

Proposed Center for Disadvantaged Communities Water Assistance



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Executive Summary

Throughout California are thousands of rural small community drinking water systems (with less than 3,300 customers) and wastewater systems (with less than 10,000 customers) whose residents are predominately economically disadvantaged (defined as being less than 80% of the state median household income.) What is significant about these systems, as noted by the United States Environmental Protection Agency (USEPA), is that “96% of all health based violations occur at systems serving less than 10,000 people. The majority of public water systems are very small. More than half of community water systems and nearly all non-community water systems serve fewer than 500 people. Thousands of these small systems need help, in particular those serving communities defined by the States as disadvantaged, including people living or working in federal Indian Country and some rural communities.”



USEPA’s findings are exemplified by a 2006 study conducted by the State Water Resources Control Board (SWRCB) in Tulare County in which a significant number of wells were found to contain coliform bacteria, fecal coliform bacteria and nitrates in excess of community drinking water standards. The groundwater contamination in Tulare County has also impacted small community drinking water systems like East Orosi Community Service District which serves a disadvantaged community of 106 residents. According to the USEPA, East Orosi CSD has been cited 11 times over the past 10 years for exceeding the maximum contaminant level for coliform bacteria and nitrates in drinking water. The primary cause of this contamination, as stated by the SWRCB, is failing septic systems or old and undersized wastewater treatment facilities directly impacting the health, safety and environment of the community. Similar results are found in other California counties.



The challenge faced by these systems is that their rural location does not provide the rate base to support modern treatment technologies. This results in higher per capita capital costs and operations and maintenance costs. It also results in systems being unable to afford technical expertise; pay for upgrades to meet regulatory changes; retain qualified operators; meet the demands for long-term operations and maintenance of an aging or inadequate infrastructure; and access to capital to fix problems. Additionally, the insufficient rate base

often makes it impossible for systems to afford in-house expertise for securing grants and loans for improvements, or to maintain the improvements once installed. Today, many small

community systems are often run by part-time and volunteer staff and overseen by volunteer boards with frequent turnover. The end result has been an inability to protect the environment and the public health and safety of rural residents.



The goal of the proposed Center for Disadvantaged Communities Water Assistance is to help small community drinking water and wastewater treatment systems develop the tools necessary to protect the public health, safety and surrounding environment. It will do this through the sharing and direct application of knowledge designed to improve the physical, financial, and organizational components of systems as they strive to increase the availability of safe, sustainable and reliable drinking water and wastewater treatment for all Californians.

It is the proposed Center's intent that a successful system will be a safe, reliable and affordable small community drinking water and wastewater system that generates multiple benefits to its residents. First and foremost, it protects their public health, safety and the environment. Additionally, it has been documented that an increased investment in public-sector drinking water and wastewater infrastructure brings higher private-sector profits in the community, spurs additional private investment in plant and equipment, and improves growth in private-sector labor productivity.

Demographics of California

If California were a nation, its economy would rank as the eighth strongest in the world. According to the U.S. Bureau of Economic Analysis in November 2009, California's Gross State Product placed it at the top of the list of all states, commanding 13% of the nation's Gross Domestic Product. Yet California is also a state of contrasts. In 2009, the USDA Economic Research Service (ERS) showed that among all of California's 58 counties, eight of the top ten counties by income are clustered in the San Francisco Bay Area (as defined by the Association of Bay Area Governments.) All these counties exceeded the states Median Household Income (MHI). At the other extreme, those counties with the lowest MHI tended to be located in either the timber producing counties of northern and eastern California, or the agricultural producing regions of the Central Valley and Desert.

Demographics and Poverty in Rural California

California can be separated into regions using MHI as the metric. Those regions which are economically disadvantaged, meaning that their MHI is 80% or less than the state MHI, include the Central Valley (composed of Sacramento Valley and the San Joaquin Valley), Imperial Valley and the Inland Empire, and the Cascade Range of northern California. For the sake of simplicity, this report uses the San Joaquin Valley as an example in that its rural characteristics are reflective of the other regions.

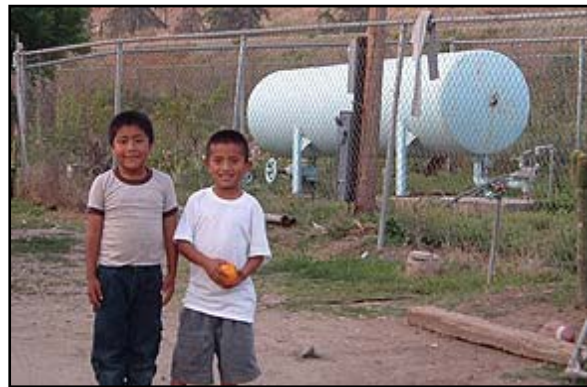
The San Joaquin Valley of California, composed of Kern, Tulare, Kings, Fresno, Madera, Merced, Stanislaus and San Joaquin counties, is home to eight of the top ten agricultural producing counties in the United States. It is also home to some of the highest poverty rates in the United States.



According to USDA's ERS, as of 2008, all of the San Joaquin Valley counties except Stanislaus and San Joaquin were economically disadvantaged. While these county statistics represent a composite of urban and rural populations, ERS noted that rural incomes tended to be 25% lower than urban incomes. ERS also noted that the extent of rural poverty in California as of 2008 had grown from 12% in 1979 to 15.5% in 2008.

In December, 2005, the Congressional Research Service (CRS) published, California's San Joaquin Valley: A Region in Transition, in which it summarized the San Joaquin Valley's (SJV) socioeconomic condition in comparison to the 410 county region overseen by the Appalachian Regional Commission (ARC).

“During the past twenty-five years, population growth rates in the SJV were significantly higher than for California or the United States and their projected growth rates over the next 20 years are also significantly higher. In 2000, the SJV also had substantially higher rates of poverty than California or the United States. Poverty rates were also significantly higher in the SJV than in the ARC region, although the rate is somewhat lower than that of the Central Appalachian subregion.



Unemployment rates in the SJV were higher than in California or the United States and the ARC area. Per capita income and average family income were higher in the SJV than in Central Appalachia, but per capita income in the SJV was lower than in the ARC region as a whole. SJV households also had higher rates of public assistance income than did Central Appalachian households. Madera County ranked among the 10 lowest per capita income Metropolitan Statistical Areas (MSAs) in the United States in 2003, and the other 5 MSAs in the San Joaquin were all in the bottom 20% of all U.S. MSAs. Other indicators of social well-being ... showed that the SJV is a region of significant economic distress.”

This scenario repeats itself in the other rural, disadvantaged regions of California.

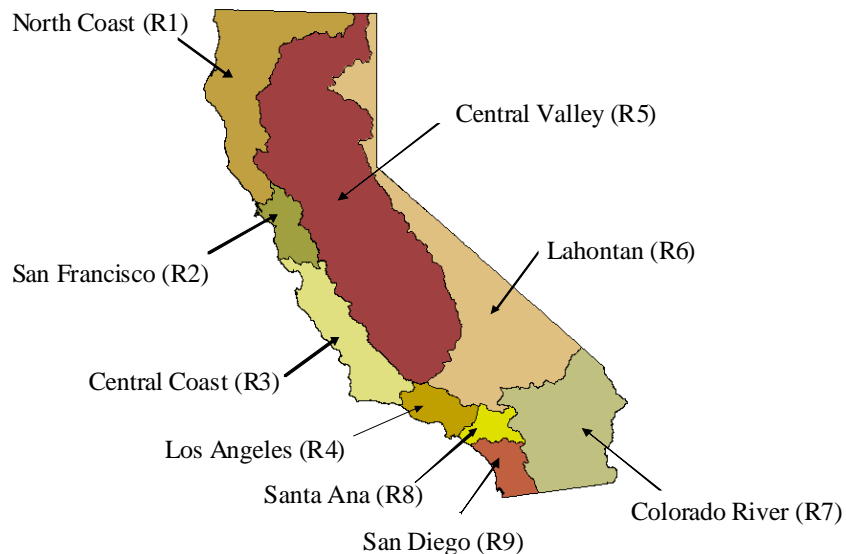
Unincorporated Rural California Regions have Contaminated Drinking Water

In 2008, Self Help Enterprises (SHE) submitted a report to the California Partnership for the San Joaquin Valley in which it cited the 2006 study conducted by the State Water Resources Control Board (SWRCB) of 181 wells in Tulare County. In that study the Board found that 60 wells, or 33%, had coliform bacteria present, of which 15 wells, or 8%, had fecal coliform bacteria present. The Board also found that 75 wells, or 41%, had nitrate concentrations in excess of the community drinking water standard of 45 ppm, ranging from 45 to 243 ppm.



This position was reinforced with a study conducted by the SWRCB entitled, Small Community Wastewater Strategy. In that draft report, the Board found that “many small and/or disadvantaged communities are on failing septic systems or have old and undersized wastewater treatment plants that cannot meet current water quality standards. Such systems can cause significant health and safety problems, endanger surface water uses, and pose a threat to groundwater supplies.”

California Waterboards' Regions



**Potentially Eligible California Small Disadvantaged
Community Wastewater Projects, July 2009**

Waterboards’ Regions	All Projects (Including Tribal Projects)	Tribal Projects
North Coast (R1)	79	2
San Francisco (R2)	4	0
Central Coast (R3)	19	0
Los Angeles (R4)	15	0
Central Valley (R5)	171	0
Lahontan (R6)	16	1
Colorado River (7)	9	0
Santa Ana (R8)	5	0
San Diego (R9)	4	0
All Regions	322	3

The State Board’s report also noted that, “based on information obtained from the California Integrated Water Quality System (CIWQS), 81 percent of those small communities which discharged to surface waters had at least one violation between January 1, 2000, and June 31, 2006; and 77 percent of those small communities which discharged to land or groundwater had at least one violation during that same period.”

Self Help Enterprises’ report to the Partnership for the San Joaquin Valley noted that many Valley rural communities lack the basics of potable water, water storage, conveyance and treatment facilities. Compounding this deficiency is that many rural communities pay in excess of what is considered affordable for water service. SHE attributed this disparity, in part, to limited state and federal grant funding.

Rural systems have greater pipeline and pumping infrastructure, resulting in higher per capita capital costs and operations and maintenance costs.

Challenges to Providing these Regions with Safe, Reliable and Sustainable Drinking Water and Wastewater Treatment.

Rural populations tend to have lower incomes, so end up paying a larger percentage of their income to these systems.

The State Water Resources Control Board’s 2006 draft report, Small Communities Wastewater Strategy, identified many of the hurdles faced by small community drinking water and wastewater treatment systems in providing a safe, reliable, and sustainable service:

“Due to their small rate base, small communities lack the economies of scale to build and maintain adequate wastewater systems. Small communities are also commonly located in rural, sparsely-populated areas that require greater pipeline and pumping infrastructure.



Small, and especially small and rural, communities generally face higher per capita capital and operations and maintenance (O&M) costs, which results in higher, sometimes prohibitive, sewer rates. Disadvantaged ... and severely disadvantaged (MHI of less than 60 percent of the statewide MHI) small communities face the additional burden of lower household incomes. This combination of higher per capita

costs with low MHI means that residents of disadvantaged small communities often pay an even more substantial percentage of their income for wastewater collection and treatment service.”

“Many small communities lack the resources and in-house expertise necessary to apply for grants and loans to help make wastewater projects more feasible. The challenges small and/or disadvantaged communities face generally result from a lack of adequate local monetary resources combined with insufficient access to technical expertise. Another contributing problem is changes in regulatory requirements and the consequent cost of technological upgrades. Small and/or disadvantaged communities also often lack the funds necessary to retain qualified operators. When their wastewater systems violate water quality requirements, they are unable to come up with the capital to fix the problem and may be unable to pay the fines associated with non-compliance. In addition, many small and/or disadvantaged communities lack the resources and in-house expertise necessary to apply for grants and loans to help make wastewater projects more feasible. Even if communities are able to secure financial assistance, they often do not have the in-house technical expertise to determine the best project alternative or to appropriately plan for long-term operations and management needs. More financial, technical, and regulatory assistance is needed to bring small and/or disadvantaged communities into compliance.”

This same conclusion was reached by the California Department of Public Health regarding small community drinking water systems. In 2002, Director Diana Bonta wrote in the California’s Capacity Development Program: Report to the Governor that, “... smaller utilities have a smaller customer base and passing along the monitoring costs can have significant impacts. In addition, smaller utilities often face higher capital operations, maintenance, and processes monitoring costs. In treating their water, they often cannot achieve economies of scale due to the fixed minimum capital costs to purchase a given technology, the inability to take advantage of bulk purchases of treatment chemicals, and labor costs to provide adequate process oversight.”



Furthermore, the Tulare County Board of Supervisors received a report on water services in its rural communities that stated, “Grant monies are available for drinking water and

wastewater projects; however, disadvantaged communities are either not aware of these funding sources, do not have the resources to apply for the funds, or have stopped applying for funds due to previous failed attempts.”



This problem is not unique to rural and disadvantaged communities in California. Claudia Copeland of the Congressional Research Service published a report in 1999 entitled Rural Water Supply and Sewer Systems: Background Information. In that report, she wrote that, “some small communities and states with large rural populations have had problems with the Clean Water Act loan program. Many small towns did not participate in the previous grants programs and are more likely to require major projects to achieve

compliance with the law. Yet many have limited financial, technical and legal resources and have encountered difficulties in qualifying for and repaying loans. They often lack an industrial tax base or opportunities for economies of scale and thus face the prospect of very high per capita user fees to repay a loan for the full cost of sewage treatment projects.”

Proposed Center for Disadvantaged Communities Water Assistance

Objective

The proposed center will have as its mission, the development of the institutional tools necessary to assist small community drinking water and wastewater systems in protecting the public health, safety and surrounding environment. It will achieve this mission through the sharing and direct application of knowledge designed to improve the physical, financial, and organizational components of systems as they strive to increase the availability of safe, sustainable and reliable drinking water and wastewater treatment for all Californians.

An important requirement to be advanced is the consolidation of a number of small systems into a larger service area. This consolidation should provide the necessary economy of scale for hiring and retaining the qualified operators necessary to provide the delivery of safe, reliable and affordable drinking water and wastewater treatment for the residents of the larger service area. Consolidation takes many forms, ranging from simple cooperative agreements to a regional entity. The process of successful consolidation is



generally led by a “convener” who provides technical assistance or guidance in the consolidation planning process. This includes bringing together interested systems and carrying out the steps leading up to consolidation, including determining which of the various forms of consolidation maximizes the benefits for all parties. Coincident with the

Small community water systems lack monetary resources, resulting in an inability to:

- *Pay for technical expertise*
- *Adapt to a changing regulatory environment or pay for cost of upgrades*
- *Retain qualified operators*
- *Access capital to fix problems*
- *Set up depreciation accounts for replacement of machinery and components*
- *Pay fines and penalties*
- *Secure grants and loans for improvements because they lack resources and in-house expertise to apply for these options*
- *Determine best project alternatives even if they are able to secure financial resources because they lack in-house expertise*
- *Afford or pay for long-term Operation and Maintenance needs.*

establishment of a larger service area, economic development should be made a priority with emphasis given towards securing consensus on innovative and effective measures. This economic growth assists in offsetting the costs for maintaining the drinking water and wastewater treatment services provided to the residents of the service area.

A key element in facilitating the adoption of these improvements is the development of an organization based on a collaborative model that works in concert with the community, surrounding districts, non-governmental organizations, and local, state and federal

governments, specifically, the Center for Disadvantaged Communities Water Assistance (CDCWA). The proposed CDCWA, which will operate as part of the California State University system, will focus on providing technical, financial, managerial and organizational assistance.

Among the services to be provided by the CDCWA will be coordination with disadvantaged community water systems in finding the right consolidation model that maximizes the systems' benefits and economic efficiencies. The CDCWA will assist by serving as a "convener" in facilitating the selection of the preferred form of consolidation.

There are multiple benefits to be gained by rural and disadvantaged communities once they have achieved a safe, reliable and affordable small community drinking water and wastewater system. First and foremost, is the protection of their public health, safety and the environment. Additionally, it has been documented that an increased investment in public-sector drinking water and wastewater infrastructure brings higher private-sector profits in the community, spurs additional private investment in plant and equipment, and improves growth in private-sector labor productivity.



Solution to Problem

Essential to resolving the current problem where disadvantaged communities typically suffer from a lack of safe drinking water and inadequate wastewater treatment is the development of the technical, financial, managerial and organizational support services designed to facilitate drinking water and wastewater treatment delivery or disposal, including:

1. Water and wastewater treatment technical assistance (hands on and instructional technical assistance), and
2. Development of the institutional framework (capacity building, collaboration, financial, organizational structure, and leadership advancement.)

The regionalization of wastewater treatment in southern Placer County that would be allowed under the Proposed Project and Alternative 2 would provide a higher level of service to all NSD rate payers and would reduce future maintenance costs by taking advantage of economies of scale associated with combining the two sanitary systems. This would enable NSD to avoid creating a financial hardship for the many fixed-income customers in its service area. The Proposed Project and Alternative 2 would also result in additional water resources available through the treatment and reuse of wastewater. Environmental Assessment, Newcastle Sanitary District Wastewater Treatment Plan Closure and Pipeline Project, prepared by ICF Jones & Stokes, May, 2009

Technical assistance is currently provided to rural communities by such entities as the California Rural Water Association (CRWA), a member organization and Rural Community Assistance Corporation (RCAC.) CRWA provides drinking water and wastewater treatment services to member communities, and to nonmember communities when supporting funding is available from governmental sources. However, the capacity of many rural, economically disadvantaged communities to implement and sustain the assistance provided is often lacking due to the reduced incomes within these communities. As a result, most disadvantaged communities receive little or no assistance and are often supplying residents with drinking water that is not in compliance with public health standards and/or have substandard wastewater treatment and disposal practices that contaminates groundwater – a drinking water source.

It is these communities, receiving little or no assistance, that will be the focus of the

proposed CDCWA and addressed via a two-pronged approach to resolving water issues. Initially, the CDCWA will prioritize disadvantaged communities needing assistance based on health risk, as well as maintenance and operations needs. Following the initial categorization, the CDCWA will then work with the disadvantaged communities in finding economically viable opportunities for collaboration between multiple communities. This includes analyzing various forms of consolidation and assisting them as a



“convener” in adopting the consolidation form that maximizes service for their needs. The purpose of this approach is to develop the economies of scale necessary to effectively address the inability of individual, small communities to access safe, reliable and sustainable water and wastewater treatment services.

The expected result is the establishment of a service area that is fiscally sustainable, leading to a self funding membership in the CRWA or other organization of choice. Through CRWA, for example, they will be able to receive professional assistance with operations and maintenance functions. However, until individual communities become affiliated with a sustainable service area, they can continue to receive operations and maintenance assistance services from CRWA through a contract administered by the CDCWA.

An additional role of the proposed CDCWA is the provision of technical, financial, and managerial assistance. Disadvantaged communities often have volunteer boards of directors overseeing small, community owned utilities. These boards may lack the time required to stay abreast of regulatory changes, legal guidelines overseeing public meetings, or best management practices of the utility. It is important that in addition to the technical services, both financial and managerial training and assistance be provided to these districts. This assures that boards are able to make full use of current methods for maximizing the delivery of essential services, plus learn of the advantages associated with regionalization. Included in this process is how regionalization can insure greater stability and sustainability for the safe operation of their individual system when functioning as part of a larger, area wide water and/or wastewater treatment provider.

Nonprofit organizations can provide an essential role ... as they are able to provide the communities with technical advice and oversight that the Water Boards, as a regulatory agency, are unable to offer. State Water Resources Control Board

Deliverables

The proposed CDCWA will provide, or contract with others to provide, the services shown below:

- Collaboration with governmental agencies, NGOs, consultants, researchers, and private sector specialists.
- Place-based and web-based training that allows for greater access to resources and expertise, including industry professionals as well as faculty and students within the CSU system.
- Consolidation of individual water and wastewater treatment systems into larger, regional entities that are economically sustainable.
- Training and assistance with financial, managerial, operations and organizational structures of small community drinking water and wastewater treatment systems.
- Regional mentoring sessions with fellow small community drinking water and wastewater operators to learn about proper operations, regulatory requirements, and new technologies through the exchange of ideas and discussions of different treatment practices.
- Provide for the availability of operator training workshops and on-site technical visits by trained professionals.
- Regulatory and treatment assistance hotline.

- Web site providing an opportunity for educational webinars; online discussion groups addressing system challenges; notification of events, training and workshops; plus links to other sources of assistance.
- Examination of innovative techniques for providing drinking water and wastewater treatment. This would include demonstration of new technologies by private and public experts.

Experience/Resources used to Address Problems

Technical, financial, managerial and organizational assistance will be coordinated directly from the proposed CDCWA offices situated on selected California State University (CSU) campuses throughout California and located in or near the disadvantaged communities being served (in addition to CSU Fresno, CSU campuses with whom discussions are ongoing are CSU San Bernardino, CSU Humboldt, and CSU Sacramento). When feasible, some of these services may be provided through a contract with the CRWA or other organizations.



An essential component of the Center is the development, by CSU Fresno's California Water Institute, of a technology advancement effort focused on Smart Water Systems (SWS). Funding for technology development is being sought through the Request for Proposal process from the U.S. Environmental Protection Agency and the National Science Foundation (NSF). The proposal to the NSF for funding the SWS development was submitted by the University of California, Los Angeles (UCLA) as the lead university for a five university

consortium that includes UCLA; CSU Fresno; University of California, Irvine; University of Nevada, Reno; and Lehigh University.

The goal of SWS technology is to develop drinking water and wastewater treatment processes which are directed toward disadvantaged communities, have lower operation and maintenance costs, and provide reliable and sustainable services. While laudable, this goal alone will not provide drinking water treatment and delivery nor wastewater treatment and disposal services that are affordable by many disadvantaged communities without other necessary institutional development.

Under the leadership of Chancellor Charles B. Reed, the California State University (CSU) has identified the **Water Resources and Policy Initiatives** as an opportunity to leverage CSU's system wide academic excellence into an important resource for addressing the complex issues about



water confronting California today and in its future.

Many other states and countries look to California and the CSU system for leadership in developing and executing solutions for sustainable water resource management. CSU's academic centers are recognized worldwide for contributing to next-generation policies, science and technology, and complex environmental, social and economic solutions.

As the largest and most diverse university system in the country, the CSU system is uniquely qualified to provide practical leadership in helping to solve immediate and long-term water management issues facing California:

- The CSU has hundreds of scientists and technicians on 23 campuses that feature almost 450,000 students and 47,000 faculty and staff.
- A system wide multidisciplinary academic program can serve as a platform for applying CSU and its resources to important sustainable water practices and policy initiatives.
- These resources can provide education, training and expertise to individuals already in or wanting to pursue diverse careers in the water industry.

THE 23 OUTSTANDING CAMPUSES OF THE CSU



Ability to Disseminate Information

The CSU system possesses many resources for disseminating information including classrooms, distance learning capability, outreach programs to disadvantaged rural communities, and graphics, GIS and printing capabilities.

In addition to the requisite technical, financial, managerial and organizational knowledge that is possessed by their professors and staff, these universities also have professors and staff who are Spanish speakers. For example, at least five of the professors and staff within CSU Fresno's water resources group are Spanish speakers.

Improved infrastructure leads to better health, a cleaner environment, and economic development, Yet Hurdles Must be Overcome

A safe, reliable and affordable small community drinking water and wastewater system generates multiple benefits to its residents. First and foremost, it protects their public health, safety and the environment. While this may be apparent, safe drinking water and wastewater treatment services have not been provided for many reasons; chief among these reasons, as



discussed above, is the inability of disadvantaged communities to pay for these services because they are so small that they cannot achieve economies of scale. Another factor necessary for disadvantaged communities to achieve the ability to pay for drinking water and wastewater services is the implementation of economic development. However, this is a “chicken and egg” issue since little economic development is possible without the necessary infrastructure of which safe drinking water and wastewater services are a key element.

According to Bettye W. Oliver, Program Director for Community Programs with USDA Rural Development in Mississippi, “due to operation and maintenance cost constantly rising as well as regulatory demands, funding cuts and the reality of poverty, the ability to provide services to un-served rural areas is greatly impacted. This extremely burdens the financial and managerial capabilities of smaller systems. In order to help these community water systems meet the needs related to general maintenance, upgrades and compliance with regulatory requirements, I believe that mergers or consolidation of water systems are a wave of the future. By decreasing the number of poorly managed water systems in our state, we help to ensure that the limited financial, technical and managerial resources are available to all of our citizens.”

Once a community drinking water and wastewater system becomes economically viable, it can become the foundation for economic development. In America's Environmental Infrastructure (1990), the author noted that an increased investment in public-sector drinking water



and wastewater infrastructure brings higher private-sector profits in the community, spurs additional private investment in plant and equipment, and improves growth in private-sector labor productivity. This concept of how investments in drinking water and wastewater infrastructure investment has enhanced economic development in hundreds of communities across the country was reported in the Summer, 1995 issue of Water Sense, published by the National Drinking Water Clearinghouse (NDWC). In that issue, NDWC showed how a South Carolina Rural Development Council demonstration project consolidated three smaller sewerage systems into an upgraded regional system in Aiken and Edgefield counties. The effort helped spur an economic expansion credited with creating nearly 3,000 new jobs.



Through direct assistance to disadvantaged community drinking water and wastewater treatment systems will these systems begin to achieve compliance with health and safety regulations. For other systems, the solution lies in consolidating with adjacent systems so as to gain an economy of scale that assures fiscal sustainability. Either way, the goal of a safe, reliable and sustainable water system is essential to securing protection to the public health,

economy and environment of California's rural economically disadvantaged communities.

Possible Sources of Funding to Assist Economically Disadvantaged Rural Community Water Systems

Potential Sources of Federal funding include:

- US Dept of Health and Human Services
 - Indian Health Service
 - Division of Sanitation Facilities Construction
 - Administration for Children and Families
 - Office of Community Services
 - Rural Communities Facilities Program
 - Safety and Security Training and Technical Assistance Project
- US Department of Agriculture
 - Rural Development
 - Rural Utilities Services
 - Water Programs
- US Environmental Protection Agency
 - Office of Water
 - Office of Groundwater and Drinking Water
 - Small Public Water Systems
 - Office of Wastewater Management
 - Municipal Support Division
 - Small Community Wastewater Systems Funding
 - Small Community Drinking Water Funding
 - Management of Onsite/Decentralized Systems

- Operator On-Site Technical Assistance Program
- Hardship Grants Program for Rural Communities
- Community Action for a Renewed Environment
- Drinking Water Academy

- US Housing and Urban Development
 - Community Development Block Grant Program
 - Office of University Partnership

- US Department of Commerce
 - Economic Development Administration
 - Public Works and Economic Development

Funding from the State of California comes predominately from:

- California Department of Public Health
 - Safe Drinking Water State Revolving Fund.
 - Prop. 50 for water security, safe drinking water, and treatment technology (in conjunction with the Department of Water Resources.)
 - Prop. 84 for safe drinking water supplies, including emergency and urgent funding, infrastructure improvements, and groundwater quality.
- State Water Resources Control Board and the Regional Water Quality Control Boards
 - The Small Community Wastewater Grant (SCWG) Program
 - Clean Water State Revolving Fund
- Department of Water Resources

Partial List of Partners Assisting the Center for Disadvantaged Communities Water Assistance

Self-Help Enterprises (SHE)

SHE's Community Development (CD) Program provides technical and organizing assistance to disadvantaged small communities in the San Joaquin Valley Counties to obtain clean drinking water and sanitary sewer services. The CD Program helps communities determine facility needs, prepare funding applications, and organize and work with community members to develop their water and sewer facilities.

Rural Community Assistance Corporation (RCAC)

RCAC provides support to small municipal and nonprofit water systems through their Water and Waste Program. This program focuses on maintaining safe reliable drinking water, wastewater, and solid waste systems.

Regional Council of Rural Counties (RCRC)

RCRC is a non-profit corporation whose thirty-one member counties participate through their respective Boards of Supervisors. RCRC represents the elected general governments of over half of California's counties – local governments that have regulatory and public trust responsibilities over the lands, surface waters, groundwater resources, fish and wildlife, and overall environmental quality within their respective jurisdictions.

Community Water Center (CWC)

CWC seeks to ensure that all communities have access to safe, clean, and affordable water. Their mission is to create community-based water solutions through organizing, education, and advocacy in California's San Joaquin Valley.

California Rural Water Association (CRWA)

CRWA is a nonprofit organization dedicated to enhancing the quality of life in small communities by providing training, technical assistance, and representation to public water and wastewater utilities

California Nevada Section of the American Water Works Association (AWWA)

AWWA is dedicated to leading, educating, and serving the drinking water community to ensure public health and to provide safe and sufficient water for all.

**Appendix A – Potentially Eligible California Disadvantaged
Community Wastewater Projects, July 2009**

POTENTIALLY ELIGIBLE SMALL, DISADVANTAGED COMMUNITY WASTEWATER PROJECTS *

REGION	APPLICANT	PROJECT TITLE	ESTIMATED COST
1	Arcata, City of	Collection System I/I Controls	\$500,000
1	Camp Meeker	Community Wastewater Pollution Project	unknown
1	Cloverdale, City of	I/I CORRECTION & WWTP UPGRADE TO ADVANCED TREATMENT	unknown
1	Etna, City of	Collection System Improvement	\$2,400,000
1	Mammoth County Water District	LANDSCAPE IRRIGATION (RECLAMATION)	unknown
1	Mammoth Lakes, Town of	DAVISON & JOHN MUIR ROADS DRAINAGE	unknown
1	Mendocino County Wastewater District #2	Lift station Rehabilitation	\$25,000
1	Miranda Community Services District	Replace and Repair Percolation Pond Levee	\$700,000
1	Redway Community Services District	Infiltration and Inflow Reduction	\$500,000
1	Yreka, City of	I/I Correction & Effluent Disposal	\$3,000,000
1	Palmer Creek Community Service District	Identify I/I Into The Sewer Distribution System	\$30,000
1	Resort Improvement District No. 1 (Shelter Cove)	UNKNOWN	unknown
1	Geyserville CSD	UNKNOWN	unknown
1	Gualala CSD (WWTP)	UNKNOWN	unknown
1	Hacienda	UNKNOWN	unknown
1	Blue Lake, City of	unknown	unknown
1	Calpella County Water District	unknown	unknown
1	Caspar South Water District	unknown	unknown
1	Fieldbrook CSD	UNKNOWN	unknown
1	Fort Jones, Town of	unknown	unknown
1	Grenada Sanitary District	unknown	unknown
1	Happy Camp Sanitary District	unknown	unknown
1	Hollydale	UNKNOWN	unknown
1	Klamath CSD	Upgrade and Expand Wastewater Treatment Plant	\$1,200,000
1	Yurok Tribe	Del Norte Community	unknown
1	Lake Shastina Community Services District	unknown	unknown
1	Lewiston Park Mutual Water Co. Inc	POTW	unknown
1	Lewiston Valley Water Co. Inc	POTW	unknown
1	Manila CSD (WWTP)	UNKNOWN	unknown
1	Mckinleyville Community Service	UNKNOWN	unknown
1	Newell County Water District	UNKNOWN	unknown
1	Odd Fellows WWTF	UNKNOWN	unknown
1	Russian River CSD (SCWA Guerneville)	unknown	unknown
1	Sonoma County Water Agency	Occidental County Sanitation District WWTP Upgrade	unknown
1	Tennant CSD	unknown	unknown
1	Trinity County Waterworks District	Hayfork WWTF	unknown
1	Weaverville Sanitary District	WWTP Project	unknown
1	Weed, City of	Weed/Shastina WWTP Project	unknown
1	Weott Community Services District	unknown	unknown
1	Scotia, Town of, Company LLC (Humboldt County)	UNKNOWN	unknown
1	Summerhome Park	UNKNOWN	unknown
1	Siskiyou Co. on behalf of Gazelle	Septic to Sewer	unknown
1	Greenview	Septic to Sewer	unknown
1	Laytonville	Septic to Sewer	unknown
1	Trinidad, City of	may be onsite WW disposal project	unknown
1	Siskiyou Co. on behalf of Callahan	Septic to sewer	unknown
1	Dunsmuir, City of	WWTP Project	unknown
1	Siskiyou Co. on behalf of Edgewood	SEPTIC TO SEWER	unknown
1	Hornbrook	septic to sewer	unknown
1	MacDoel Waterworks	Septic to sewer	unknown
1	Rolling Hills Community (in Yreka)	Septic to sewer	unknown
1	Sonoma County Permit and Resource Management Department and/or Community Development Commission	Monte Rio Community Wastewater Project	\$11,865,000
1	Crescent City, City of	City of Crescent City Wastewater Treatment Plant Upgrade	\$20,000,000
1	Ferndale, City of	City of Ferndale Wastewater Treatment Plant Improvement Project	\$11,430,000
1	Fort Bragg Municipal Improvement District No. 1	Pudding Creek Force Main Replacement Project	\$1,500,000
1	Graton Community Services District	Graton Community Services District Wastewater Treatment Plant Upgrade and Reclamation Project	\$5,400,000
1	Lolita Community Services District	Inflow and Infiltration (I&I) Reduction and Wastewater Flow Monitoring	\$275,000
1	Redway Community Services District	Rehabilitation of Sewer Collection System and Treatment Plant Capacity	\$2,000,000
1	Rio Dell, City of	City of Rio Dell Effluent Wastewater Disposal and Treatment Improvements	\$9,996,000
1	Sonoma County Water Agency	South Park County Sanitation District Sanitary Sewer System Rehabilitation Project	\$12,000,000
1	Tulelake, City of	City of Tulelake Wastewater System	\$3,000,000
1	Ukiah Valley Sanitation District (UVSD)	Ukiah Valley Sanitation District Collection System Replacement Project	\$2,607,562
1	Ukiah, City of	City of Ukiah Collection System Replacement Project	\$2,607,562
1	Brooktrails Township Community Services District	Sewer System Rehabilitation	\$2,000,000
1	Brooktrails Township Community Services District	Madrone Lift Station Improvements	\$200,000
1	Dorris, City of	Dorris Lift Station	\$308,000
1	Elk Valley Rancheria	Elk Valley Rancheria/Crescent City Wastewater Treatment Facility Improvement Project	\$20,000,000
1	Fort Bragg Municipal Improvement District No. 1	multiple small	\$270,000
1	Fortuna, City of	Odor and Solids Handling Expansion	\$4,000,000
1	Hopland Band of Pomo Indians	Hopland Tribe Wastewater Collection System Extension Project	\$1,903,000
1	Lolita Community Services District	LCSD WWTP System Improvements	\$3,150,000

POTENTIALLY ELIGIBLE SMALL, DISADVANTAGED COMMUNITY WASTEWATER PROJECTS *

REGION	APPLICANT	PROJECT TITLE	ESTIMATED COST
1	Mendocino City Community Services District	Headworks Auger Monster and Emergency Generator Installation	\$200,000
1	Montague, City of	Southeast Area Sewer Trunk Replacement, Effluent Discharge/Tailwater Ditch Bypass	\$119,000
1	Orick Community Services District (OCSD)	Orick Community Services District (OCSD) Wastewater Treatment System	\$4,796,725
1	Point Arena, City of	Point Arena Wastewater System Upgrades and Repair	\$764,761
1	Smith River Rancheria	Smith River Rancheria Wastewater Improvements	\$5,000,000
1	Westport County Water District	Wastewater Treatment & Disposal System Upgrade	\$500,000
1	Willow Creek Community Services District	Willow Creek - Downtown Wastewater Project	\$1,500,000
1	Covelo Community Services District	Covelo Community Services District Wastewater Systems Improvement Project	\$3,600,000
2	Calistoga, City of	GRIT REMOVAL/SLUDGE DEWATERING EQUIPMENT & WEATHER PROTECTION BUILDING	unknown
2	Frog Hollow Farm, LLC	New Farm Worker Housing Wastewater Systems	\$840,000
2	Marin, County of, Community Development Agency	Tomales Bay Wastewater Improvement Project	\$5,225,705
2	Pescadero, Community of	Pescadero Sewer Project	\$6,000,000
3	Cambria Community Services District	BIOSOLIDS & NITRATE REMOVAL PROJECT	unknown
3	Carpinteria Sanitary District	RINCON POINT SEWER EXTENSION	unknown
3	Carpinteria Sanitary District	SAND POINT ROAD SEWER EXTENSION	unknown
3	Carpinteria Sanitary District	SANDYLAND COVE SEWER EXTENSION	unknown
3	Carpinteria Sanitary District	PADARO LANE SEWER EXTENSION	unknown
3	King City	WWTP Upgrades	\$1,500,000
3	Paso Robles, City of	PASO ROBLES PUMP STATION NO. 1	unknown
3	San Luis Obispo, County of	LOS OSOS WASTEWATER PROJECT	unknown
3	Soledad, City of	TREATMENT PLANT EXPANSION	unknown
3	Heritage Ranch CSD	CONVERT FROM PERCOLATION PONDS TO SPRAY FIELDS	unknown
3	Guadalupe, City of	Upgrade to Full Tertiary Treatment	unknown
3	Little Bear Water Company, Inc.	SEPTIC CONVERSION/CONNECTION TO KING CITY SEWER	unknown
3	Monterey Co. Resources Management Agency	Camphora	unknown
3	Morro Bay, City of	Morro Bay/Cayucos Sanitary District Wastewater Treatment Plant Project Upgrade	\$2,000,000
3	San Jerardo Cooperative, Inc.	San Jerardo Wastewater Treatment and Capacity Upgrade	\$300,100
3	Cuyama Community Services District	Percolation Ponds for Cuyama's Community Wastewater Treatment Plant	\$500,000
3	Guadalupe, City of	Pioneer Sanitary Sewer Lift Station Replacement	\$2,148,800
3	Salsipuedes Sanitary District	Stratford and Parkwood Drives Sewer Repair Project, Kelly Lake Sewer Repair Project	\$26,920
3	San Miguel Community Services District	San Miguel Community Services District Percolation Disposal Pond Upgrade	\$1,952,500
4	Avalon, City of	AVALON WATER RECLAMATION PLANT	unknown
4	Fillmore, City of	FILLMORE WATER RECYCLING PLANT REPLACEMENT, etc.	unknown
4	Dufau Rd. Trailer Park (Ventura Co.)	unknown	unknown
4	Ventura, County of	El Rio Area	unknown
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in Lennox	\$80,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in Florence	\$157,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in Willowbrook	\$587,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in North City Terrace	\$2,150,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in Walnut Park	\$1,090,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in Athens	\$815,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in South City Terrace	\$4,400,000
4	Los Angeles County Department of Public Works	Lining of Cement Pipe Sewers in East Los Angeles	\$2,650,000
4	Maywood, City of	Neighborhood Sewer Rehabilitation Project	\$25,225,000
4	Santa Paula, City of	Santa Paula Water Recycling Facility	\$39,000,000
4	Saticoy Sanitary District	Saticoy Salt Reduction, Removal, and Recycle Storage Project	\$3,000,000
5	Alpaugh, Town of	Treatment & Collection System	\$2,216,050
5	Amador County Public Works Department	LAKE CAMANCHE VILLAGE-CONSTRUCT STORAGE DAM	unknown
5	Amador County Public Works Department	FIDDLETOWN-REPLACE SEPTIC SYSTEMS WITH LOCAL SEWER	unknown
5	Amador Water Agency	REGIONAL WASTEWATER TREATMENT & RECLAMATION	unknown
5	Anderson, City of	unknown	unknown
5	Arvin, City of	Treatment Plant Expansion and Milux Road Interceptor Sewer	\$25,000,000
5	Clearlake Oaks County Water District	I/I Correction	\$600,000
5	Coalinga, City of	NEW WASTEWATER TREATMENT PLANT	unknown
5	Denair Community Service Dist.	CONSTRUCT COLLECTION SYS INTER & LIFT STA	unknown
5	Earlimart Public Utilities District	Treated Effluent Disposal Project	\$1,500,000
5	Esparto CSD	TREATMENT & DISPOSAL EXPANSION	unknown
5	Farmersville, City of	City of Farmersville Clean Water Project	\$22,000,000
5	Fresno, City of	Herndon Town Sewer Collection System	\$896,600
5	Galt, City of	WASTEWATER TREATMENT PLANT UPGRADES	unknown
5	Hughson, City of	WWTP REHAB WD UPGRADE	unknown
5	Lincoln, City of	REHABILITATE COLLECTION SYSTEM IN HOITT SUBDIVISION	unknown

POTENTIALLY ELIGIBLE SMALL, DISADVANTAGED COMMUNITY WASTEWATER PROJECTS *

REGION	APPLICANT	PROJECT TITLE	ESTIMATED COST
5	Lindsay, City of	Plant Expansion	\$250,000
5	Livingston, City of	Domestic Water Treatment Plant	\$29,000,000
5	Mount Shasta, City of	I/I Correction	\$2,180,000
5	Murphys Sanitary District	WILLIAMS STREET LINE REPLACEMENT, POND 4 EXCAVATION, MURPHYS GRADE PUMP STATION	unknown
5	Oakdale, City of	UPGRADE WASTEWATER TREATMENT FACILITY	unknown
5	Sanger, City of	Sanger WWTP Expansion	\$25,000,000
5	Sierra, County of	Treatment & Collection System - Community of Calpine	\$2,300,000
5	Taft, City of	Wastewater Treatment Expansion	\$25,000,000
5	Amador Regional Sanitation Authority	HENDERSON RESERVOIR IMPROVEMENTS	unknown
5	Avenal, City of	Expand/Upgrade WWTP	\$15,000,000
5	Canby Community Services District	Canby Community Services Water and Sewer Project	unknown
5	Lake Co. Special District- Lower Lake/City of Clearlake	Southeast Regional Wastewater collection system	unknown
5	Del Norte County	Upgrade Collection System	unknown
5	Donner Summit Public Utilities District	Upgrade WWTP	unknown
5	Dos Palos, City of	Upgrade WWTP	unknown
5	Fresno County Waterworks District No 38	REPLACE CLARIFIER AND EFFLUENT PUMP	\$186,980
5	Jackson, City of	UNKNOWN	unknown
5	Kelseyville County Water Works District No. 3	WTTP Improvements- Phase II	unknown
5	Newcastle Sanitation District	Close Current WWTP and Convey to an Adjacent District	unknown
5	Newman, City of	UNKNOWN	unknown
5	Santa Nella County Water District	Upgrade WWTP	unknown
5	Sutter Creek, City of	REGIONAL TREATMENT PLANT	unknown
5	Sutter, County of	CITY OF ROBBINS WWTP UPGRADE- NEW FILTRATION MEDIA AND SETTLING TANK REPAIR	unknown
5	Tehachapi, City of	unknown	unknown
5	Bear Valley, City of	UNKNOWN	unknown
5	Knights Landing Community Services District	unknown	unknown
5	Loyalton, City of	WWTP Project	unknown
5	Rio Vista, City of	sewer replacement project	unknown
5	Allensworth	Septic to sewer	unknown
5	Buttonwillow County Water District	collection system replacement	\$28,370
5	Cameron Creek (adjacent to Farmersville)	Septic to sewer	unknown
5	Caruthers Community Services District	Capacity expansion and nitrate removal	unknown
5	Del Rey (in Fresno County)	unknown	unknown
5	Kern County KSA-City of Taft	South Taft Sewer Collection System	\$7,000,000
5	Kern, County of	North Rexland Acres Sewer Project	\$4,000,000
5	Lamont Public Utility District	Weedpatch Sewer Connection Project	\$250,000
5	Lindcove	Septic to sewer	unknown
5	London Community Services District	Aeration System Improvements	unknown
5	Madera, County of	Fairmead septic to sewer (MD-33)	unknown
5	Matheny Tract (in Tulare County)	Septic to sewer	unknown
5	Monson (in Tulare County)	Septic to sewer	unknown
5	Pixley Public Utility District)	Sewer Collection System Improvements	unknown
5	Plainview Mutual Water Company	septic to sewer	unknown
5	Sultana Community Services District	Capacity shortage at Culter-Orosi WWTP	unknown
5	Tipton CSD	Connect recently annexed N. Burnett Road	unknown
5	Tranquility CSD (in Fresno County)	unknown	unknown
5	Tulare County Resources Management Agency	Community of Seville- Capacity shortage at Culter-Orosi WWTP	unknown
5	Tulare County Resources Management Agency	Community of Yettem- Capacity shortage at Culter-Orosi WWTP	unknown
5	West Goshen	Septic to sewer	unknown
5	Grayson	UNKNOWN	unknown
5	Ballico	unknown	unknown
5	Bret Harte	unknown	unknown
5	Ceres, City of	unknown	unknown
5	Cressey	unknown	unknown
5	Crows Landing	unknown	unknown
5	Ducor	unknown	unknown
5	East Orosi	Capacity Expansion	unknown
5	East Shore Lake Almanor	unknown	unknown
5	Empire	unknown	unknown
5	Garden Avenue Community (Stanislaus Co.)	unknown	unknown
5	Gustine	unknown	unknown
5	Hilmar	unknown	unknown
5	Keys	unknown	unknown
5	Le Grant	unknown	unknown
5	Yuba Co. Community Development	Mage Avenue Community (in Yuba County)	unknown
5	Maxwell Public Utilities District	unknown	unknown
5	Midland Community (Stanislaus Co.)	unknown	unknown
5	Modesto, City of	unknown	unknown
5	Prattville	UNKNOWN	unknown
5	Riverbank	UNKNOWN	unknown
5	Robertson Rd. (Stanislaus Co.)	unknown	unknown
5	Santa Fe Avenue (Stanislaus County)	unknown	unknown
5	Stevinson (Merced Co.)	unknown	unknown
5	Terra Bella	unknown	unknown
5	Tulare County Redevelopment Agency	Tonyville	unknown
5	Tooleville	unknown	unknown

POTENTIALLY ELIGIBLE SMALL, DISADVANTAGED COMMUNITY WASTEWATER PROJECTS *

REGION	APPLICANT	PROJECT TITLE	ESTIMATED COST
5	Turlock, City of	unknown	unknown
5	Westley	unknown	unknown
5	Winton	unknown	unknown
5	Madera, County of	South Fork Community Wastewater System	\$2,147,723
5	Amador Water Agency	Gayla Manor Wastewater System	\$290,000
5	Amador Water Agency	Lake Camanche Wastewater Improvement Project	\$11,900,000
5	Isleton, City of	Isleton Wastewater Treatment Facility	\$1,700,000
5	Kern, County of	West and Southwest Shafter- South Shafter Wastewater Project	\$3,173,340
5	Kern, County of	Smiths Corner and Thomas Lane- South Shafter Wastewater Project	\$4,335,055
5	Kern, County of	Cherokee Strip and Burbank- South Shafter Wastewater Project	\$1,494,890
5	Lake Berryessa Resort Improvement District	Lake Berryessa Resort Improvement District Wastewater Facility Improvements and Upgrades	\$2,200,000
5	Lakeport Municipal Sewer District	City of Lakeport Municipal Sewer District Capacity Expansion Project	\$2,000,000
5	Linda County Water District (Yuba County)	Linda County Water District, Wastewater Treatment Plant Upgrade and Expansion Project	\$65,000,000
5	Live Oak, City of	WWTP Upgrade	\$22,000,000
5	Madera, County of	MD-22 WWTF	\$1,400,000
5	Madison Community Services District	Madison Community Services District Wastewater Treatment Plant	\$500,000
5	Maricopa, City of	Maricopa Wastewater Project	\$6,100,000
5	Marysville, City of	Waste Discharge Feasibility Study & Master Plan	\$750,000
5	Mendota, City of	Mendota Wastewater Effluent Treatment & Disposal	\$4,000,000
5	Mettler County Water District	Mettler Wastewater Project	\$2,500,000
5	Napa Berryessa Resort Improvement District	Napa Berryessa Resort Improvement District Wastewater Facility Improvements and Upgrades	\$2,750,000
5	Nevada City	2007 Wastewater Improvement Program - Disinfection	\$675,000
5	Orange Cove, City of	WWTP System Improvements	\$2,482,000
5	Placer County Department of Facility Services- Environmental Engineering Division	North Auburn Sewer Maintenance District #1 Upgrade Project	\$60,000,000
5	Planada Community Services District	Wastewater Treatment & Disposal Facility Improvement Project	\$4,000,000
5	Plymouth, City of	Plymouth Wastewater System Renovation	\$5,110,000
5	Quincy Community Services District	Quincy Wetlands Treatment Project	\$261,404
5	Red Bluff, City of	Antelope Area Sewer Project (Red Bluff jurisdiction)	\$1,600,000
5	Richgrove Community Services District	Richgrove Wastewater Treatment/Disposal Facility Improvement Project	\$5,464,000
5	San Andreas Sanitary District	Tertiary Treatment Plant Expansion	\$4,400,000
5	Shafter, City of	North Shafter Wastewater Project	\$2,467,697
5	Springville Public Utility District	Treated Sewer Effluent Disposal Project - Phase II	\$1,600,000
5	Tehama, County of	Antelope Area Sewer Project (Tehama County Jurisdiction)	\$23,900,000
5	Tuolumne Utilities District	West Ranch Recycled Water Storage Reservoir	\$7,812,000
5	Westwood Community Services District, Lassen County	Rehabilitation of Sewer Collection System and Sewage Treatment Facility	\$2,000,000
5	Angels, City of	Wastewater Treatment Plant Improvement Project	\$1,940,000
5	Armona Community Services District	Armona Community Services District Wastewater Treatment Improvements and Expansion Project	\$6,500,000
5	Biggs, City of	Sewer Plant Upgrade	\$150,000
5	Burney Water District	Secondary Clarifier	unknown
5	Burney Water District	Lift Station Upgrade	\$500,000
5	Burney Water District	Sludge Lagoon	\$350,000
5	Calaveras County Water District	Douglas Flat/Vallecito/Six Mile Village Regional Wastewater System, Phase II	\$2,600,000
5	Chowchilla, City of	Municipal Wastewater Treatment Plant	\$730,253
5	Cutler Public Utility District	Sewer Replacement Project - Phase I/II/III	\$3,601,000
5	Dinuba, City of	East Side Trunk Sewer Expansion Project	\$2,000,000
5	Dunnigan Water District	Sewer Service for the Community of Dunnigan	\$4,000,000
5	Fresno County Waterworks District No. 18	Friant Community Wastewater System	\$3,782,500
5	Fresno, County of	Raisin City Sanitary Sewer System	\$2,000,000
5	Hidden Valley Lake Community Services District	Hidden Valley Lake Community Services District - Sewer System Improvements	\$3,528,000
5	Indian Valley Community Services District	Greenville California Sewage Backup Mitigation, Safety Upgrade and Reliability Enhancement Project	\$4,200,000
5	Indian Valley Community Services District	Crescent Mills Sewer System Development	\$1,956,515
5	Jamestown Sanitary District	WWTF Upgrade and Expansion	\$5,400,000
5	Kern, County of	South Shafter Wastewater Project	\$8,965,809
5	Kettleman City Community Services District	WWTP Improvements	\$2,000,000
5	Lost Hills Utility District	Wastewater Treatment Plant Expansion	\$2,500,000
5	Madera, County of	MD-37 WWTP	\$200,000
5	Madera, County of	SA-14 WWTP	\$600,000
5	Madera, County of	MD-28 WWTP	\$250,000
5	Madera, County of	MD-8A WWTF	\$1,440,000
5	Malaga County Water District	WWTP Renovation Project	\$450,000
5	Mariposa Public Utility District	Wastewater Collection System Inflow and Infiltration Study, and Sewer Extension	\$100,000
5	McFarland, City of	Replaced Damaged Trunk Sewer, Upgrade to Tertiary, etc.	\$1,250,000
5	Nevada County Sanitation District No. 1	Penn Valley Wastewater Treatment Plant Improvements	\$3,500,000
5	New Auberry Water Association	New Auberry Wastewater Facilities Improvements	\$1,200,000
5	Olivehurst Public Utility District	Olivehurst Public Utility District Capacity Review and Plant Upgrade	\$5,500,000
5	Paradise, Town of	Downtown Revitalization Area Clustered Wastewater Treatment System	\$3,000,000
5	Parlier, City of	Parlier Wastewater Effluent Treatment and Disposal	\$1,552,000

POTENTIALLY ELIGIBLE SMALL, DISADVANTAGED COMMUNITY WASTEWATER PROJECTS *

REGION	APPLICANT	PROJECT TITLE	ESTIMATED COST
5	Princeton Water Works District	Improvement and/or Replacement of Existing WW Plant	\$353,650
5	River Pines Public Utility District	River Pines Water Re-Use	\$70,000
5	Riverdale Public Utility District	Riverdale Wastewater Treatment Facility Improvements	\$4,960,000
5	Shasta Lake, City of	Sewer Improvements Project	\$2,230,000
5	Stratford Public Utility District	Wastewater Treatment Plant Upgrade	\$2,000,000
5	Tulare County Redevelopment Agency	Traver Sewer, & Wastewater Treatment & Expansion Project	\$764,761
5	Tuolumne City Sanitary District	Wastewater Treatment Facility Upgrade & Expansion	\$6,000,000
5	Tuolumne County Yosemite Vista Estates	Yosemite Vista Estates Effluent Disposal System	\$540,000
5	Tuolumne Utilities District	Brentwood Sewer System	\$5,360,000
5	Wheatland, City of	City of Wheatland Wastewater Treatment Plant Expansion and Upgrade	\$29,000
5	Williams, City of	City of Williams Wastewater Treatment Facility Upgrade Project	\$20,000,000
5	Placer County Department of Facility Services-Environmental Engineering Division	Sheridan Wastewater Treatment Facility and Groundwater Protection Project	\$800,000
6	Bridgeport Public Utilities District	Upgrade & Expand WWTP & Pump Station - Evans Tract Collection System	\$287,000
6	Crestline Sanitation District	INFILTRATION/INFLOW REDUCTION PROGRAM, WWTP EXPANSION & UPGRADE, etc.	unknown
6	Floriston Property Owners Association	UPGRADE COMMUNITY SEPTIC SYSTEM	unknown
6	Hilton Creek Community Services Dist	WASTEWATER TREATMENT PLANT EXPANSION	unknown
6	Markleeville Pub Util Dist	INFRASTRUCTURE PROTECTION PROJECT	unknown
6	Mono, County of	REPLACE SEPTAGE POND	unknown
6	Rosamond Community Services Dist	LANDSCAPE AND AGRICULTURAL IRRIGATION (RECLAMATION)	unknown
6	San Bernardino, County of	CSA 53 B FAWNSKIN - I&I CORRECTION	unknown
6	San Bernardino, County of	CSA 82 - SEARLESS VALLEY - PERCOLATION POND	unknown
6	San Bernardino, County of	CSA 70B - HELENDALE WWTP UPGRADES	unknown
6	San Bernardino, County of	CSA 42 ORO GRANDE - SEWER MAIN REPLACEMENT	unknown
6	San Bernardino, County of	CSA 79 GREEN VALLEY LAKE - UPGRADE AHWAHNEE LIFT STATION	unknown
6	Susanville Consolidated Sanitary District	SCSD Wastewater Treatment Plant Expansion	\$7,041,709
6	Fort Bidwell Indian Community Council	Fort Bidwell Tribal Project	\$47,500
6	Inyo, County of	Tecopa Hot Springs Park/Campground Sewage Treatment Lagoon Repair Project	\$323,000
6	Susanville Sanitary District	Susanville Sanitary District Collection System Rehabilitation Project	\$1,011,246
7	Brawley, City of	Rehabilitation of Sewer Collection System Brawley County Water District Colonia and Construction of Digester at City's Wastewater Treatment Facility	\$4,400,000
7	Calipatria, City of	Improvements to Wastewater Collection & Treatment System	unknown
7	Cathedral City	Dream Homes Septic Elimination Project Phase 2	\$1,980,000
7	Heber Public Utility District	Preliminary Engineering Report for the Heber PUD Wastewater Treatment Plant	\$50,000
7	Hi-Desert Water District	Hi-Desert Water District Wastewater Trunk Line & Collection System	\$100,000,000
7	Mission Springs Water District	Dos Palmas Community Sewer System	\$4,450,000
7	Niland Sanitary District	Improvements to Wastewater Collection & Treatment System	unknown
7	Salton Community Services District	Wastewater Treatment System Improvements	\$800,000
7	Seeley County Water District	Seeley County Water District - Mt. Signal Pump Station Project	\$810,000
8	Big Bear Lake, City of	upgrades	unknown
8	Eastern Municipal Water District	Enchanted Heights Sewer System	\$4,800,000
8	Eastern Municipal Water District	Quail Valley Sewer System Design	\$70,000,000
8	Yucaipa Valley Water District	Slack Sewer Assessment District	\$2,500,000
8	Yucaipa Valley Water District	Dunlap Sewer Assessment District	\$24,100,000
9	Oceanside, City of, WUD	CONSTRUCTION OF EMERGENCY HOLDING POND, BUCCANEER BEACH	unknown
9	Olivenhain Municipal Water District	unknown	unknown
9	Ramona Water Company as Anza Facilities District	Anza Facilities District - Sewer Collection, Treatment, & Disposal Project	\$14,000,000
9	Ramona Municipal Water District	Santa Maria Wastewater Treatment Plan Expansion	unknown

Statewide Need (for the 167 [of the 322 total projects listed] with 'known' project costs) **: \$1,013 million

Notes:

* This list includes projects identified as potentially eligible for the Small Community Wastewater Grant (SCWG) Program, as of July 6, 2009. Prior to updating the SCWG Program Competitive Project List (CPL), State Water Resources Control Board staff will mail an application for the SCWG Program CPL to all potential applicants identified. Only eligible applicant types (i.e., city, town, county, district, Indian tribe, or other public body) meeting the population and Median Household Income (MHI) criteria, and all other eligibility criteria for the SCWG Program, will be considered for funding. If United States Census data representative of the service area is not available, an income survey must be conducted to evaluate SCWG Program eligibility. Inclusion on this preliminary list does not guarantee funding or inclusion on the updated SCWG Program CPL.

** Since the project cost for many of communities listed above is unknown, this is considered a conservatively low number. State Water Resources Control Board staff will update this number upon receipt and review of applications for the SCWG Program CPL.

**Appendix B – Newspaper Articles Reporting on Challenges to
Disadvantaged Community Water Systems**



Safe water for Seville, other rural Tulare County areas to be focus of rally; residents can bring samples for testing

By Ana Orozco Burluson • For the Visalia Times-Delta • May 3, 2010

The last thing you expect to see in your water glass is a sandy sludge at the bottom.

But for more than five decades, that's what the residents of Seville have experienced. The problem is so bad, Seville recently was featured in a Nickelodeon TV special on the absence of clean and safe drinking water in third-world countries like Bangladesh and Honduras.

"Safe drinking water is a human right," said Susana De Anda, co-executive director of the Community Water Center in Visalia.

In an effort to focus state and federal attention on the problem, which also affects other rural Tulare County communities, Seville and the Community Water Center will host a National Drinking Water Week rally Tuesday at which residents may bring tap water for testing. There also will be a tour of the community.

"You'll actually be seeing the problems, like the pipes being above ground," De Anda said. "We're going to get a good sense of what it's like living in a community with many water challenges."

Contaminants found in Seville's drinking water are potentially fatal. They include arsenic and nitrates, which cause cancer and blue baby syndrome, De Anda said.

Blue baby syndrome occurs in babies 6 months or younger who ingest water with high nitrate levels.

"When their blood is unable to absorb oxygen, they suffocate and turn blue," De Anda said.

Residents of Seville and other outlying Tulare County communities have been double-paying for drinking water for years, De Anda said. They pay monthly for water they can't drink, then must drive miles away to purchase bottled water.

"They've just conformed to the situation," she said. "But you can't conform to an injustice."

The Community Water Center is calling on Gov. Arnold Schwarzenegger and the Central Valley's congressional representatives to provide direct emergency funding to communities without safe drinking water as well as long-term solutions.

"We need to prioritize that drinking water is the essence of life and [that] without it, we cannot live," De Anda said.



Improving water quality in Matheny Tract south of Tulare comes with a high price

BY VALERIE GIBBONS • vgibbons@visalia.gannett.com • May 15, 2010

It's not hard to find evidence that the residents of the Matheny Tract know their water is contaminated with a high level of nitrates.

Just look for the bottled water.

Residents of the 45-acre community on the outskirts of Tulare have been buying bottled drinking water for more than three years, said Lew Nelson, the director of public works for the city of Tulare.

"It's really unfortunate that a disadvantaged community is forced to buy bottled water," he said. "That's really the most expensive alternative for them."

High costs

Nitrates are the county's largest water contamination problem, said Mark Bairstow, an environmental health specialist with Tulare County.

The problem comes down to money. Most of the water delivered to homes locally comes from groundwater. Only the most expensive systems in the county — like the ones that serve the cities of Visalia and Tulare — are large enough either to avoid contaminated sources or treat the water.

But anyone living outside of the city water systems may not know if they have high nitrate levels.

"If you have a private well, you are not required to test the water," Bairstow said.

A \$150 surcharge on county well drilling permits pays for testing at a lab in Fresno. So far the county has tested 472 wells for contaminants over the last four years.

In Tulare, Nelson hopes that state and federal grants will eventually come though to help all 200 properties of the tract hook up to the city's water system. But that future has a steep price tag: more than \$5.5 million. It will also cost another \$3 million to hook up each of the homes to the city's sewer system and add other infrastructure.

Leaky septic systems are widely blamed for high-nitrate levels in water, as well as certain fertilizers and natural sources. And if a proposed annexation of the tract to the city of Tulare goes through, the area would be served by the city's water system but it would also force residents to hook up to the city's sewer system, Nelson said.

The bill per household for just the sewer connection alone would run about \$2,800.

"That's a whole lot of money for the people living out there," he said.

Annexation fight

Residents of the Matheny Tract and the city have been at odds over annexation for the last nine years. Now an effort by the California Rural Legal Assistance Foundation is trying to tie the annexation of the tract — and all of the infrastructure improvements that come with it — to the annexation of a 400-acre industrial park on the tract's edge.

Nelson said the annexation would put all of the grants in peril, since the city would be ineligible to apply. Even if the grants do go through, though, it could be years before the residents of the tract have clean water.

"We just sent our last grant application off on Thursday," he said.

Across the county, efforts to clean up contaminated wells are just beginning. High nitrate levels can be found in wells along the base of the foothills. But in the county's flat lands, nitrate hot spots like the Matheny Tract occur as well.

"It's just because of the nature of ground water here in Tulare County," Bairstow said.

This year the county is assisting seven small water systems connect to larger city services in Tulare, Porterville and Exeter. Most of those smaller systems serve low-income communities.

Bairstow said the only way the county can afford to connect the smaller communities is to look for state and federal grants.

"As long as we have had these funding sources, we have been able to move forward," he said.

There's little assistance, though, for individual homes. Testing for the well takes place after the well has been drilled, the equipment installed and the pumps are turned on. If the wells test positive for contaminants, the homeowner is sent a letter.

"We don't require the property owner to shut down the well," he said.

Help from ag industry

The county's agricultural industry has made some changes over the last decade, as well, said Tricia Stever, the executive director of the Tulare County Farm Bureau.

Dairy owners are capturing the run-off from their farms and reusing it up to five or six times and growers are taking part in county-wide commissions to help with water quality. Stever said companies that manufacture fertilizers, insecticides and other so-called "crop protection materials" are also changing their formulas.

"They're taking tremendous strides to make their products safer for drinking water," she said.

"Growers are also going to tremendously expensive lengths like hiring hydrologists and going through groundwater testing — agriculture is carrying a tremendous part of that burden."



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Election: Contaminated water, costs are issues in Tulare County's District 4 supervisor race

BY DAVID CASTELLON
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One of the most difficult issues faced by five candidates in Tulare County's District 4 supervisor race is water.

Farmers and homeowners with private wells have spent years watching their water levels decline. Meanwhile, arsenic, nitrates and other harmful substances threaten to render undrinkable well water from across the north county.

Residents in Delft Colony, Tonyville, Seville, Yettem and nearby areas pay some of the highest water rates in the county, while the county runs the water and sewage systems in those areas at a loss.

In the case of Seville, that water system doesn't even work right. Years of disrepair have left cracks in pipes, allowing silt to flow through household faucets and forcing residents and students at the town's elementary school to buy bottled water.

Seville's dilapidated water system has gotten so bad that last year, the county took temporary ownership of it.

Lack of money is a big reason the problems can't be easily fixed. Another issue: California has just emerged from three years of drought, and it's anybody's guess whether the next rain season will be a prolific one.

Then there's the question of what water-conservation laws may come down because of the state's water shortage, and how they might affect agriculture and homeowners.

Here are what the candidates who responded to Times-Delta's requests for interviews had to say about water:

J. Steven Worthley (incumbent)

While the county operates water systems for some north county communities, most are run by local water districts. Still, Worthley said he believes supervisors can advocate to get federal and state money that may help those districts improve their systems.

"The county has not been a player because of their limited direct connection, but water affects so many people," he said

In addition, Worthley said, supervisors can:

- Advocate for changes in state and federal laws that might benefit local water districts.
- Persuade cities to tie smaller, neighboring communities into their city water systems.
- Lobby lawmakers for water policies that help agriculture.

A couple of years ago, supervisors formed a new county Water Commission to look at water issues here, advise the county and seek funds for water-improvement projects, Worthley noted.

Recently, the board became a voting member of the Kings River Water Association, which supplies agricultural water to most of the 4th District. Worthley said being on the board should give the county a say in ensuring that some of the grants the association receives for water projects are directed here.

But fixing problems — whether replacing pipes and pumps or installing treatment systems — costs money. Lots of money.

"The county doesn't have a pot of money," Worthley said. "The money to fix rural water systems would ideally come from the beneficiaries of that system, to spread the costs around. That's where growth can be beneficial."

Worthley said he supports allowing growth in rural communities, which he believes would expand their financial bases to pay for water-system improvements.

Maggie Florez

Florez said supervisors need to take the lead to ensure that residents across the county have safe and adequate access to drinking water.

"I'm talking about whatever needs to be done," she said.

That includes lobbying in Sacramento and Washington, D.C., for funds to replace faulty pipes and remove arsenic and other contaminants from water systems, she said. It also includes networking and, possibly, working with groups that study and lobby on water issues, said Florez, who could cite no specific groups.

She said the county has not been responsive to residents of Seville and other communities seeking help with their water problems.

"I think that [the county] should bring in bottled water to those areas where there is arsenic and people can't afford to buy [bottled] water," Florez said.

As for the complaints of high water and sewage rates for the county-run water systems in the north county, Florez said she would study the issue before deciding whether rates should be capped or cut.

Consolidating water systems so they can share costs should be looked at, she said.

As for allowing rural communities to grow, Florez offered no opinion.

"Before you can decide on growth, you need to find out what's going on in the community and if something is able to be sustained out there," she said.

Florez added that she'd like the county to do more outreach to promote water conservation.

Juan Guerrero

"I believe the problem here is lack of leadership," Guerrero said.

In Seville, Guerrero said, there were discussions five years ago about replacing aging pipes. The problems haven't been fixed, he said.

"The county should have been on top of this," he said.

Guerrero said that as a supervisor, he would work with local water authorities and lobby for legislation that keeps water for agriculture. Monthly water fees for county-run water systems should be capped, he said, and the supervisors should look at reducing them.

He also supports consolidating water systems where distance and geography allow. Guerrero said he's excited that the Alta Water District is considering treating Kings River water and combining it with ground water to serve Cutler-Orosi and East Orosi.

But some communities, including London, Yettum and Seville, may be too far apart to consolidate and share their water costs.

As for funding the fixes and improvements to local water systems, Guerrero said he would mine state and federal grants.

"It's been my experience that you can find it," he said.

He also favors allowing small, unincorporated communities to grow.

"They need to have some type of controlled growth out there, and they need some kind of tax base to pay for their [water] systems," Guerrero said.

Brian Rouch

Water is one of the most critical issues in the 4th District, Rouch said.

"The incumbent has traditionally taken a position that this is not his job to deal with, this is the not the responsibility of the county, the county doesn't own these systems," he said.

Rouch said county government should act because rural residents depend on supervisors to look after them. Supervisors must be firm advocates for bringing water in for farms and ranches while lobbying against water rules that could affect those businesses, he said.

Rouch said he's pro-growth for the county, but not if it restricts water for agriculture.

On the issue of reducing water and sewer rates in the north county, he said there is no simple answer.

"Some of these [residents] are paying too much money, there's no doubt about it," Rouch said.

But before he could say yes or no to changing water and sewage rates, Rouch said, he'd have to look at the reasons for the proposed changes and what would happen without them.

"You can't say, willy-nilly, yes or no to a rate hike," he said. "These are complicated issues."

Rouch does not support Worthley's proposal to grow towns. Growth in the county should focus largely around cities, which have water systems and other infrastructure, he said.

Rouch said he'd focus on seeking grants to fix and renovate towns' water systems and work to find other ways to help.

"I have never claimed I have a solution how to solve this," Rouch said. "Nobody knows how to solve this, but I recognize this is a problem."

Donny Barton

Barton could not be reached Wednesday.

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Stanislaus residents, activists make push for clean water

By Michelle Hatfield

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The water is not safe. Parents buy bottled water to drink, cook and bathe their infants.

Some children have suffered painful intestinal aches.

These people aren't from a Third World country — they live in Stanislaus County's outlying areas such as Monterey Tract Park and Riverdale Park, where access to clean, healthy drinking water is hard to come by.

Residents and clean water organizers talked about their plight Tuesday in rallies and news conferences across California, in conjunction with National Drinking Water Week.

"I'm worried about my children and their future," said Mario Jimenez, a resident of Riverdale, at a news conference in Modesto.

Riverdale is a community of 300 houses west of Ceres, west of Carpenter Road between Paradise Road and Whitmore Avenue. "Water is life. If there's no water, there's no life," Jimenez said.

Cities and towns across California consistently test positive for contaminants such as arsenic, manganese and nitrates. Ingesting them can cause cancer, neurological disorders and stomach pain.

To avoid the danger, some people buy bottled water, but the cost is too high for many low-income families, residents said Tuesday.

Some of the chemicals occur naturally, but others come from landfills or dairy and farm runoff.

"Instead of fighting over surface water, like how much should be pumped from the delta or which way canals flow, people should be thinking about groundwater and what you're drinking," said Jennifer Clary, water policy analyst with Clean Water Action. The San Francisco-based coalition fights for clean water across California.

Monterey Park Tract and Riverdale are surrounded by farms and dairies. Each community can build new wells or treat water to clean it, but the cost can be hard for them to fund alone.

"The smaller the community, the more difficult it is to bear the cost," Clary said.

Monterey Park Tract received a grant and money from Stanislaus County to study water cleanup and new delivery methods, but the solution could cost millions of dollars, Clary said.

In the meantime, residents like Jimenez hope to spread the word about their lack of quality water and convince local officials to help, said Virginia Madueño, Riverbank mayor and community organizer with Clean Water Action.

"Clean water is a fundamental, basic human right," she said.

For more information about bringing clean water to communities such as Monterey Park Tract and Riverdale Park, go to www.cleanwateraction.org.

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California Water Institute

Formation of the California Water Institute (originally called the San Joaquin Valley Water Institute) was authorized in March 2000 when California voters approved Proposition 13, a \$2 billion water bond measure. State Senator Jim Costa of Fresno and Assemblyman Mike Machado of Linden co-authored the portion of Proposition 13 that provided \$3 million in seed money for the Institute

The Institute is housed at the California State University, Fresno, and Dr. David Zoldoske is the director.

The scope of the activities of the California Water Institute is to carry out concise, comprehensive studies that will provide the direction for better future uses and conservation of the State's waters; to promote practices that will enhance and preserve the State's water resources and their quality; to serve as a center for research, education, planning, policy evaluation, and information transfer; to communicate the results of its research and studies with the residents of California; and to collaborate with agencies and institutions in California to seek a positive resolution to the State's complex water problems.