

CHAPTER 6. RECOMMENDATIONS

This chapter presents a summary of work achieved and recommendations of the Project Team at the completion of this three-year planning effort.

6.1 Summary of Work Achieved

In 2010, the State Water Resources Control Board contracted with 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 groundwater that is potentially unsafe for drinking. In response to the UC Davis report, the Governor’s office convened a Drinking Water Stakeholder Group in 2012 that was tasked with 1) developing an understanding of the challenges faced by small communities impacted by nitrate-contaminated groundwater, and 2) identifying promising solutions.

This planning effort, funded through a State Water Board grant (with funds appropriated by the California Legislature), was the direct result of the recommendations made by the Drinking Water Stakeholder Group. The *Integrated Plan to Address Drinking Water and Wastewater Needs of Disadvantaged Communities in the Salinas Valley and Greater Monterey County IRWM Region* has been a three-year project, starting in January 2015 and concluding in December 2017. Over those three years, the Project Team successfully carried out the following tasks, achieving objectives as intended and realizing many other accomplishments as described below:

1. **Identify Disadvantaged Communities:** The Project Team used several methods to identify disadvantaged communities in the planning area, including US Census data as well as alternative secondary sources to help identify potentially “hidden” disadvantaged communities (see Chapter 2). Approximately 25 small disadvantaged and suspected disadvantaged communities in unincorporated areas of the Greater Monterey County IRWM region, comprising primarily local small water systems (2-4 connections) and state small water systems (5-14 connections) along with private domestic wells, were identified. Several of the “suspected” disadvantaged communities were subsequently surveyed by Project Team members to determine median household income (MHI) levels, and were confirmed as being “disadvantaged” according to the State’s definition.
2. **Database and Mapping:** A robust database and online map platform was produced through the planning effort, with information from the US Census American Community Survey, Monterey County Department of Environmental Health, Central Coast Regional Water Quality Control Board, UC Davis Center for Regional Change, California Office of Environmental Health Hazard Assessment (CalEnviroScreen), Environmental Justice Coalition for Water (EJCW), Rural Community Assistance Corporation (RCAC), and other sources. EJCW staff worked with Monterey County Environmental



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Health and the Central Coast Regional Board staff in updating nitrate and other data layers, making a significant contribution to the regional understanding of nitrate trends over time for local and state small systems and small public water systems (15-199 connections). The online map platform will continue to be maintained and updated by EJCW in partnership with the Water Resources and Policy Initiatives of California State University and UC Davis Center for Regional Change after the completion of the project on a three-year renewable basis.

In addition, several maps, including interventional online maps, were produced to illustrate the locations of small disadvantaged and suspected disadvantaged communities along with associated data (e.g., population, nitrate levels, block group number) and within context of other small communities/water systems and nearby large utilities. These maps will continue to provide a valuable visual tool for identifying nitrate “hot spots” and opportunities for potential regionalization and/or for consolidation.

3. **Identify Drinking Water and Wastewater Issues:** EJCW staff conducted door-to-door surveys to preliminarily assess drinking water and wastewater issues in 25 communities and/or neighborhoods that had been identified as, or suspected of, being disadvantaged (as previously described), and that were located near drinking water wells with high nitrate. This on-the-ground verification of secondary data afforded the Project Team a great deal of information and insight into the community issues and dynamics, and enabled them to prioritize the areas needing more immediate attention.
4. **Identify Solutions:** The Project Team conducted comprehensive assessments for seven high priority communities to bring those communities to an implementable solution. An innovative partnership was struck with Community Engineering Corps (CECorps), an alliance of the American Society of Civil Engineers, the American Water Works Association, and Engineers Without Borders-USA. CECorps, supported entirely with outside funding (a USDA grant), worked closely with EJCW staff to conduct in-depth investigation and analyses of long-term drinking water solutions for each of the seven communities. CECorps produced detailed Project Reports with recommended solutions for six of the communities, and EJCW followed up with extensive community engagement to help the communities evaluate potential solutions and select a preferred option. Project proposals for each community were developed by Nilsen and Associates. The project proposals summarize available information and discuss potential funding sources, institutional and other barriers, and identify realistic schedules and next steps to move the projects forward.

The Project Team’s work has not ended with the conclusion of this project. Project Team staff from EJCW, RCAC, and Nilsen and Associates – with grant funds from the Proposition 1 Technical Assistance, Proposition 1 IRWM Disadvantaged Community Involvement grant programs, and other funding sources – are continuing their work to finalize and implement solutions for high priority communities. They will also begin the process of identifying solutions to drinking water and wastewater problems for the other disadvantaged communities in the Greater Monterey County IRWM region, as described in *Chapter 4 Identifying Solutions*.

6.2 Recommendations

Many excellent recommendations have come out of recent reports and studies with regard to addressing drinking water and wastewater problems for small disadvantaged communities in California. See notably the recommendations from the Governor’s Drinking Water Stakeholder Group’s *Final Report to the Governor’s Office*, including their *Report on New and Expanded Funding Sources* (dated August 13, 2013), and the Tulare County study (*Disadvantaged Community Water Study for the Tulare Lake Basin*). The Project Team concurs with these recommendations, and offers the following additional recommendations based on their work with communities in the Salinas Valley and North Monterey County over the past three years.

Recommendation 1. Funding Needs

Most of the Project Team’s recommendations begin with a need for continued or increased funding support. While numerous federal and state funding opportunities exist for disadvantaged communities (see *Chapter 5, Section 5.3* for a list of current grant and loan programs), the Project Team noted special funding needs in the following areas. This recommendation is targeted toward federal, state, and local funding entities, with the request that they consider increased funding support to address the following needs.

- 1a. **Guaranteed Set-aside Funds for Small Disadvantaged Community Water Systems:** While several excellent grant programs for disadvantaged community water/wastewater projects currently exist, there is no ongoing, guaranteed, dedicated source of financing for this purpose. The Project Team recommends the establishment of set-aside funds on the state level – perhaps appropriated through the California Legislature from fines and penalties from the Waste Discharge Permit Fund, in much the same way that this planning effort was funded – to finance construction and other needs, such as technical assistance, legal entity formation, community engagement, training and education. First and foremost, the Project Team recommends prioritizing funding for high priority projects to ensure the provision of safe water to Monterey County residents in a timely manner. Specifically, the Project Team recommends prioritized funding for: Apple Avenue, Middlefield Road, Johnson Road, Walnut Avenue, Hudson Landing Road, and Schoch Road. A dedicated source of funds would enable the Project Team to see these high priority projects through to successful implementation.
- 1b. **Community Engagement:** Community engagement is staff intensive and time intensive, but is one of the most critical elements in ensuring successful implementation of safe drinking water and wastewater solutions for small communities. The Project Team made great strides in community engagement over the course of this project in terms of identifying communities, surveying their water and wastewater needs, and focusing efforts on a small subset to move them closer to project readiness. Moving forward the Project Team sees two specific needs for future community engagement work, for which funds are needed:
 - With recently updated mapping, four geographic areas within Monterey County have been identified that contain clusters of state/local small water systems with high nitrate levels, and that are located within disadvantaged communities or suspected disadvantaged communities (see *Chapter 4 Identifying Solutions, Section 4.9 Next Steps for Other High Priority Communities: Focus Areas for Future Work*). The Project Team recommends conducting outreach to new systems on that list.

- The Project Team also recommends prioritizing pre-project development and project development activities for all high priority projects as described in Table 4.1. This would enable the Project Team to continue to build on work done to date with the goal of getting projects shovel ready.

Along with these specific recommendations, the Project Team offers the following more general recommendations to address community engagement needs:

- *Community Education:* As evident from many of the survey responses on the questionnaires distributed by EJCW to small communities in 2015 (see *Chapter 3 Identifying Problems*, Section 3.3.1), there is still a significant lack of understanding on the part of individual community members about the extent and potential impacts of drinking water contamination, as well as options that may be available to them. Information provided at workshops can help community members understand, for example, when a problem with water or wastewater may exist, when in-house water treatment may or may not be an effective solution, how to prevent wastewater problems, and the importance of developing a long-term solution for safe, clean drinking water.
 - *Building Community Leadership:* It is overambitious to believe that brief outreach visits can lead a community to reach consensus on a drinking water or wastewater solution, without some type of organizational structure made up of community members. The process requires the building of resident leadership. This task can be challenging and typically requires a longer timeframe as well as a larger community engagement team. Nevertheless, developing community leadership and a leadership structure can result in broader community consensus and a more durable foundation for long-term implementation.
 - *Technical Assistance:* Ongoing training and technical assistance are essential to keeping local communities moving forward toward long-term drinking water and wastewater solutions as well as having assistance to make good choices. One area of particular need that the Project Team has noted is succession planning for small public water systems.
- 1c. **Ongoing Assessment of Needs:** Once this project is completed, there will be a continued need for funds to support the ongoing evaluation of drinking water and wastewater needs of disadvantaged communities in the region. This includes updating the disadvantaged community list with annual ACS data and MHI surveys, comparing disadvantaged community data with County Health Department well water contamination reports, and on-the-ground outreach and education to communities to assess their drinking water and wastewater needs and preferences. Relatedly, ongoing funding support will be needed for the online database and map viewer tool (called the “Greater Monterey County Community Water Tool”). The GMC Community Water Tool is an important and effective visual tool for informing the Greater Monterey County Regional Water Management Group of disadvantaged community needs, and potentially for tracking IRWM disadvantaged community projects or activities. Funds will be needed to support ongoing updates and maintenance for the GMC Community Water Tool database and map viewer over time, as well as continued hosting costs.
- 1d. **Focused MHI Surveys:** The focused MHI surveys conducted as part of this project have confirmed the existence of many “hidden” disadvantaged communities in the region. These communities can be documented as “disadvantaged” and made eligible for funding assistance by means of MHI surveys; however, funding is needed to conduct the MHI surveys. Because income surveys represent such an

important tool for being able to provide assistance to communities with great need, the Project Team recommends increased funding to be able to conduct focused MHI surveys.

- 1e. **Support for Interim Solutions:** Grant funds are typically tied to long-term solutions. Before a project is developed and application ready, however, funds may be needed to address immediate drinking water or wastewater needs. Interim solutions for disadvantaged communities with polluted drinking water, including the provision of bottled water, are absolutely necessary for ensuring that all communities have access to safe, clean, affordable drinking water. Emergency bottled water programs only provide funding for two to three years, while long-term solutions often take more than twice that length of time to implement. Likewise, interim solutions for wastewater problems are necessary for ensuring that no community faces a public health risk while awaiting a long-term solution to their wastewater issues. The Project Team recommends guaranteed funding for interim solutions to ensure that immediate drinking water and wastewater needs are addressed for however long it takes a community to implement a permanent solution.
- 1f. **Outreach to Private Domestic Well Owners:** Because private domestic wells are not regulated (see *Chapter 3 Identifying Problems, Section 3.1.3*), many residents who rely on private domestic wells may not be aware that the water they and their families have been drinking, possibly for many years, is polluted. Increased funding is needed to provide more intensive outreach to homeowners with private domestic wells, along with systematic water quality testing.
- 1.g **Wastewater Education:** While this project has been focused primarily on addressing drinking water needs as a result of nitrate contamination, wastewater issues should also be addressed. Many communities in the region are served by individual septic systems and may not be aware of preventive maintenance practices. Lack of maintenance can lead to high concentrations of nitrate in drinking water supplies. Funds are needed to provide outreach and education for those communities that are served by septic systems. This can be accomplished by distributing written materials, hosting informative community workshops, and providing door-to-door outreach. A well-funded educational program in wastewater management would address the goal of safe, clean drinking water as well as the public health goal of ensuring proper sewage disposal.

Recommendation 2. Grant Funding Process

Observations regarding the grant funding process in service of achieving long-term drinking water and wastewater solutions for disadvantaged communities have led to the following recommendations. These recommendations are targeted primarily toward state funding agencies (in particular, the State Water Board) and Monterey County, which is now an entitlement jurisdiction for the US Department of Housing and Urban Development (HUD) Community Development Block Grant.

- 2.a **Project Sponsorship:** The difficulty in finding qualified sponsors for drinking water projects for small disadvantaged communities is, statewide, a frequent and significant barrier to implementing solutions. This is a recurring theme in grant-driven projects due to the fact that most grants do not allow for full project cost recovery. A secondary issue can be the cost of follow-up monitoring and reporting requirements (sometimes up to 30 years after the original grant dollars are spent) that do not have an identified funding mechanism. The Project Team recommends that State funding agencies make grant requirements for disadvantaged community drinking water projects easier and more affordable for qualified entities to sponsor projects (e.g., including funds to cover their

administrative costs). Other ideas are for State or local governments to take a leadership role in sponsoring projects, or for the development of a legal entity, such as a regional Joint Powers Agency (JPA), to act as project sponsor for rural communities, private domestic wells, and small systems where consolidation is not feasible. JPA members could potentially include the County, local water districts, other agencies such as Monterey One Water and/or the Monterey County Water Resources Agency, non-profit disadvantaged community assistance organizations (such as EJCW, RCAC, CRLA, CECorps), and members at large.

2.b Lateral Costs: Most grants do not cover the cost from meter to house (lateral costs). While consolidation is, in general, the preferred solution of the County and State, and while many funding sources will cover most costs related to pipeline extension, the additional lateral costs can make this solution unaffordable for many homeowners. The Project Team recommends that State funding agencies allow for grant coverage of lateral costs for disadvantaged communities.

2.c More Efficient Reimbursement from State Grants: Reimbursement of costs from State grants can often take many months, sometimes over a year. Small communities typically do not have the reserves to cover these costs, and short vs. long reimbursement periods can make the difference between them being able or not being able to implement long-term solutions. Beginning with Proposition 1 IRWM funds, the Department of Water Resources has instituted a policy to pay disadvantaged communities and nonprofit organizations 50 percent of their grant award upfront. The Project Team urges other State agencies to consider similar reimbursement policies for disadvantaged communities.

2d. Need for Increased Certainty in Identifying Costs: In all high priority communities, community members have clearly stated that their interest and willingness to participate in a long-term water or wastewater project depends on the total cost of the project that they will be responsible to cover. The Project Team recommends that the State Water Board and other funding agencies implement a “pre-approval” process to clarify in writing the costs to property owners and residents of future water or wastewater projects. It would also be helpful if deadlines to receive pre-approved funding could be clearly stated – for example, to qualify for Proposition 1 funding for a water project the following three things will need to be complete by a specific date. Disadvantaged communities often depend on technical assistance providers or larger water providers or other external entities to file grant applications on their behalf. A pre-approval process and schedule would provide community members the information they need to decide whether to join a water project and also how to be proactive in encouraging a grant application.

Recommendation 3. Monterey County Health Department Coordination

Over the course of this project, Monterey County Health Department staff was instrumental in providing water quality data and other information about the targeted high priority communities. The Project Team recognizes the depth of knowledge that Monterey County Health Department staff have regarding small communities in unincorporated areas of the region, as well as the relationships that they have developed over many years with managers of state and local small water systems. Given this experience and depth of knowledge, the Project Team encourages increased input from County staff on project evaluations for disadvantaged communities as this work continues into the future. The Project Team members will continue to engage with the County to help inform and support the ongoing solution implementation process and to

build on the coordinated relationship necessary to achieve successful long-term drinking water outcomes for disadvantaged communities.

6.3 Looking Ahead

As this project comes to an end, the Project Team members will continue their work to address the drinking water and wastewater needs of disadvantaged communities in the Greater Monterey County IRWM region. Next steps for each of the high priority disadvantaged communities are described in *Chapter 4 Identifying Solutions*, and are summarized in Table 4.1 of that chapter.

As noted previously, the IRWM Regional Water Management Group anticipates receiving approximately \$1,775,034 in grant funds through the Proposition 1 IRWM Disadvantaged Community Involvement grant program to assist with continued work on this project. This work will occur in two phases. The first phase will focus primarily on project planning, pre-development engineering, and project development environmental planning, resulting in a minimum of two projects to 30% design completion and two projects to funding application readiness in terms of design and environmental documentation. Phase I of the Disadvantaged Community Involvement work will also include continued engagement with the high priority communities and general community outreach, leadership training workshops, needs assessments, and MHI surveys for a minimum of four communities.

The second phase of Proposition 1 Disadvantaged Community Involvement grant funds will be used for construction of projects identified and developed during the first round. The Disadvantaged Community Involvement funds will go a long way toward supporting the work needed to bring several of the communities identified in this project to, or closer to, long-term solutions for their drinking water and wastewater needs. These funds will also be used in the near-term to continue the assessment of needs, MHI surveys, and community engagement – as outlined in Recommendation 1 – using the GMC Community Water Tool as a powerful platform for tracking needs and planning approaches for potential solutions and community engagement.

Drinking water and wastewater construction projects will also be eligible for Proposition 1 IRWM Implementation Grant funds (separate from the Disadvantaged Community Involvement funds). The Regional Water Management Group is anticipating two rounds of Proposition 1 IRWM Implementation grants (beginning in 2018), and expects there to be a total of about \$6.5 million available for the region. If project sponsors are identified, drinking water and wastewater implementation projects in disadvantaged communities will be eligible to apply, though they will be competing with other implementation projects in the IRWM region. The Project Team recommends that the Regional Water Management Group give special consideration to the projects developed through this planning effort, when deciding which projects to put forward for IRWM Implementation Grant funding.

In addition, Project Team members have access to other sources of grant funds that will enable them to push the disadvantaged community projects forward. RCAC receives funding from various private contributors as well as USDA Rural Development, Health and Human Services, Community Services Department, State Water Resources Control Board, and USEPA to provide technical assistance and training to disadvantaged communities. EJCW has a master contract with the State Water Board for the Proposition 1 Technical Assistance Funding Program. It should be noted that Prop 1 TA and construction funding is limited, and statewide demand has been extremely high.

This *Drinking Water and Wastewater Plan for Disadvantaged Communities in the Salinas Valley and Greater Monterey County IRWM Region* has been situated within a broader effort, many years in the making, to shift public priorities and, importantly, resources to the communities most in need of assistance to realize the human rights to water and sanitation, not just in the Salinas Valley, but statewide. It is the Project Team's hope that this project will offer still more good practices and insights from which to draw inspiration for follow-on efforts in the Salinas Valley and beyond. As many now begin to implement the Proposition 1 Disadvantaged Community Involvement Program and Technical Assistance Program, the time is ripe to advance the lessons, recommendations, and community-specific actions contained in this final report.