California State University
Disadvantaged Communities Center Conference

April 23, 2015
Sacramento, CA
Boykin Witherspoon III  
Executive Director, WRPI

Dear Conference Attendees:

Welcome to the California State University Disadvantaged Communities Center Conference. Thank you for taking time out of your busy schedules to spend this day with us. We are looking forward to exchanging ideas over this new center, which has been in the making for years and will be a dynamic collaboration between all three California public institutions of higher education--California State University, University of California, and California Community Colleges--California state government, industry, and nongovernmental organizations (NGOs).

In California, there is a pressing need for capacity building and technical assistance in disadvantaged communities facing water insecurity as the drought worsens already-dire conditions. The California Public Higher Education system has a great capacity to meet this increasing need through our existing administrative structure, students and faculty, external partnerships, and a long history of experience in working with disadvantaged communities (DACs). We have the opportunity to augment the capacity of our partners currently assisting DACs.

The California Public Higher Education system is the largest education system in the world, having an enormous, unprecedented capacity. This will be an important opportunity for our students to gain valuable experiential learning that will benefit them as the next generation of water leaders. Furthermore, many of our students come from the very communities we are aiming to serve; having these students bring their skill sets back into their own communities will help build trust, resiliency, and sustainability.

I encourage you to take advantage of this event by networking and looking for ways to collaborate with old and new colleagues as we work together to solve California’s water problems and help lead us to a sustainable future.

I hope you enjoy the conference, and I look forward to meeting you.

Sincerely,

Boykin Witherspoon III
The California State University Disadvantaged Communities Center

Vision

The Water Resources and Policy Initiatives and its partners are forming the Disadvantaged Communities Center (DACC), a new California State University (CSU) institute dedicated to supporting water-related technical assistance and capacity building in disadvantaged communities (DACs) throughout California. The CSU Chancellor’s Office has approved of the establishment of this system-wide institute that will focus on providing technical, financial, managerial and organizational assistance to DACs.

Student-Centered Learning

The DACC will provide experiential learning opportunities for the students of the California Public Higher Education System including California Community Colleges (CCC), California State University (CSU) and University of California (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.

Partnerships

We will be engaging with partners from industry, non-governmental organizations (NGOs), and academia. In collaboration with the expertise of our industry and NGO partners, faculty and student research teams will be recruited across the California Public Higher Education system to engage in identifying and implementing solutions to the various water issues each DAC faces.

These academic research teams will represent expertise from various fields—science, technology, engineering, and mathematics (STEMS), political science, business, and design to name a few. Student recruitment will be accomplished by the academic support programs Mathematics, Engineering, Science Achievement (MESA), College Assistance Migrant Program (CAMP), and Latino Education and Advocacy Days (LEAD).

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. 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.

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 benefiting 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.
Mathematics, Engineering and Science Achievement/MESA Engineering Program (MESA/MEP) 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 successful student 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) is 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) is 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.
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<tr>
<td>9:00 am</td>
<td>Opening</td>
<td>Boykin Witherspoon</td>
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<td>9:15 am</td>
<td>Welcome</td>
<td>Fran Spivy-Weber, State Water Resources Control Board (SWRCB)</td>
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<td>9:30 am</td>
<td>Conference Overview</td>
<td>Joseph Castro, Fresno State President</td>
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<td>Break</td>
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<td>10:00 am</td>
<td>Panel</td>
<td>Moderator: Maria Kennedy, WRPI, CSUSB</td>
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<td>Martha Guzman-Aceves, Office of the Governor</td>
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<td>Susana De Anda, Community Water Center</td>
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<td>Paul Boyer, Self-Help Enterprises</td>
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<td>Karen Larsen, Drinking Water Division, SWRCB</td>
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<td>11:00 am</td>
<td>RUS Case Studies</td>
<td>Moderator: Dr. Karl Longley, Fresno State</td>
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<td>Ali Sharbat, Cal Poly Pomona</td>
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<td>• Water meter studies in London and Sultana in Tulare County, Dr. Shikha Rahman, Cal Poly, San Luis Obispo</td>
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<td>• Evaluation of the effectiveness of Point-of-Use devices in Monson (Tulare County), Dr. Ali Sharbat, Cal Poly Pomona</td>
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<td>• Conducting engineering/hydrogeological/environmental assessments of proposed DAC projects and preparing technical reports to support pre-applications and applications for DAC water/wastewater projects in Perry Colony in Fresno County, Dr. Rebekah Oulton, Cal Poly San Luis Obispo</td>
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<td>Refinement of CalEnviroScreen Mapping</td>
<td>Mathew Schmidtlein, Sacramento State</td>
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<td>12:00 pm</td>
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# CSU DACC Conference Agenda -Continued-

April 23, 2015
CalEPA, Sacramento, CA

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<tr>
<td>1:00 pm</td>
<td>Panel</td>
<td>Moderator: David Zoldoske, Fresno State</td>
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<td><em>A California State Director’s Perspective</em></td>
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<td>Anthony Rendon, Assemblymember (D-Lakewood)</td>
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<td>Fran Spivy-Weber, SWRCB</td>
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<td>Glenda Humiston, California State Director of USDA, Rural Development</td>
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<td>Panel</td>
<td>Moderator: Boykin Witherspoon, WRPI, CSUSB</td>
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<td><em>Challenges Facing Urban Disadvantaged Communities</em></td>
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<td>Maria Kennedy, WRPI, CSUSB</td>
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<td>Dr. Carolina Balazs, UC Davis</td>
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<td>Karl Longley, Fresno State</td>
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**Anthony Rendon**

Assemblymember, 63rd Assembly District (D-Lakewood)

12132 S Garfield Avenue  
South Gate, CA 90280  

Assemblymember Anthony Rendon represents the 63rd Assembly District in the California State Assembly, which includes nine cities – Bell, Cudahy, Hawaiian Gardens, Lakewood, Lynwood, Maywood, Paramount, South Gate, and a northern portion of Long Beach. During his first term in office, Rendon chaired the Water, Parks, and Wildlife Committee and authored Proposition 1, the $7.5 billion state water bond, which voters passed by a 67% to 33% margin in the November 2014 election. Now in his second term, Rendon chairs the Utilities and Commerce Committee, and serves on the Water, Parks & Wildlife, Natural Resources, Public Employees, Retirement and Social Security, and Appropriations Committees. Rendon arrived in the Assembly with a commitment to clean, transparent, and open government, having come from a district with more than its share of impropriety by government officials. Rendon's work on the water bond reflected this commitment. During the bond development process, Rendon took input from residents over the course of 16 public hearings throughout the state, resulting in a measure with no earmarks or backroom deals. In addition to the water bond, Rendon passed bills on a wide range of topics in his first term, reflecting his interests in early childhood education and the environment. He authored Assembly Bill 711, the statewide ban on lead hunting ammunition to remove a known toxic substance from impacting human and wildlife health. Rendon also passed Assembly Bill 2403, which streamlined stormwater capture programs and facilitated water conservation in California. Prior to serving in the Assembly, Rendon was an educator, non-profit executive director, and environmental activist. He led Plaza de la Raza Child Development Services, Inc. as Executive Director. “Plaza” provides comprehensive child development and social and medical services to over 2,300 children and families offered through Plaza’s 35 child development centers located throughout Los Angeles County. Before working at Plaza, Rendon served as the Interim Executive Director of the California League of Conservation Voters (CLCV) from 2008 to 2009. Rendon attended Cerritos Community College before earning his Bachelors and Masters of Arts Degrees from California State University, Fullerton. As a recipient of a National Endowment for the Humanities Fellowship, he earned his Ph.D. from the University of California, Riverside and completed post-doctoral work at Boston University. Rendon served as adjunct professor in the Department of Political Science and Criminal Justice at California State University, Fullerton from 2001 to 2008. Rendon resides in Lakewood with his wife Annie.
MODERATORS

Maria Elena Kennedy
Consultant, WRPI, CSU San Bernardino
9042 Camellia Court
Rancho Cucamonga, CA 91737
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Maria Elena Kennedy has worked on behalf of disadvantaged communities for many years. Maria's work encompasses helping disadvantaged communities find the resources they need to improve their lives. These resources can include helping these communities navigate the often-complex systems of financial assistance that are available to them as well as helping them steer through complex regulatory, political and policy arenas. Currently, Maria is working with the WRPI as an advisor on disadvantaged communities.

Karl Longley
RUS Grant PI, CSU Fresno
5241 N Maple Avenue
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karl@csufresno.edu

Dr. Longley is a researcher and project manager with the California Water Institute at Fresno State. His current responsibilities include serving as a Senior Fellow for the California Council on Science and Technology for whom he was an author of their report on Innovation for California’s Water Future Program. Dr. Longley has been actively engaged in developing solutions for the safe drinking water needs of small, economically disadvantaged communities (DACs). Dr. Longley’s experience also includes over 23 years as a Central California Regional Water Quality Control Board member of which ten years were as the Board’s chair, a position he currently fills. Dr. Longley served as a Professor of Civil Engineering during 1982 to 2004 at CSU Fresno, he was the Dean of CSU Fresno’s College of Engineering and Computer Science during 1996 through 2004, and he was a U.S. Army officer working as an environmental engineer beginning in 1960 and departing active duty as a lieutenant colonel in 1981. Dr. Longley has over 50 years of experience directly supervising or conducting studies of water quality, industrial waste control, hazardous waste management, and water and wastewater treatment plant design and as a civil engineering faculty member, researcher and academic administrator.

David Zoldoske
Director, Center for Irrigation Technology, CSU Fresno
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Fresno, CA 93740
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Dr. David Zoldoske serves as the director of the Center for Irrigation Technology and California Water Institute at CSU Fresno, where he has been actively working on “water use efficiency” issues for over 30 years. He recently served as vice-chair of the California Department of Water Resources strategic planning caucus for New Water Technology: Objective 11, an effort which became part of the California 2013 State Water Plan, served as a member of the California Department of Food and Agriculture Nitrogen Tracking Reporting Task Force and served as a member of the A-2 subcommittee to the SBx7-Agriculture Stakeholders Committee. David was named “person of the year” in 2015 by the California Irrigation Institute, and received a similar award from the Irrigation Association in 2013, he is a Senior Fellow with the California Council on Science and Technology, and an Honorary Member of the American Society of Irrigation Consultants. He is also a past President of the Irrigation Association (2005), a member of the “SMART” Water Application Executive Committee, founding Executive Director for the Water Resources and Policy Initiatives for the California State University system (2008-2013) and past President of the American Society of Agronomy: California Chapter (2002).

Boykin Witherspoon III
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Mr. Witherspoon serves as the Executive Director of the WRPI as well as the Director of Programs for the Water Resources Institute at CSU San Bernardino. His experience includes the administration of all aspects of the management including: strategic planning and budgeting; promotion with community, universities and industry; liaison with advisory boards; program management; development and oversight of contracts and grants; hiring and supervision of staff; and training and publications efforts. Additionally, Mr. Witherspoon is a focused problem solver with international project management experience developing GIS applications and software for sustainable landscape architectural planning and design.
Martha Guzman-Aceves  
Deputy Legislative Affairs Secretary,  
Office of the Governor  
State Capitol, First Floor  
Sacramento, CA 95814  
916-445-4341  
martha.guzman-aceves@gov.ca.gov

Martha is Deputy Legislative Affairs Secretary for the Office of Governor Edmund G. Brown. Her previous role was as an attorney and advocate with the California Rural Legal Assistance Foundation, a nonprofit legal services and advocacy organization founded in 1981 to improve rights and opportunities for California’s immigrants, their families and communities. Martha has been a leader at finding productive ways to work with the farming community to both improve conditions for workers and recognize and promote best practices on California’s farms and ranches.

Susana De Anda  
Co-Executive Director & Co-Founder, Community Water Center  
311 W Murray Avenue  
Visalia, CA 93291  
559-733-0219  
susana.deanda@communitywatercenter.org

Susana is a seasoned community organizer and has received numerous awards and recognitions, including: the 2009 Petra Foundation Fellowship award; “150 Fearless Women in the World” by Newsweek Magazine (2012); “Women on Top – Top Activist” by Marie Claire magazine (2012); AOL sponsored PBS 3-part series titled, Makers: Women Who Have Shaped America (2012); and “Las Fabulosas” and “Inspiring Latinas” by Powerful Latinas (2011). In addition, Jill Iscol’s book, Hearts on Fire, features a chapter on Susana De Anda and CWC (2011). Susana’s experience includes planning and organizing positions at the Center on Race, Poverty and the Environment; the County of Merced Planning Department; the Santa Barbara County Water Agency; and the Santa Barbara non-profit Community Environmental Council. Susana earned a B.A. from the University of California, Santa Barbara while completing a double major in Environmental Studies and Geography. Susana served for the past few years on the Community Funding Board of the Grassroots Fund through the Rose Foundation for Communities and the Environment and now serves on the Tulare County Water Commission and the Board of Directors of the Tulare County United Way.

Paul Boyer  
Program Director for Community Development,  
Self-Help Enterprises  
8445 W Elowin Court  
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paulb@selfhelpenterprises.org

Paul has worked for Self-Help Enterprises since 1977 where he has assisted many disadvantaged rural San Joaquin Valley communities in developing funding for scores of water and sewer projects. This work has included assistance to community groups and Boards in forming Districts, assessing water quality problems, assessing water system needs, and applying for and administering government loans/grants for project financing. Recent work has included addressing drought issues for community water systems and private domestic well owners.
Corine Li
Manager of Drinking Water, US EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105
415-972-3560
li.corine@epa.gov

Corine Li is manager of the drinking water office of the EPA, Region 9 Pacific Southwest Region. In her capacity, she works on national policies and regional initiatives to ensure the delivery of safe drinking water that meet federal requirements for over 15,000 water systems in the Region. Her office is responsible for overseeing delegated drinking water programs in Arizona, California, Hawaii, Navajo Nation, Nevada, and the outer Pacific islands of American Samoa, the Commonwealth of the Northern Marianas and Guam. The Region 9 Pacific Southwest office also works closely with 147 federally recognized Native American Tribes and 530 tribal water systems. She is a registered professional engineer in the State of CA and has been with EPA for over 30 years.

Karen Larsen
Assistant Deputy Director, Drinking Water Division,
State Water Resources Control Board
1101 I Street
Sacramento, CA 95814
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Karen.Larsen@waterboards.ca.gov

Karen’s career with the CA Water Quality Control Boards began in 1999. Over the years, she has worked on a variety of programs including water quality monitoring and assessment, local watershed stewardship grant programs, total maximum daily loads, and water quality control planning. From 2010 to 2014 Karen served as the Director of the State Water Board’s Office of Information Management and Analysis where she managed the development and maintenance of the Water Boards’ information management systems (including CEDEN) and worked closely with the Water Boards’ Chief Information Officer to deliver useful products to meet program needs. She also managed California’s statewide Surface Water Ambient Monitoring Program (SWAMP), advanced the state’s monitoring coordination through the California Water Quality Monitoring Council, and developed policies for protecting healthy streams. In her current position, she manages the states drinking water regulation development, oversight of local drinking water regulatory programs, recycled water permitting, emergency response, and the state’s environmental laboratory accreditation program.

Ali Sharbat
Professor of Civil Engineering, Cal Poly Pomona
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Pomona, CA 91768
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sharbat@cspupomona.edu

Ali Sharbat is an Assistant Professor in the Civil Engineering Department at California State Polytechnic University, Pomona. His research is mostly focused on drinking water quality, desalination, concentrate management, and water issues in disadvantaged communities.
Dr. Carolina Balazs is an environmental health researcher who focuses on drinking water contamination and health, and the role of regional planning to meet drinking water needs in California's disadvantaged communities. Her current research projects include drinking water and cumulative impacts, assessing participation of disadvantaged communities in Integrated Regional Water Management, and developing an evaluation framework for the Human Right to Water. She recently completed a UC President's Post-Doc at UC Davis, and is currently consulting with the Office of Environmental Health Hazards Assessments on the aforementioned topics. Previously, Carolina worked as Research Scientist for the Community Water Center. Dr. Carolina Balazs received her PhD and MS from UC Berkeley’s Energy and Resources Group. She is a Switzer Environmental Leadership fellow. Her dissertation entitled “Just Water? Social Disparities in Drinking Water Contamination in California’s San Joaquin Valley” used environmental health and social science research methods to examine the health and environmental justice implications of drinking water contamination in California’s agricultural heartland.
Drinking Water Technical Assistance and Training for Disadvantaged Communities (DACs) in the California Central Valley project directly placed CSU water experts and student interns in five identified DACs in the California Central Valley for the purpose of identifying and evaluating problems and solutions to the respective area’s drinking water issues.

The primary objective of the project was to gather and evaluate technical data that each respective DAC could use to support decision making regarding drinking water quality problems and to provide support to applications submitted for assistance grants.

Water supply in relation to drought conditions has been a major issue for three of the DACs located in Tulare County—London, Sultana, and East Orosi. Water meters are either non-operational or non-existent for residents; as a result, residents are unaware of how much water they are using, and a flat rate charge does not accurately reflect usage cost. Through an analysis, it was proposed that through grant funding, the installation of water consumption meters per household and low-flush toilets in these communities would result in water savings of up to 19 percent. Two letters of commitment were submitted to the Prop 84 grant, but the communities were not able to secure funding.

Also located in Tulare County, Monson faces issues of drinking water contamination; potable water contains nitrates five times the maximum contaminant level due to neighboring agricultural operations. Point-of-use reverse osmosis filters are currently addressing this problem, but limited storage capacity and inaccurate indicators for filter replacement have posed shortcomings. Analyzed solutions included the installation of a second tank to increase storage capacity and the installation of Total Dissolved Solids monitors for accurate filter replacement.

Drinking water contamination is also an issue in Fresno County’s Perry Colony; water is contaminated with uranium and nitrates. Since Perry Colony is not part of a community water system, such high contaminant levels do not technically violate any laws for water contamination, despite being a health hazard to residents. Preliminary engineering reports were created for a new water distribution system to replace the current individualized well system.

While this pilot project was successful in identifying problems and solutions, the lack of time and administrative capacity demonstrates the difficulty of implementing long-lasting solutions in DACs. This is why we strive to establish a state-wide institute that can model after these pilot projects at a larger scale and capacity.

For more info, contact: Ali Sharbat - sharbat@csupomona.edu
Dassymetric Filtering of CalEnviroScreen 2 Data

Original CalEnviroScreen 2 tract data

CalEnviroScreen tract data clipped to include only blocks populated in 2010

CalEnviroScreen 2 tract data clipped to include only areas with developed landcover categories from 2011 NLCD

CalEnviroScreen 2 tract data clipped to include only areas both in blocks populated in 2010 and developed landcover categories from 2011 NLCD

For more info, contact: Mathew Schmidtlein - schmidmc@saclink.csus.edu
Thank you for attending today. We hope this conference provided you with valuable information and connections with colleagues. Special thanks to the DACC Conference Planning Team!

For further information and to stay up-to-date on WRPI's DACC activities, please contact:

Water Resources and Policy Initiatives
5500 University Pkwy
San Bernardino, CA 92407
909-537-7681
www.calstate.edu/water

Or visit:

Water Resources and Policy Initiatives / Disadvantaged Communities
www.calstate.edu/water/disadvantage.shtml

Water Resources and Policy Initiatives / Proposition 1 Water Bond
http://www.calstate.edu/water/proposition1.shtml

Current partners: