

## **Operation Pillars for the CSU Disadvantaged Community Center (DACC)**

### **Purpose:**

Throughout California are thousands of small community drinking water systems and wastewater systems whose residents are predominately economically disadvantaged (defined as being less than 80 percent of the state median household income). The purpose of the CSU Disadvantaged Community Center (DACC) is to provide technical assistance and capacity building for the provision of safe drinking water supplies and wastewater management for disadvantaged communities, thereby providing a critical service that they would not typically receive otherwise. These DACs are home to many CSU students, and the DACC will provide unique learning opportunities for participating CSU students.

### **Basic Operations:**

The DACC would be housed at Fresno State. Initially, staff will include an executive director and administrative staff. There will also be six full-time project managers located at selected CSU campuses. The DACC staff will work with other partners with the goal of initially placing 50 to 80 assistance teams in DACs annually. It is anticipated that the number of teams will increase over time. The DACC is a primary entity in California focused on assisting DACs that has access to a full-time, highly qualified job pool of technical experts including professors, numbering in the hundreds.

DACC staff will oversee multiple assistance teams based on geography and required expertise. The assistance teams will be recruited from the California Community Colleges (CCC), CSU and UC systems. A DACC staff member and a professor will be assigned to a DAC (or a number of DACs) for multiple years with students rotating into and out of employment with the CSU DACC, typically on an academic year basis. Faculty, students and other institutional partners will be compensated for their participation.

### **Pillar 1 - Partnerships:**

#### **Institutional Partnerships**

Partnerships are essential with programs such as MESA/MEP, CAMP, LEAD and other similar programs as they are identified. These academic support university-based programs provide opportunities to recruit faculty and students across the California Public Higher Education system by using existing networks at the CCCs, UCs and CSUs. These organizations also provide opportunities to identify community outreach partners and assistance opportunities through their existing community outreach and K-12 programs.

### Industry Partnerships

Partnerships with engineering and consultant industries will allow for DACs to be more competitive and resilient in solving technical problems. Organizations such as Engineers Without Borders (EWB), the American Society of Civil Engineers (ASCE), and others can provide the professional consultation required for many technical assistance projects with DACs. EWB and consulting engineers may be able to provide pro bono work for consideration in providing future fee services when technical assistance infrastructure projects are funded.

### Existing NGO Partnerships

A number of non-government organizations operating in California provide various types of technical assistance to DACs. The DACC will work with these groups to augment their existing capacities and to utilize their existing knowledge of DAC issues.

### **Pillar 2 – Student-Centered Learning:**

The DACC will provide experiential learning opportunities for the students of the California Public Higher Education System including CCC, CSU and UC systems. Experiential learning opportunities are a proven method to increase retention and performance in college, especially for underrepresented populations. The DACC will track all student participants' persistence and performance in major, as well as their pathway progress through the CCC, CSU, and UC systems and to employment. Also important to the student and to the resilience of these communities is that many of the participating students come from these DACs, and the ability to put these students back into their communities to solve real problems is invaluable to the students, the communities and to California.

### **Pillar 3 - Team Embedding**

DACC assistance teams will consist of faculty, students and DACC Staff; these teams will be embedded in DACs for the time necessary to complete identified projects, a period of commitment by the DACC that may span several years—though students will typically rotate through projects on an academic year basis. Long-term relationships with communities is based on long-term projects, training and mentoring. By embedding the teams for periods of time encompassing specific DAC projects, the success of the technology transfer should be greatly enhanced and relationships can be developed based on trust and performance.

### **Pillar 4 - Observations and Measurements**

A key aspect of the DACC will be developing and refining the body of knowledge regarding California DACs. While the primary goal of the DACC is to provide technical assistance for developing safe drinking water supplies and wastewater

disposal for DACs, the DACC will also explore other opportunities benefitting DACs such as refining—in an academically rigorous manner—existing indices such as CalEPA’s CalEnviroScreen 2.0 and developing and combining multiple community data sources including public health, education outcomes and other quality of life indicators. One of the goals of this activity will be to help the State determine the effectiveness of the substantial investments in these communities. The DACC will be able to re-measure and re-observe DACs after investments are made to help determine the changes in the community after the investment.

## **Glossary of Selected Academic Support Programs**

Mathematics, Engineering and Science Achievement/MESA Engineering Program (MESA/MEP): MESA is both a national and California State program that provides underrepresented students with the skills and opportunities to succeed in science, technology, engineering and mathematics (STEM) disciplines within higher education and STEM careers. Programs within California include the MESA Schools Program, focused on strengthening the math and science skills of first generation middle and high school students and preparing them for access to higher education and productive careers; the MESA Community College Program, focused on student successful transfers into four-year institutions in STEM disciplines; and MEP, which supports students enrolled in schools/colleges of engineering so they will successfully attain their baccalaureates.

College Assistance Migrant Program (CAMP): an educational program that assists first-year college students who are migratory or seasonal farmworkers (or children of such workers) succeed in higher education.

Leadership, Education and Advocacy Days (LEAD): an organization that provides education/awareness, research, outreach, events, and collaborative networks for the Latino Community in regards to issues in education at both the national and local level. Specifically, the organization aims to provide college opportunities for local Latino families.