Attachment 8.
Disadvantaged Community Assistance

Monterey Peninsula, Carmel Bay, and South Monterey Bay
Integrated Regional Water Management
2014 Drought Grant Proposal

Table of Contents

Attachment 8. Disadvantaged Community Assistance

8.1 City of Salinas Drought Relief through Stormwater Diversion for Water Supply

The project presented in this proposal addresses critical water supply and water quality needs of a disadvantaged community (DAC) within the Greater Monterey County Region. This disadvantaged community is the community of Castroville in the northern portion of the region, served with water by the Castroville Community Services District (CCSD). This section provides the required documentation regarding DACs for this project.

8.1.1 Documentation of the Presence and Needs of Disadvantaged Communities

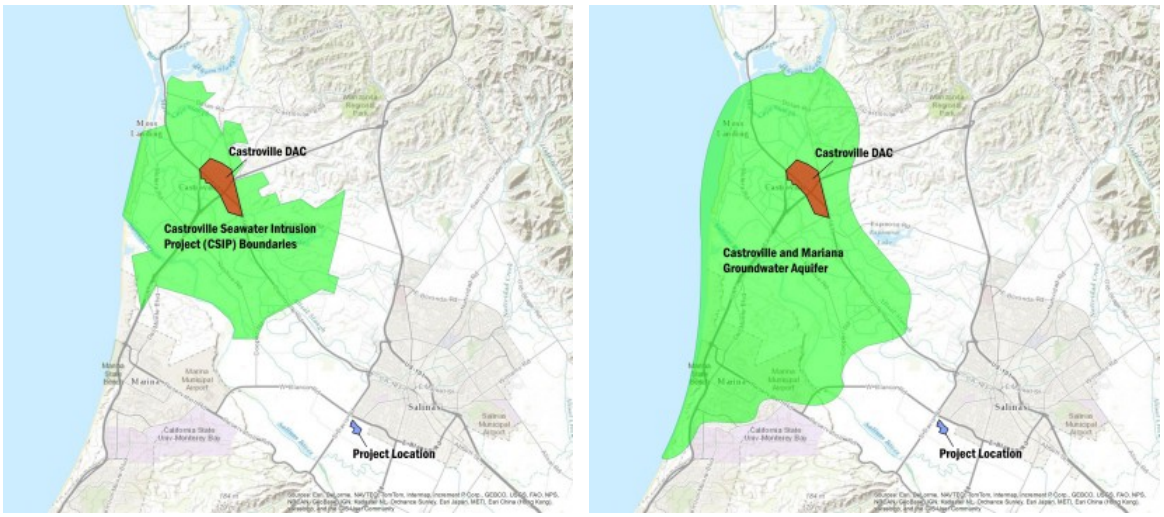


Figure 8-1. Project 1 Service Area and Castroville DAC

As shown in Figure 8-1, this project serves the safe drinking water supply needs of Castroville, a disadvantaged community in the Salinas Valley. Castroville is an unincorporated community in rural Monterey County, about 6.5 miles northwest of Salinas. U.S. Census records reflect Castroville Township as early as 1870. The community is a mixture of residential, small commercial and light industrial uses, focused on supporting regional agriculture and the construction industry.

State of California Department of Water Resources (DWR) defines a DAC as "a community with an annual median household income that is less than 80 percent of the Statewide annual median household income (PRC 75005 (g))."[1]

Castroville is a Census-Designated Place (CDP), so U.S. Census data was used to determine DAC status. The U.S. Census Bureau's 2006-2010 American Community Survey 5-year estimates provide Median Household Income (MHI) data for the state of California at $60,883.2, therefore, 80-percent of the state MHI is $48,706. For the same data set and time period, Castroville CDP's MHI was found to be $44,286.3. Castroville is at 72.7% of the state's MHI and therefore, qualifies as a DAC.

[1] Guidelines, IRWM Drought Solicitation, June 2014, pg 82, available at: http://www.water.ca.gov/irwm/grants/docs/Guidelines/P84_IRWM_GL_Drought2014_Final.pdf

8.1.2 Description of Proposed Project and Targeted Benefits to DACs

With drought conditions forcing growers and water supply agencies in the area to overdraft the groundwater aquifers to meet demand, seawater intrusion in the aquifers is causing serious drinking water issues in the community of Castroville. As shown in Figure 8-2, Castroville lost the ability to pump fresh water from the 180-Foot Aquifer in 1993. Figure 8-2 similarly shows seawater intrusion reaching beyond Castroville, which places Castroville in great danger of losing the ability to pump from the 400-foot Aquifer if the drought continues. Further seawater intrusion caused by overdraft severely exacerbated by the drought could mean loss of this water source. Such a change would have huge capital and operating costs, which could catastrophically affect the affordability of a quality drinking water supply for Castroville.

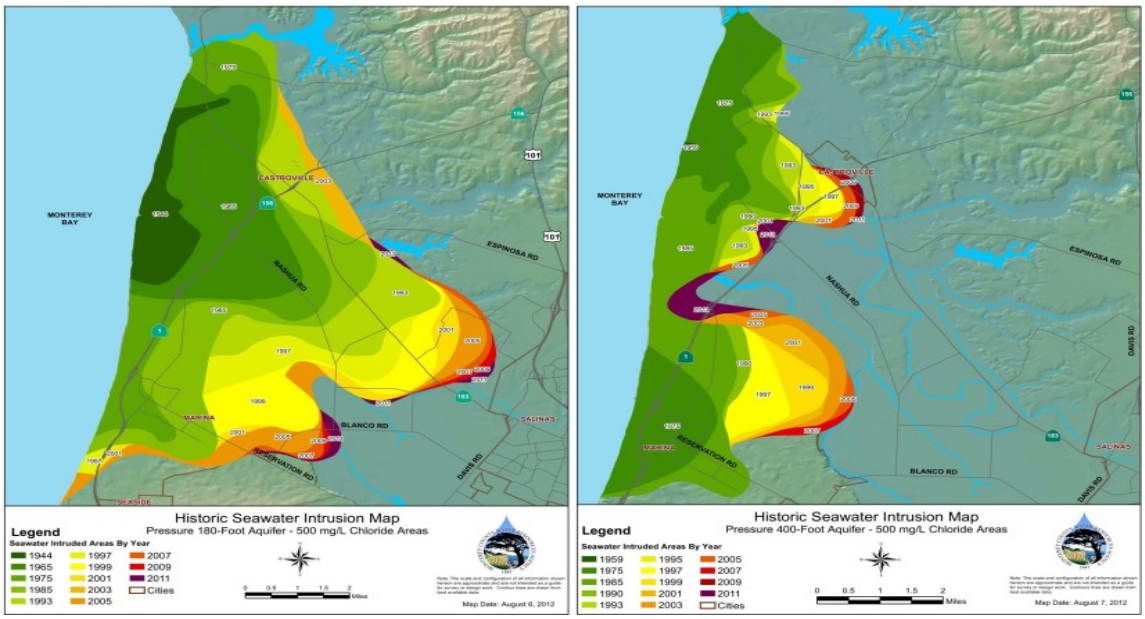


Figure 8-2. 180- and 400-Foot Aquifer Historical Seawater Intrusion

CCSD serves water to about 7,400 residents in the community of Castroville. CCSD currently delivers about 820 acre feet per year (AFY -- 0.73 million gallons per day). CCSD draws water from the 400-Foot aquifer through three wells. The static water level is more than 100 feet below sea level for these wells, having dropped nearly 80 feet over the past three months. If the levels drop any lower, they will be below the CCSD's level transmitters. As an apparent direct result of ongoing drought conditions, the water quality for two of these wells has degraded markedly, with chloride concentration at Well 3 increasing by over 130 mg/L in the past month to 476 mg/L of chloride. Owing to the continuing water table drop, CCSD's energy costs for pumping have increased correspondingly, about $3,000 per month, compared to the same wells and the same calendar dates last year. CCSD General Manager Eric Tynan reports that he expects to lose one or two of these wells by the end of August. He hopes to drill a new well further to the east but the cost will be substantial, over $1 million. CCSD owns one well currently not in service that penetrates into a much deeper aquifer, roughly 1,400 feet deep. This well's water quality is problematic. Its arsenic (As) concentration is 17 micrograms per liter (µg/L), well above the drinking water maximum contaminant level of 10 µg/L. Furthermore, the deeper well water has elevated sulfur compounds and is odorous. CCSD

estimated that an arsenic treatment system would cost about $1 million per well. CCSD also is considering desalination, which would also be very costly, in lieu of drilling a new well or treating groundwater to remove arsenic and sulfur compounds.

This project is designed to divert stormwater from South Salinas to provide more water to the Castroville Seawater Intrusion Project (CSIP), to prevent seawater contamination of the groundwater aquifer that serves CCSD. This project will provide a new water source to growers to alleviate the strains on the groundwater supply, thus protecting CCSD's threatened drinking water source, the 400-Foot aquifer. The proposed project will reduce drought impacts for CCSD and reduce irrigation well pumping from the 180/400-foot aquifer

[2] ACS Fact Finder, Median Household Income In The Past 12 Months (In 2010 Inflation-Adjusted Dollars), available at: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

[3] Disadvantaged Communities Mapping Tool, July 2014, available at: http://bit.ly/GAfIdv

8.1.3 Documentation of DAC Representation and Participation

CCSD has participated in the Salinas Valley Integrated Regional Water Management (IRWM) Planning process since 2006, when it joined with Monterey County Water Resources Agency and the Marina Coast Water District in publishing the Salinas Valley IRWM Functionally Equivalent Plan (FEP).

Since 2008, the DAC community of Castroville has participated in the Greater Monterey County IRWM process. CCSD is represented on the governance structure, known as the Regional Water Management Group for the Greater Monterey County Region, through CCSD's General Manager, Eric Tynan

8.2 INFORMATION SUPPORTING THE DETERMINATION OF DACS IN THE HEART PILOT PROGRAM REGION

8.2.1 Documentation of the Presence and Needs of Disadvantaged Communities

The U.S. Census Bureau's 2006-2010 American Community Survey 5-year estimates provide Median Household Income (MHI) data for the state of California at $60,883.2 therefore, 80-percent of the state MHI is $48,706. For the same data set and time period, four tracts within the City of Monterey and Seaside were determined to have an MHI below 80% that of the state. Tracts 127, 136, 137 and 140 within the City of Monterey and Seaside meet qualifications to be considered DACs.

8.2.2 Description of Proposed Project and Targeted Benefits to DACs

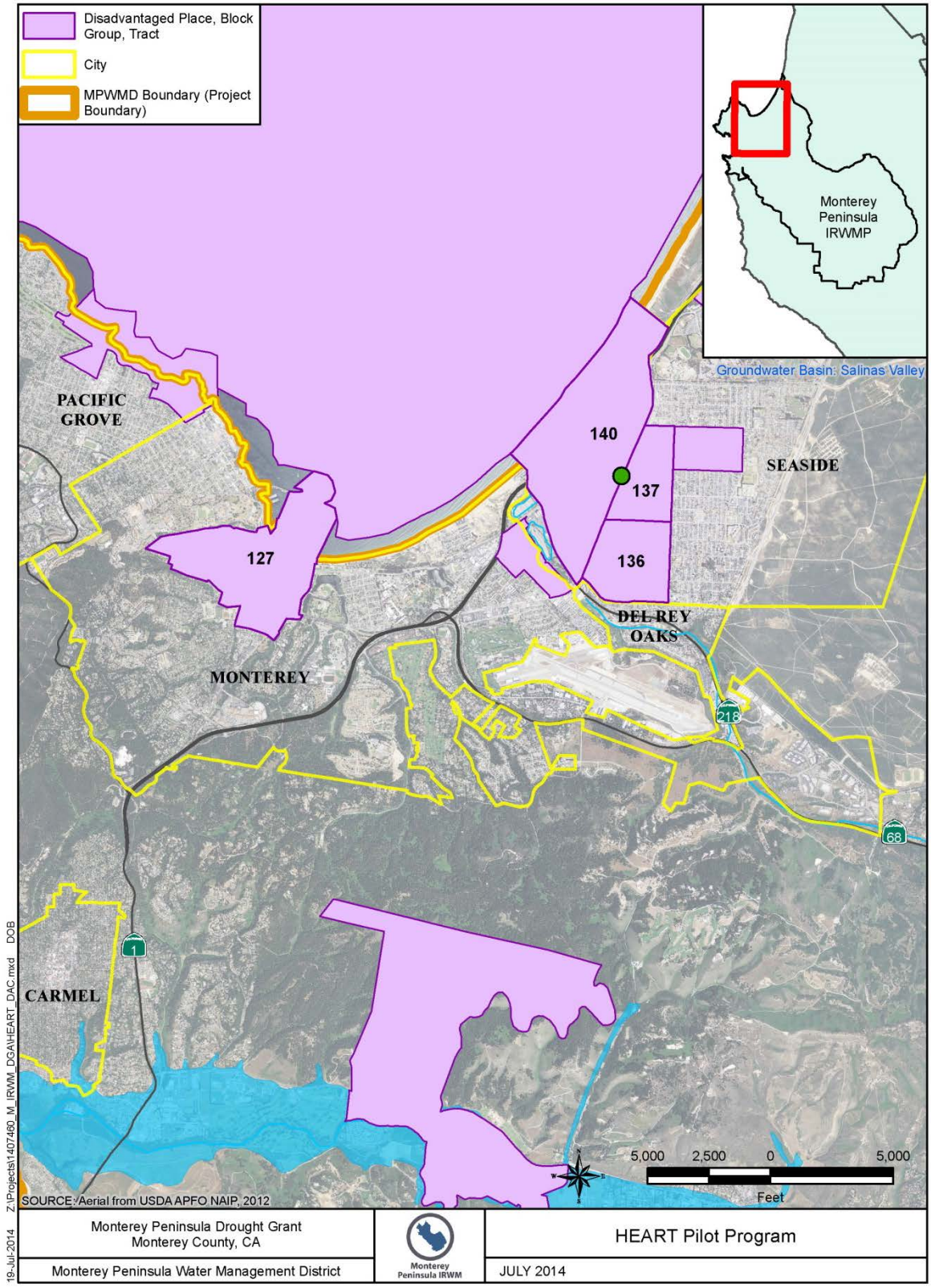
The HEART Pilot Program will provide substantial benefit to disadvantaged communities by causing water and energy savings resulting in lower utility bills for customers that cannot afford to purchase and install these products. Marketing the program to low-income customers in the most commonly used languages will encourage participation. Providing professional installation at no cost to the customer will also incentivize participation. As side benefits, high efficiency clothes washers also use less detergent and reduce fabric wear, saving the customer money.

8.2.3 Documentation of DAC Representation and Participation

Census tracts within the benefit area with MHIs less than 80% of the State MHI, or $48,706, include the four tracts identified below:

Tract	People	Households	Income
127	3,247	1,742	46,400
136	4,258	1,434	47,830
137	4,975	1,374	42,551
140	2,461	780	47,759
Total	**14,941**	**5,330**	

The total population in the Monterey Peninsula IRWM region is about 106,000. So, about 14% of the population would be considered as disadvantaged. It is estimated that 50% of the qualified participants will take advantage of the HEART Pilot Program. The tracts may be identified in the benefitted project area in the image below:


Disadvantaged Place, Block Group, Tract
City
MPWMD Boundary (Project Boundary)
Monterey Peninsula IRWMP
Groundwater Basin: Salinas Valley
PACIFIC GROVE
140
137
136
127
SEASIDE
DEL REY OAKS
MONTEREY
CARMEL
218
68
1
5,000 2,500 0 5,000
Feet
SOURCE: Aerial from USDA APFO NAIP, 2012
Z:\Projects\1407480_M_IRWM_DGA\HEART_DAC.mxd DOB
19-Jul-2014
Monterey Peninsula Drought Grant
Monterey County, CA
Monterey Peninsula Water Management District
Monterey Peninsula IRWM
HEART Pilot Program
JULY 2014