Merced Integrated Regional Water Management
Merced Region 2015 Grant Proposal

Attachment 7:
Disadvantaged Community Assistance

Attachment 7 consists of the following items:

- ✓ **Determining the DAC Status**
  Local Disadvantaged Communities (DACs) are defined utilizing the 2015 IRWM Guidelines, Appendix G and mapped using data from the American Community Survey (ACS) of the U.S. Census, and targeted benefits to local DACs from the proposed projects are described.

- ✓ **Meeting a Critical Water Supply or Water Quality Need**
  A project that serves a DAC Program Preference critical water supply or water quality need where there is a severe threat to the health and safety of the DAC.

- ✓ **Funding Match Waiver**
  No projects in this proposal are proposing to waive the funding match.

This attachment is designed to assist DWR in evaluating the application with regard to DAC program preference and DAC funding targets. No projects in this proposal are proposing to waive the funding match.

Documentation of the Presence of a DAC

Determination of DACs in the Project Area

A DAC is defined by the State of California as a community with an annual median household income (MHI) that is less than 80 percent of the statewide MHI (Public Resources Code, 75005[g]). According to the *2015 IRWM Guidelines*, the most recent U.S. Census Bureau's American Community Survey (ACS) data available show that 80% of statewide MHI is $48,875, meaning that any community with an MHI of $48,875 or less would qualify as a DAC. The MHI reported in the *2015 Guidelines* uses ACS data from 2009-2013, which was also used to map with those Census Tracts qualifying as DAC shown in **Figure 7-1**.

The Merced Region includes the incorporated cities of Atwater, Livingston, and Merced, and the unincorporated communities of Cressey, El Nido, Franklin/Beachwood, Le Grand, Planada, Snelling, Stevinson, UC Merced, and Winton. Using the GIS data from the California Department of Water Resources (DWR) IRWM website, a DAC analysis was performed for the Merced IRWM Region. As summarized in **Table 7-1**, the majority of the Merced Region is categorized as a DAC. With the exception of Livingston and Cressey, all of Merced's communities meet the State's definition of a DAC using either Census Tracts or Census Places. Table 7-1 lists the Census Designated Places that are DACs in the Merced Region and their associated MHIs.

Table 7-1: DACs in the Merced Region based on ACS (2009-2013)

Community	Median Household Income by Census Place	DAC
Snelling	$22,083	Yes
El Nido	$32,100	Yes
Winton	$39,718	Yes
Le Grand	$36,700	Yes
Planada	$35,017	Yes
Merced	$37,822	Yes
Atwater	$42,162	Yes
Livingston	$49, 634	No
Franklin/Beachwood	$41,442	Yes
Cressey	$58,333	No
Stevinson	$44,643	Yes
UC Merced Area	$34, 113	Yes*

*The UC Merced Area is partially within a Census Tract that has a MHI of $34,113 and thus qualifies as a DAC. Additionally, UC Merced is shown as a DAC by Census Place but ACS data for median household income is unavailable.

Both of the projects contained in this application are included in the Merced Integrated Regional Water Management Plan (IRWMP). As part of the Merced IRWMP development process, directed outreach was conducted to DACs within the IRWM region to solicit and incorporate their input into the document and to identify projects that directly benefit the DACs. It is through the IRWMP development process that DACs have been involved and engaged in the development and preparation of the projects contained herein.

DAC Needs and Targeted Project Benefits

The ongoing drought, reduced surface water supplies, and the associated increase in groundwater use have created a water crisis in the Merced IRWM Region. The region is reliant on groundwater for drinking water supplies, including those of DACs. **Figure 7-1** and **Figure 7-2** illustrate DACs within the Merced Region.

Figure 7-1: DACs in the Merced Region by Block Group based on ACS (2009-2013)

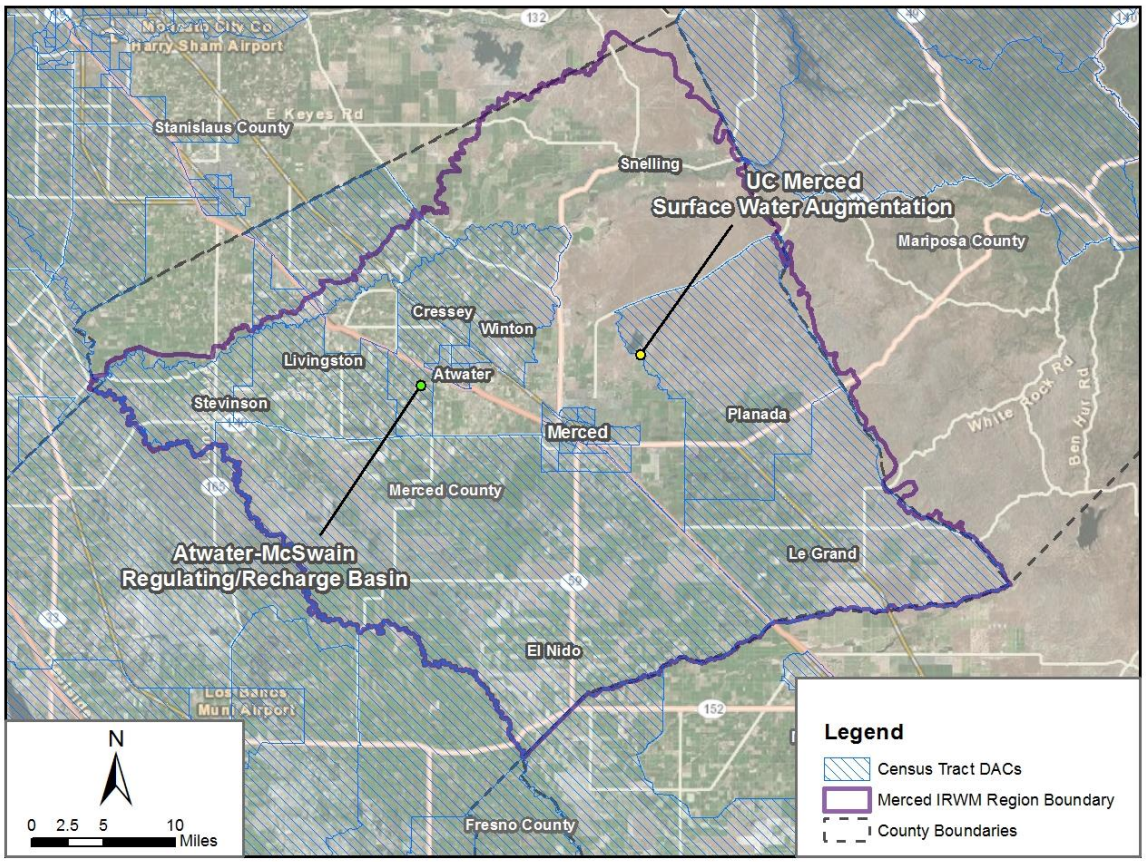
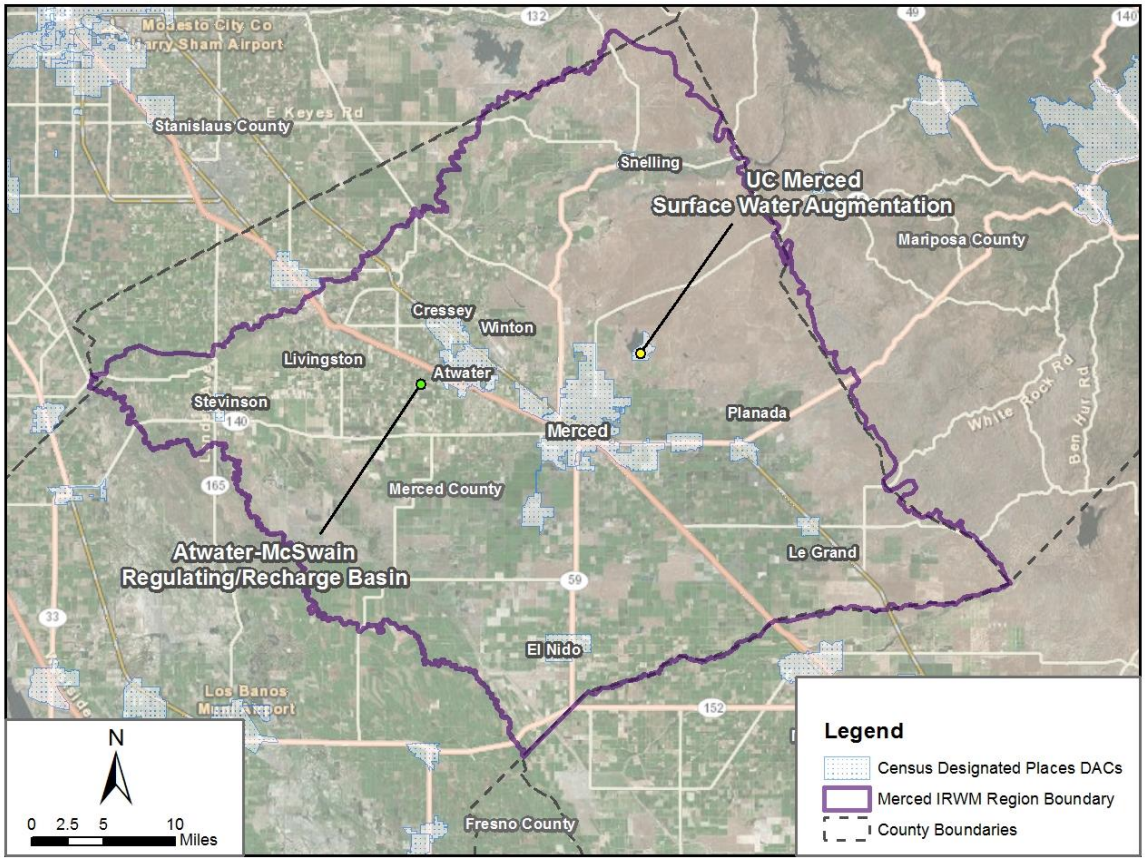


Figure 7-2: DACs in the Merced Region by Census Place based on ACS (2009-2013)



Needs of DACs

The needs of DACs in the Merced Region are best summarized by the MIRWMP objectives:

A. Manage flood flows for public safety, water supply, recharge, and natural resource management.
B. Meet demands for all uses, including agriculture, urban, and environmental resource needs.
C. Correct groundwater overdraft conditions.
D. Improve coordination of land use and water resources planning.
E. Maximize water use efficiency.
F. Protect and improve water quality for all beneficial uses, consistent with the Basin Plan.
G. Protect, restore, and improve natural resources.
H. Address water-related needs of DACs.
I. Protect and enhance water-associated recreation opportunities.
J. Establish and maintain effective communication among water resource stakeholders in the Region.
K. Effectively address climate change adaptation and/or mitigation in water resource management.
L. Enhance public understanding of water management issues and needs.

The objectives addressed by each of the projects in the proposal are summarized in **Table 7-2**.

Table 7-2: DAC Needs Addressed by the Proposed Projects

Objective	Atwater-McSwain Regulating/Recharge Basin	UC Merced Surface Water Augmentation
Highest Priority Objectives		
A. Manage flood flows for public safety, water supply, recharge, and natural resource management	○	-
B. Meet demands for all uses, including agriculture, urban, and environmental resource needs.	●	●
C. Correct groundwater overdraft conditions.	●	●
D. Improve coordination of land use and water resources planning.	-	○
E. Maximize water use efficiency.	-	-
F. Protect and improve water quality for all beneficial uses, consistent with the Basin Plan.	●	●
G. Protect, restore, and improve natural resources.	○	○
H. Address water-related needs of disadvantaged communities (DACs).	○	○
I. Protect and enhance water-associated recreation opportunities.	-	-
J. Establish and maintain effective communication among water resource stakeholders in the Region.	-	-
K. Effectively address climate change adaptation and/or mitigation in water resource management.	●	●
L. Enhance public understanding of water management issues and needs.	-	○

● indicates the MIRWMP objective is a primary objective of the project

○ indicates the MIRWMP objective is a secondary objective of the project

- indicates the MIRWMP objective is not an objective of the project

Atwater-McSwain Regulating/Recharge Basin Project – The Atwater-McSwain Regulating/Recharge Basin Project, sponsored by Merced Irrigation District (MID), is a conjunctive use project that will allow water to be banked in the groundwater basin in two ways:

1. It will provide direct groundwater recharge of 1,000 acre-feet per year (AFY) through an unlined basin.
2. It will allow MID to reduce operational discharges and provide approximately 2,000 AFY of saved surface water as additional supply to customers in-lieu of groundwater pumping.

The project's recharge and groundwater banking activities will contribute to the recovery of groundwater levels in the underlying groundwater basin, and will aide in the long-term sustainability of the groundwater basin as a supply. Recharge will combat the negative effects of ground-water depletion such as increased pumping costs, deterioration of water quality, reduction of water in streams and lakes, and/or land subsidence. All municipal water purveyors within the Merced Subbasin rely solely on groundwater for water supply. This project will recharge the basin to assist in meeting the drinking water needs of DACs throughout the region, and in particular, for the City of Atwater which is one mile east of the project site.

University of California Merced Surface Water Augmentation Project – The UC Merced project will provide surface water to the University's irrigation system, offsetting groundwater that is currently pumped into the Little Lake for irrigation. This will allow for the in-lieu banking of groundwater in the Merced Subbasin. In-lieu recharge activities would contribute to the recovery of regional groundwater levels and aid in long-term groundwater basin sustainability, which, in turn, will assist in meeting drinking water needs DACs throughout the region.

UC Merced is partially located within a Census Tract that has a qualifying DAC MHI. The campus is also identified as a DAC by Census Place, however Median Household Income information is unavailable from ACS. Additionally, UC Merced's student population is comprised of many disadvantaged, underserved or first generation college students and approximately 60% of university's student body receives financial aid in the form of Pell Grants.

Currently, the only source of University of California Merced (UCM) Campus water is a city well (aquifer), half of which is used for irrigation. This project will address critical water supply needs of the DACs in the service area (see Fig. 7-3) through the utilization of non-potable water source in lieu of groundwater for irrigation, leaving groundwater in the basin for potable uses while optimizing surface water. The project would improve water supply reliability and augment shortfalls in the region and offset further economic impacts to the local DACs based on their physical proximity to the project (geography) and reliance on groundwater for drinking water supplies.

Targeted DAC Benefits

Each of the proposed projects is designed to address water management needs of specific DACs. These targeted benefits are summarized in **Table 7-3**, and the communities targeted by each project are illustrated in **Figures 7-3** and **7-4**.

Table 7-3: Targeted DAC Benefits Provided by the Proposed Projects

Project	Targeted DAC(s)	Targeted DAC Benefit(s)
Atwater-McSwain Regulating/Recharge Basin Project	• Atwater Area (Disadvantaged Community Tract No. 06047000505)	• By reducing groundwater pumping for irrigation and providing groundwater recharge (through in-lieu and active recharge), groundwater would be preserved for drinking water purposes for the Atwater community and within the subbasin. Groundwater is the sole source of potable water in the Merced Region. • Reduces demand for groundwater, thereby reducing overdraft and threat of domestic water supply wells running dry in the area.
UC Merced Surface Water Augmentation Project	• UC Merced Area (Disadvantaged Community Tract No. 06047001901; Disadvantaged Community Place EFP No. 81312)	• By reducing groundwater pumping for irrigation and providing for groundwater recharge (through in-lieu recharge), groundwater would be preserved for drinking water purposes for region. Groundwater is the sole source of potable water in the Merced Region.

Figure 7-1: Atwater-McSwain Regulating/Recharge Basin Project: Targeted DACs

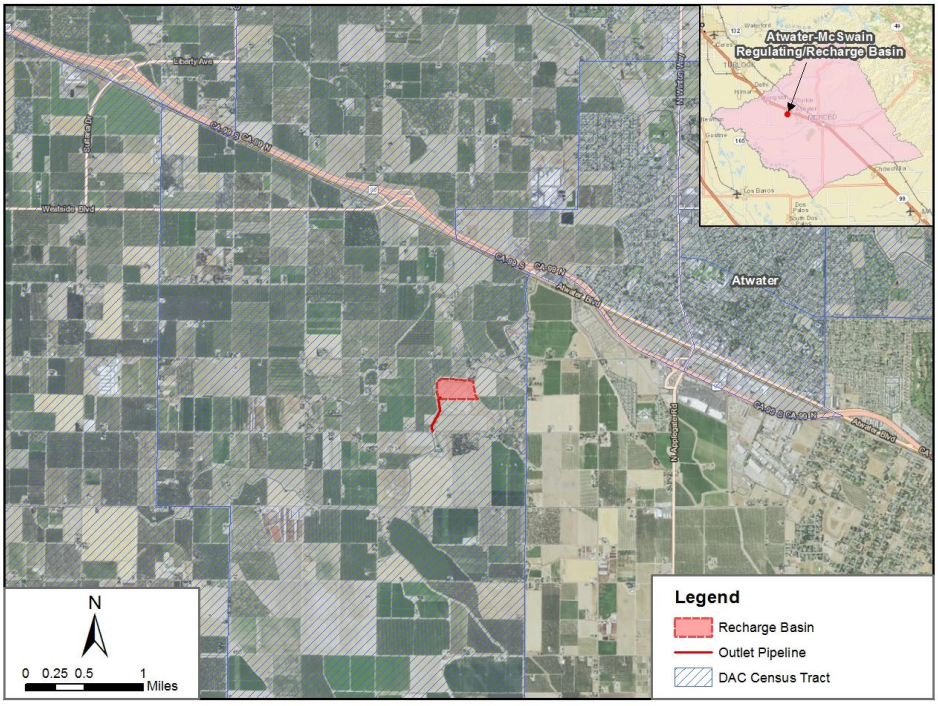


Figure 7-2: UC Merced Surface Water Augmentation Project: Targeted DACs