwater*, and *State Water Board Report: Communities that Rely on a Contaminated Groundwater Source for Drinking Water*.

2. Identifying Disadvantaged Communities

2.1 Project Focus

This plan focuses specifically on small disadvantaged communities, and communities suspected to be disadvantaged, in unincorporated areas that are served by state small water systems (5-14 connections), local small water systems (2-4 connections), and private domestic wells.

2.2 Defining “Disadvantaged Community”

A “disadvantaged community” is defined in the California Water Code (§79505.5(a)) as “a community with an annual median household income that is less than 80 percent of the statewide annual median household income” (MHI). A “severely disadvantaged community” is defined as a community with an annual MHI that is less than 60 percent of the statewide annual MHI. According to the most recent (2015) American Community Survey (ACS) data, the statewide annual MHI is \$61,818 (in 2015 inflation-adjusted dollars). All US Census places, census tracts, and block groups with an annual MHI of \$49,454 or less are considered disadvantaged, and those with an annual MHI of \$37,091 or less are considered severely disadvantaged.

According to 2015 ACS data, there are eight disadvantaged community places, 26 census tracts, and 77 block groups that fall within the “disadvantaged community” definition within the project area. In all, 36 percent of

the population within the Greater Monterey County IRWM region is defined as being disadvantaged, according to 2015 ACS data at the block group level.

Many small low-income communities that face drinking water and wastewater issues are located in neighborhoods or communities that are not identified as being “disadvantaged” by large-scale income survey efforts such as the US Census. The Project Team worked with UC Davis Center for Regional Change to collect secondary sources of data that might indicate potentially “hidden” disadvantaged communities. The Project Team also obtained drinking water quality data from Monterey County Health Department and obtained maps to show the locations of nearby water utilities. The water quality and water systems data layers were added to the disadvantaged community data layers on a mapping tool called MapCollaborator. TAC members, including staff from the Central Coast Regional Water Board and Monterey County Department of Public Health, added their firsthand knowledge of communities and their drinking water and/or wastewater problems. The result of this effort was a final list of small disadvantaged and suspected disadvantaged communities in the Greater Monterey County IRWM region that were considered likely to have drinking water or wastewater problems (see Table 2.3 in the chapter).

2.3 Disadvantaged Community Database

EJCW is working in partnership with the University of California Chancellor’s Office and UC Davis Center for Regional Change to host, analyze, and map the disadvantaged community data for this project and indefinitely into the future. The partnership has created a new viewing platform that can be viewed at: <http://www.arcgis.com/apps/View/index.html?appid=1aea37e5150c425f987bd7129ad40a53>.

3. Identifying Problems

3.1 Regulatory Context

The chapter describes how drinking water and wastewater systems are regulated on the federal, state, and county level.

3.2 Outreach to Small Communities

Common problems of small rural disadvantaged communities include, for example: unreliable or inadequate infrastructure; inability to achieve economies of scale; lack of technical, managerial, and financial capacity; dependence on a single source of water; lack of redundancy of system; and geographic isolation. To understand the specific drinking water and wastewater problems that communities in the Greater Monterey County IRWM region were experiencing, EJCW staff conducted extensive outreach to small communities in unincorporated areas of the region, using a questionnaire survey. EJCW surveyed a total of 153 households in 25 communities, covering 19 census block groups (six of which were identified as disadvantaged and 13 were identified as suspected disadvantaged communities). Table 3.1 in Chapter 3 summarizes the survey results. Figure ES.1 below illustrates the locations of disadvantaged and suspected disadvantaged communities.

The Project Team then prioritized the communities according to need (see Tables 3.3 - 3.5 in the chapter). From the high priority community list, the Project Team selected seven small disadvantaged communities (described in detail in Chapter 4) with the goal of identifying specific solutions for each of those communities.

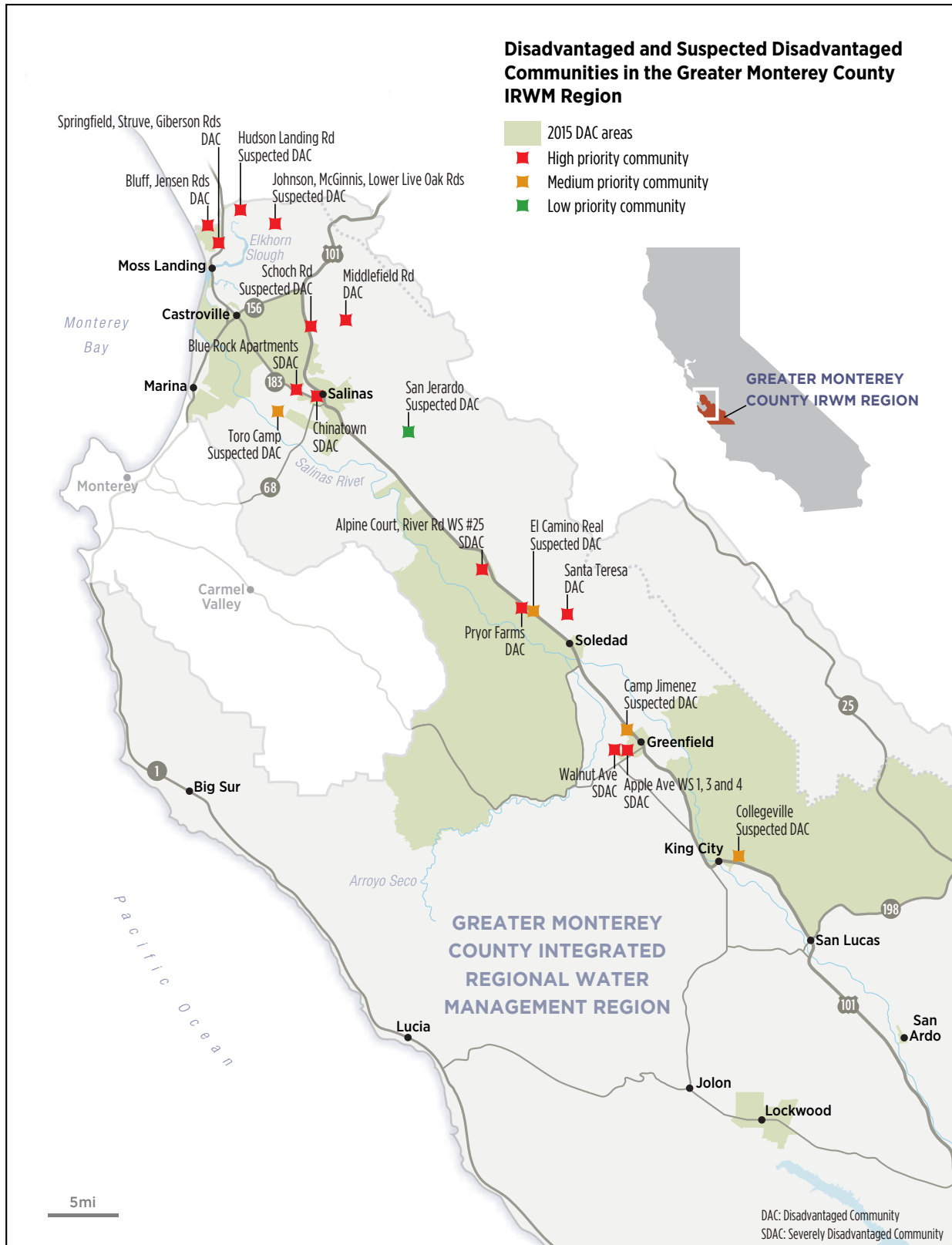


Figure ES.1 Location of disadvantaged and suspected disadvantaged communities in the region.

3.4 Outreach to Larger Disadvantaged Communities and Water Systems

Outreach to the following disadvantaged community “places” to assess needs as well as potential capacity to provide services to nearby small communities was conducted by RCAC: Boronda CDP, King City, Moss Landing CDP, San Ardo CDP, and San Lucas CDP. Table 3.7 in Chapter 3 summarizes the results of that outreach. In addition, the following water districts and water utilities were contacted to assess available resources for potential consolidation or extension of service with nearby small disadvantaged communities: City of Soledad, Pajaro Sunny Mesa Community Services District, Castroville Community Services District, City of Gonzales, California American Water (CalAm), Alco Water Service, and California Water Service (Cal Water). The results of that outreach effort are summarized.

4. Identifying Solutions

The Project Team worked with in partnership with the Community Engineering Corps (CECorps), an alliance of the American Society of Civil Engineers, the American Water Works Association, and Engineers Without Borders-USA, to identify and evaluate solutions for the seven selected high priority communities. The chapter describes alternative options for each community, recommended solution(s), potential barriers, community preference (if any), and next steps. Table ES.1 (Table 4.1 in the chapter) summarizes recommendations and next steps for the seven selected communities, as well as the other communities on the high priority list. A brief overview of each community and summary of recommendations is provided below.

4.1 Johnson Road

The Johnson Road community is located in North Monterey County, approximately 1.5 miles southeast of Las Lomas. The community is classified as an Economically Distressed Area. The primary source of water supply for the homes within the Johnson Road community is from privately owned domestic wells. It is estimated that over 50 wells total serve the 85 homes/dwellings that make up the community. Six of these wells are local small water systems. Well samples show contamination by both nitrate and chromium-6.

The CECorps engineering team evaluated four alternatives: 1) consolidation with California Water Service (Cal Water), with an option to also connect 4-5 homes up the hill; 2) community treatment facility; and 3) construction of five public water systems. CECorps recommended option 1, consolidation with Cal Water-Las Lomas. The Project Team and TAC support that recommendation. EJCW will continue stakeholder engagement in the Johnson Road community to help them determine a preferred solution. The immediate-term goals are to confirm a potential project sponsor, define the project boundary, conduct an MHI survey, and reach consensus among community members on the preferred long-term solution.

4.2 Walnut Avenue

Walnut Avenue Water System #2 is located about a half mile west of the City of Greenfield. The community consists of six dwellings with an estimated population of 20-30 residents. The community is severely disadvantaged (MHI survey). The property owner has expressed a desire to potentially increase the number of dwellings on this property. Water quality results indicate high nitrate levels (36 mg/L NO₃-N, where MCL is 10 mg/L). The CECorps engineering team considered three options: 1) pipeline extension from the City of Greenfield; 2) new well; and 3) wellhead treatment. If the property owner wishes to increase the number of dwellings, a pipeline extension from the City of Greenfield would not be possible since LAFCO will only allow a pipeline extension for the number of dwellings currently on the property. In that case, CECorps’s recommendation would be to drill a deeper well and consider formation of a public water system.

Table ES.1 List of Recommendations

Community	Area / Nearest Water Provider	DAC/EDA Status ¹ [MHI]	Drinking Water and Wastewater Problems ²	Recommendation(s)	Next Steps	Suitable Funding Source	Point of Contact
Middlefield Rd.	Bolsa Knolls area Cal Water-Salinas, Gabilan Water Company	DAC [\$38,200] MHI Survey by EJCW, 2016/2017	Nitrate above the MCL. No known wastewater problems.	Consolidation with Cal Water-Salinas. <i>See Project Proposal for more detail.</i>	Outreach, MHI survey, and facilitate consensus of neighboring small water system to determine whether they will join project (EJCW). Support Middlefield Rd. community in all aspects of connecting to larger water provider. (EJCW, DACI or Prop 1 TA).	SRF/Prop 1 (Construction)	EJCW
Johnson Rd, McGinnis Rd, lower Live Oak Rd.	Las Lomas area Cal Water-Las Lomas	EDA [\$49,673] ACS Data	Nitrate above the MCL. No known wastewater problems.	Waterline extension from Cal Water-Las Lomas with Monterey County or Cal Water as grant applicant. <i>See Project Proposal for more detail.</i>	<u>Phase 1:</u> MHI survey and continued outreach to finalize determination of community boundary for Johnson Rd., McGinnis Rd. and lower Live Oak Rd. (EJCW and Prop 1 TA). Conduct wastewater analysis to determine options (EJCW/CECorps). <u>Phase 2:</u> Conduct outreach meetings and door-to-door outreach to upper Live Oak Rd. to determine interest (EJCW, DACI and/or Prop 1 TA).	Prop 1 TA or IRWM DACI (Planning)	EJCW
Walnut Ave. (Carrillo Farms)	City of Greenfield	SDAC [\$30,100] MHI Survey by EJCW, 2016	Nitrate above the MCL. Failing septic systems.	Waterline extension from City of Greenfield. <i>See Project Proposal for more detail.</i>	Consultations with County planning department, City of Greenfield, LAFCO, neighboring residents, State Water Board regarding potential project (EJCW, DACI or Prop 1 TA).	Prop 1 TA or IRWM DACI (Pre-Planning and Planning)	EJCW
Apple Ave. #1 and #4 (Mittelstadt)	City of Greenfield	SDAC MHI Survey by RCAC, 2016	Nitrate above the MCL. Possible wastewater problems.	Waterline extension from City of Greenfield.	Environmental review, LAFCO out of service area agreement, grant application. Engineering complete. (EJCW, Prop 1 TA)	Prop 1/SRF (Construction) <i>Same application as Camp Rocha.</i>	EJCW / Nilsen and Assoc
Apple Ave. #3 (Camp Rocha)	City of Greenfield	SDAC	Nitrate above the MCL.	Waterline extension from City of Greenfield.	Environmental review, grant application. Engineering complete.	Prop 1/SRF (Construction)	EJCW / Nilsen and

		MHI Survey by RCAC, 2016	Reported septic system upgrade needed.		(EJCW)	Same application as Mittelsteadts.	Assoc
Hudson Landing Rd.	Watsonville /Las Lomas area Pajaro Sunny Mesa CSD	Suspected DAC	Nitrate above the MCL. Potential wastewater problems.	Extension from Pajaro Sunny Mesa CSD. <i>See Project Proposal for more detail.</i>	Outreach to neighbors to gauge interest and determine community boundary (EJCW, IRWM DACI). Conduct MHI survey (RCAC, IRWM DACI).	IRWM DACI (Pre-Planning) Prop 1/SRF (Planning and Construction)	EJCW
Schoch Rd.	Bolsa Knolls area Cal Water - Salinas, CalAm-Ralph Lane	Suspected DAC	Nitrate above the MCL. No known wastewater problems.	Waterline extension from Cal Water-Salinas. <i>See Project Proposal for more detail.</i>	Outreach to neighbors to gauge interest and determine project boundary (EJCW, IRWM DACI). Conduct MHI survey (RCAC, IRWM DACI).	IRWM DACI (Pre-Planning) Prop 1/SRF (Planning and Construction)	EJCW
Springfield, Struve, and Giberson Rds	Moss Landing area Springfield Water Company / Pajaro Sunny Mesa CSD	DAC ACS Data	Nitrate above the MCL. No known wastewater problems.	Consolidation of Springfield Rd, Struve Rd, Giberson Rd, and the Moss Landing Manor mobile home park into Springfield Water Company, which is owned and operated by Pajaro Sunny Mesa CSD.	Monitor progress and provide assistance if Pajaro Sunny Mesa CSD encounters any roadblocks. Pajaro Sunny Mesa CSD has received a SRF planning grant and received the permit from Monterey County to proceed with a test well in late August 2017.	SRF (Planning and Construction)	Pajaro Sunny Mesa CSD and Nilsen and Assoc
Bluff, Jensen Rds	Moss Landing area Pajaro Sunny Mesa CSD	DAC ACS Data	Nitrate above the MCL. No known wastewater problems.	Waterline extension from a water system owned and operated by Pajaro Sunny Mesa CSD.	Outreach to property owners and residents to gauge interest and determine community boundary (EJCW, IRWM DACI). If residents are interested, prepare Planning Grant application (Nilsen and Assoc SRF or IRWM DACI)	DACI (Pre-Planning) SRF/Prop 1 (Planning)	Nilsen and Assoc / EJCW
Alpine Court, River Rd. WS	City of Gonzales	SDAC [\$24,000]	Nitrate above the MCL.	Water and wastewater consolidation with the City of	Monitor progress and provide assistance if the City of Gonzales	Prop 1 (Planning and	City of Gonzales/

#25		MHI Survey by CRLA, 2013	Failing septic systems.	Gonzales.	encounters any roadblocks.	Construction)	RCAC / Nilsen and Assoc
Chinatown	City of Salinas (within city limits)	SDAC	Previously, no public restroom access after 7pm	No additional recommendations at this time.	24-hour public toilet and shower facility complete in Oct. 2016	n/a	n/a
Blue Rock Apartments	Boronda area Cal Water -Salinas	SDAC ACS Data	Nitrate above the MCL. No known wastewater problems.	A UCLA project site	UCLA has applied for a waste discharge permit from the Central Coast Regional Board. They will also need to submit an amendment to the current drinking water permit for approval by the Monterey County Health Department.	State Water Board grant, Agreement No. 14-251-550 [C/A 367]	UCLA
Pryor Farms	City of Soledad	DAC ACS Data	Nitrate above the MCL. No known wastewater problems.	A UCLA project site	UCLA will need a waste discharge permit from the Central Coast Regional Water Quality Control Board, and also an amendment to the current drinking water permit for approval by the Monterey County Health Department.	State Water Board grant, Agreement No. 14-251-550 [C/A 367]	UCLA
Santa Teresa	City of Soledad	DAC [\$40,000] MHI Survey by CRLA, 2014	Nitrate above the MCL. Reported septic system upgrade needed.	A UCLA project site <i>See Project Proposal for more detail.</i>	UCLA pilot project site for wellhead nitrate treatment and remote monitoring.	State Water Board grant, Agreement No. 14-251-550 [C/A 367]	UCLA

ACRONYMS AND ABBREVIATIONS:

CRLA: California Rural Legal Assistance

DAC: Disadvantaged Community

DACI: Proposition 1 Integrated Regional Water Management (IRWM) Disadvantaged Community Involvement Grant Program.

EDA: Economically Distressed Area

Prop 1 TA: Proposition 1 Technical Assistance grant funds

SDAC: Severely Disadvantaged Community

SRF: California State Revolving Fund

The Walnut Avenue community also faces wastewater management challenges. CECorps completed an analysis of the community's wastewater system, considering two options: 1) consolidation with the City of Greenfield, and 2) leach field expansion. The property owner's preference is to consolidate with the City of Greenfield's water and sewer systems. EJCW will continue a dialogue with the owner concerning the property owner's potential plan for expanding the number of units. The project is considered temporarily on hold pending a final decision from the owner.

4.3 Apple Avenue #3

Apple Avenue Water System #3 is a multifamily residential property and farm labor camp located within the City of Greenfield limits. The community is identified as severely disadvantaged (MHI survey). There are 14 water system service connections, one of which serves a 19-room labor camp. Across the street from Apple Avenue WS #3 are six households served by two water systems, Apple Avenue WS #1 and Apple Avenue WS #4, known as the Mittelsteadt properties, also classified as severely disadvantaged. Wells for all three systems have shown high nitrate levels.

This community previously applied for State Revolving Fund (SRF) funds for consolidation with the City water system. In 2014, Apple Ave WS #3 completed engineering design for a consolidation with the City of Greenfield water system. Four alternatives were considered: no action, drill a new well, provide water treatment, and consolidate with a nearby system. In 2017, NV5, Inc. was contracted to amend the original consolidation engineering design to include the six connections currently served by Apple Ave WS #1 and Apple Ave WS #4. Consolidation with the City of Greenfield was the recommended option. All property owners support the City's efforts to secure funding for the consolidation of Apple Ave water systems #3, #1, and #4 with the Greenfield municipal water service. EJCW will continue to work with the property owners and facilitate the Agreement for Connection to the Greenfield Water System. The City Engineer is currently working with NV5 Inc. to complete the plans, specifications and bid package for consolidation.

4.4 Santa Teresa

Santa Teresa Village is located in the central Salinas Valley approximately half mile northeast of the City of Soledad. Santa Teresa is identified as a disadvantaged community (MHI survey). Santa Teresa's water system is a state small system, known as San Vicente Road WS #01. The system consists of 10 connections, serving an estimated 36-40 individuals. Nitrate concentrations slightly exceed the state MCL of 10 mg/L (as NO₃-N), though annual monitoring data since 1989 indicates an upward trend.

The CECorps engineering team evaluated the following alternatives for the Santa Teresa community: 1) consolidation with the City of Soledad, 2) new well siting or well relocation, 3) wellhead treatment, and 4) water importation from the City of Soledad. CECorps's recommended solution was consolidation. The City of Soledad is willing to proceed with an application to Monterey County LAFCO for an out of service area extension upon request. The owner of Santa Teresa Village has executed an agreement to install a nitrate treatment system to remove excess nitrate in conjunction with a UCLA pilot project. The property owner's preference is to potentially consolidate with the City of Soledad's water and wastewater services at the conclusion of the UCLA pilot project. The property owner does not want to take any action that would jeopardize the arrangements with UCLA for the pilot treatment system or violate the terms of the signed agreement.

4.5 Hudson Landing Road

Hudson Landing Road community is located in North Monterey County, approximately one mile west of Las Lomas. The community is a suspected disadvantaged community. The community consists of approximately 80 homes, most served by individual domestic wells. There are about 50 wells, eight local small water systems, and one state small water system. A number of wells are out of compliance for nitrate and chromium-6. Nitrate levels found in one well are upward of four times the state standard.

The CECorps engineering team evaluated five alternatives: 1) wellhead treatment for all 50 wells; 2) wellhead treatment for three wells, plus a distribution network; 3) installation of new deep wells; 4) blending; 5) pipeline extension from the Pajaro Sunny Mesa Community Services District (PSMCS D). The two recommended alternatives were installation of new deep wells and consolidation with PSMCS D. CECorps considered consolidation with PSMCS D to offer the most secure system; however, for consolidation to be possible, PSMCS D must implement a compliance plan to address chromium-6 in the Sunny Mesa well. Next steps include: Community engagement will be expanded, and an MHI survey will be conducted. The Project Team will determine the timeline of PSMCS D's chromium-6 compliance project, and continue outreach to County officials and potential funding partners to identify a project sponsor.

4.6 Middlefield Road

The Middlefield Road community is located approximately seven miles northeast of downtown Salinas. The community consists of five residences sharing one water supply well served by Livingston Mutual Water System (LMWS). The area is across the street from homes served by Gabilan Water Company and a short distance from a connection for Cal Water. The well serving the Middlefield Road community has consistently exceeded the MCL for nitrate since 2009. The community is identified as disadvantaged (MHI survey).

CECorps evaluated several alternatives. Three alternatives were briefly evaluated and dismissed as not being viable: 1) POU/POE treatment, 2) modifications to the existing well, and 3) blending. Two further alternatives were fully evaluated: 1) drilling a new well, and 2) consolidation with a nearby water utility. The recommended solution was consolidation with either Gabilan or Cal Water. Engineering consultants will, subject to funding availability, complete a Design Report to evaluate consolidation of additional property owners on Middlefield Road or nearby, and recommend community boundaries for the proposed service area. If Cal Water is selected, an application will be submitted to the CPUC for the expanded service area. Cal Water would provide in-house design engineering for the consolidation project. The Project Team will continue to engage County officials, Cal Water staff members, potential funding organizations, and additional community members with the goal of identifying a funding source and finalizing a project boundary.

4.7 Schoch Road

The Schoch Road community is located 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. 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. The community is a suspected disadvantaged community. Monitoring shows consistent nitrate concentration over the MCL, with a trend of increasing nitrate levels over time.

The CECorps engineering team evaluated the following alternatives: 1) consolidation; 2) new community treatment facility; and 3) wellhead treatment. The recommended option was consolidation with either Cal Water or CalAm water public utilities. Cal Water is supportive of this project. The Schoch water system owner

and households contacted to date are interested in exploring the costs and feasibility of connecting to a larger system. Should the community decide to proceed with a consolidation plan, a project sponsor will need to be identified. If Cal Water or CalAm is selected as the provider, then an application will be submitted to the CPUC for the expanded service area. Dialogue with property owners, Cal Water, CalAm, and Monterey County Environmental Health regarding water system options will continue over the next several months. The Project Team intends to conduct an MHI survey during the winter 2017/2018.

4.8 Next Steps for Other High Priority Communities: Focus Areas for Future Work

In 2017, the Project Team worked with staff from the Central Coast Regional Water Board and Monterey County Environmental Health to identify 52 small water systems with high nitrate levels (2015-2017) located in disadvantaged community block groups, tracts, and places in Monterey County. A complete list of these systems is provided in Appendix 2.1. Based on this data, the Project Team identified four geographic focus areas for future work: Northwest Monterey County, North of Salinas, West of Soledad and Gonzales, and Greenfield area (illustrated in Figure 4.15 in the chapter). Tables 4.1 and 3.7 include next steps and recommendations for 17 of the 52 small water systems identified. The Project Team recommends outreach to the remaining 35 small water systems and to nearby water providers to determine feasible interim and long-term water solution options. The Project Team also recommends updating the list of high priority communities every year when new ACS data is released.

5. Other Related Efforts and Considerations

5.1 Current Related Efforts, Programs, and Recent Developments

Other planning efforts and recent developments that may potentially impact efforts to secure clean, safe, affordable drinking water for disadvantaged communities are summarized. These include:

Ag drinking water initiatives, specifically, the Interim Replacement Water Settlement Agreement and Senate Bill 623: These initiatives allow (or would allow) growers to avoid water enforcement programs in exchange for providing replacement drinking water to residents whose wells are contaminated with nitrate.

UCLA Pilot Project: A team from UCLA is conducting a wellhead treatment pilot project to address nitrate-contaminated drinking water in small disadvantaged communities. The project involves three small communities in the project region: Blue Rock Apartments, Pryor Farms, and Santa Teresa. The systems will use reverse osmosis, and will be remotely monitored/operated. The pilot project is designed to determine, in part, the affordability of O&M costs of the wellhead water treatment option to disadvantaged communities.

Other Developments at the County Level: Brief descriptions of relevant programs and recent developments at the county level are provided, including: the status of point-of-entry (POE) and point-of-use (POU) treatment options; the recently drafted Local Agency Management Program (LAMP) for Monterey County; Monterey County's imminent sale or transfer of wastewater utilities in unincorporated areas; and Monterey One Water's conceptual plan to extend service to small disadvantaged communities in unincorporated areas.

5.2 Obstacles, Data Gaps, and Funding Opportunities

Several "issues" that came up repeatedly over the course of the three-year planning effort are discussed, including: challenges in addressing the source of the problem (i.e., nitrate loading in groundwater supplies); the general problem of affordability associated with consolidation or extension of service; the difficulty in

identifying project sponsors for drinking water or wastewater projects for disadvantaged communities; lack of organizational capacity on the part of small water systems, preventing them from being able to offer extension of service to nearby disadvantaged communities; and the inability of many small disadvantaged communities to demonstrate technical, managerial, and financial (TMF) capacity, preventing them from meeting the requirements needed to operate a water system. Data gaps of note included: data for private domestic wells and local/state small water systems, and data for individual onsite septic systems. Finally, potential funding opportunities to address water and wastewater needs of small communities are listed.

6. Recommendations

The Project Team offers the following recommendations based on their work over the three-year project period:

1. **Need for Increased Funding:** Most of the Project Team’s recommendations begin with a need for increased funding support. While numerous federal and state funding opportunities exist for disadvantaged communities, the Project Team noted certain funding “gaps” and recommended that federal, state, and regional government entities consider increasing funding in the following areas:
 - Guaranteed set-aside funds for small disadvantaged community water systems, particularly to see the “high priority” communities through to an implementable solution
 - Increased support for community engagement, particularly to support outreach to communities in the four geographic focus areas identified for future work, and for pre-project development and project development activities for all high priority projects described in Table 4.1.
 - Support for outreach to private domestic well owners
 - Support for interim solutions
 - Support for lateral costs and O&M
 - Support for wastewater education
 - Funding for ongoing assessment of needs
 - More efficient reimbursement from State grants
2. **Project Sponsorship:** The reluctance of many water providers and Monterey County officials to sponsor drinking water projects for small disadvantaged communities is a frequent and significant barrier to implementing solutions. One suggestion is for the County to take a leadership role in sponsoring projects, or for development of a regional Joint Powers Agency to act as project sponsor for rural communities, private domestic wells, and small systems where consolidation is not feasible. Short of that, the Project Team recommends, at minimum, continued dialogue with the County and water utilities to work out any obstacles to project sponsorship on a case-by-case basis.
3. **Need for Closer Connection with Monterey County Health Department:** While Monterey County Health Department staff was instrumental in providing water quality data and community information throughout this project, the Project Team recognizes a need for increased communication with and involvement from the County as the project moves into the next phase.
4. **Need for Increased Certainty in Identifying Costs:** Community members repeatedly state that their interest to participate in a long-term water or wastewater project depends on cost. The Project Team recommends that the State Water Board and other funding agencies implement a “pre-approval” process to clarify the costs to property owners of future water or wastewater projects.