

Boykin Witherspoon III

Executive Director, WRPI

Director of Programs, WRI CSUSB

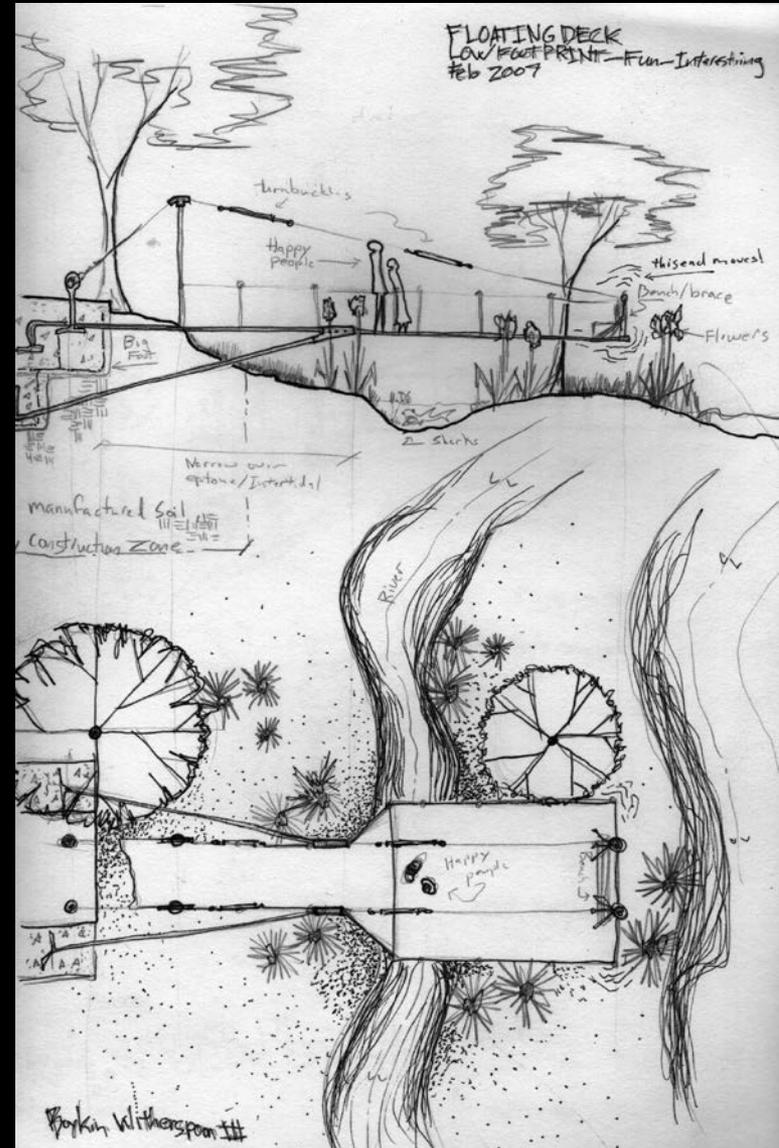
Julie Lappin

Program Manager, WRI CSUSB

For this afternoon:

- **Who Am I**
- **WRPI Activity**
- **WRPI Initiatives**

Master Landscape Architecture



10 Years as a Professor

W



O



6 Years with ESRI



ESRI

ESRI Professional Services
Let us help implement your GIS

A collage of four images illustrating GIS applications. The top image shows a software interface with a map and a data table. The middle image is a 3D topographic map of a mountain range. The bottom-left image is a 2D thematic map with a color scale. The bottom-right image shows a group of people in a meeting room, with one person standing and presenting to others seated around a table with laptops.

ESRI Services 

CSUSB WRI

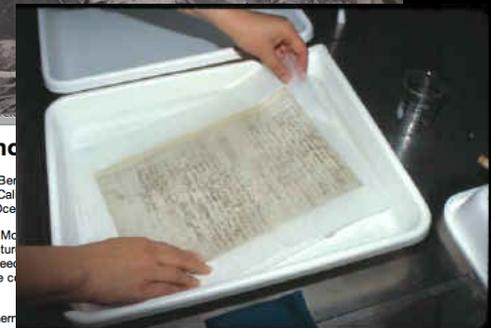


The San Bernardino-East Aerial Photo

The San Bernardino East area is located in the foothills of the San Bernardino Mountains near the San Geronimo Wilderness area in San Bernardino County, California. San Bernardino East is approximately 80 miles inland from the Pacific Ocean.

The San Bernardino East area is part of the Santa Ana Watershed. Metadata further describing the images. Detailed analysis of the pictures is arranged through the CSUSB WRI at (909) 537-7883. If you are in need of assistance in order to view or understand the following images, please contact the WRI for assistance.

The WRI is an outreach partnership between CSUSB and the Southern California Water Resources Institute. We serve, driven by the vision that sustaining water resources rests on science and public policy collaboration. The Historical Aerial Photo Collection is comprised of images of Southern California beginning in the 1920's. The geographic areas include much of Southern California from deserts to the Pacific Ocean. The images in these flights are from the Joseph Andrew Rowe Water Resources Archives and represent various collections that are held by the Archives.



CSU Employee from 2006

Executive Director



Water Resources and Policy Initiatives

Director of Programs
Water Resources Institute



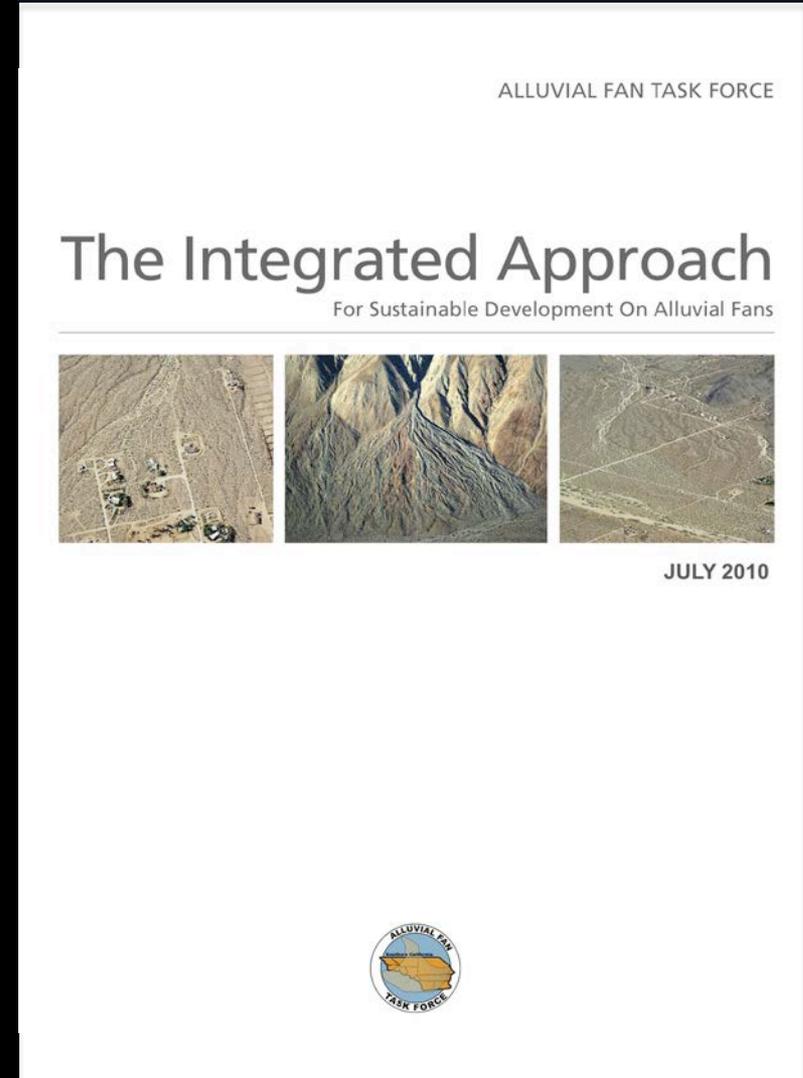
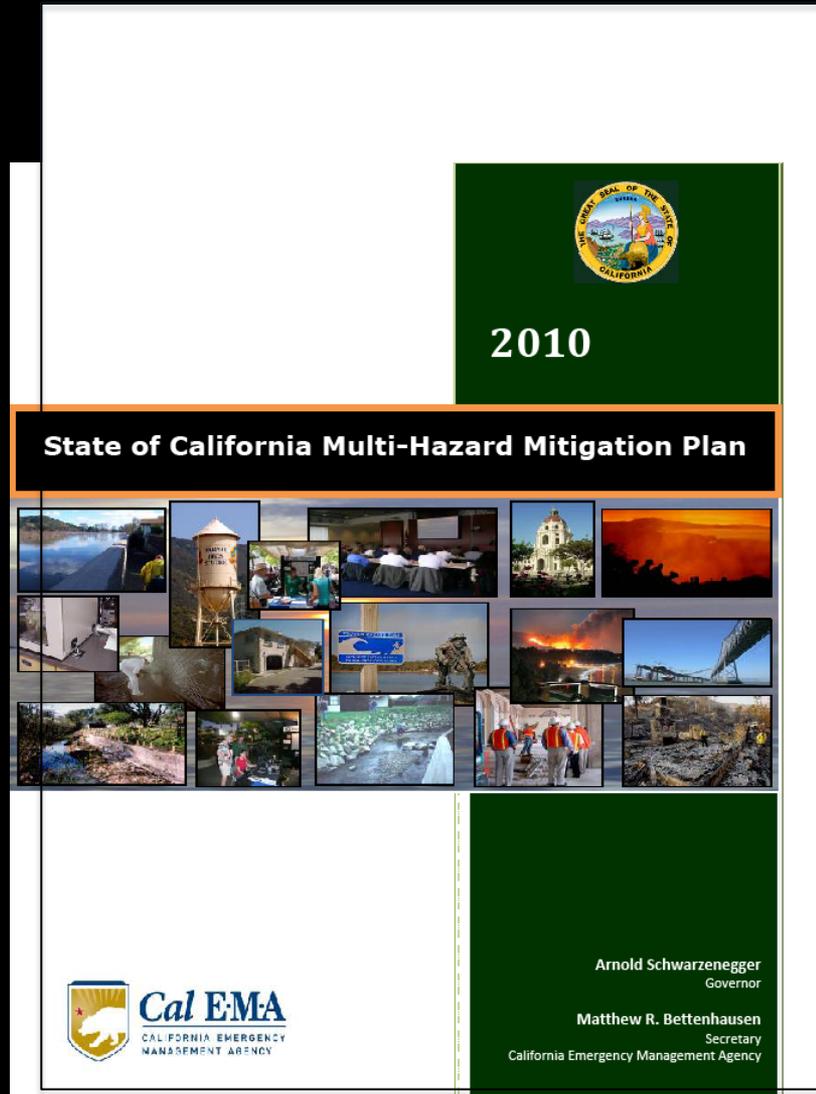
Director, Center for
Geographic Information
Science Research



Lecturer, Dept. of
Landscape Architecture

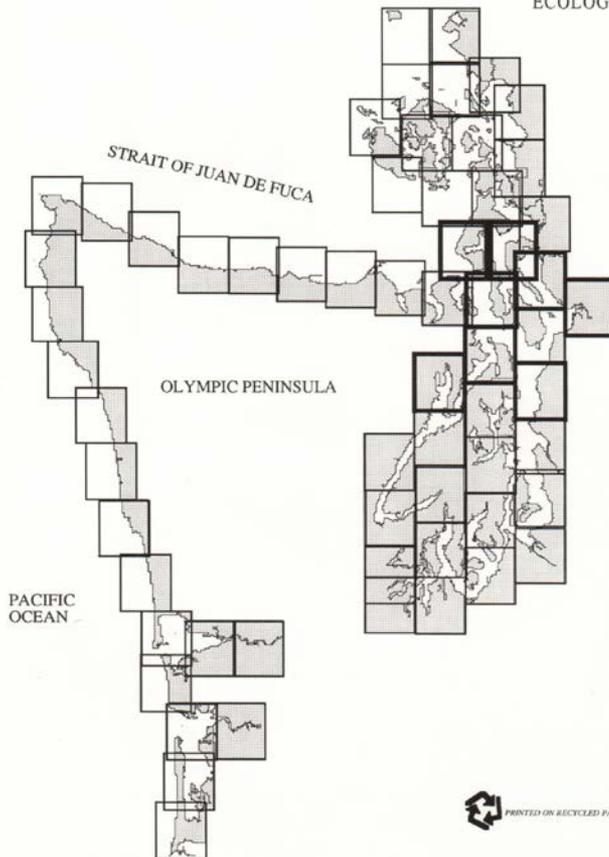


Worked with Cal EMA and DWR / FEMA



Coastal Development and Oil Spill

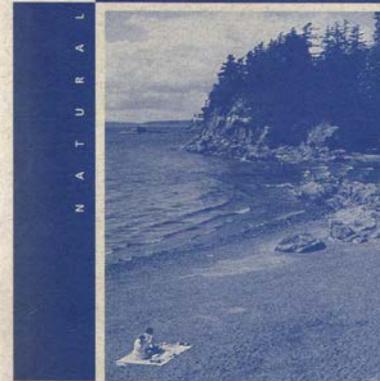
Washington State Coastal Sensitive Areas Mapping Project Upper Puget Sound Booklet



SHORELINE ACCESS DESIGN GUIDELINES

For Washington Marine
Shoreline Habitats

July 1994



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Jennifer M. Belcher - Commissioner of Public Lands
Kaleen Cottingham - Supervisor

ESI to Inland Interior Waters (Nigeria)

ESI Mapping Standards and Protocols

Final

Nigeria OPTS
March 2002

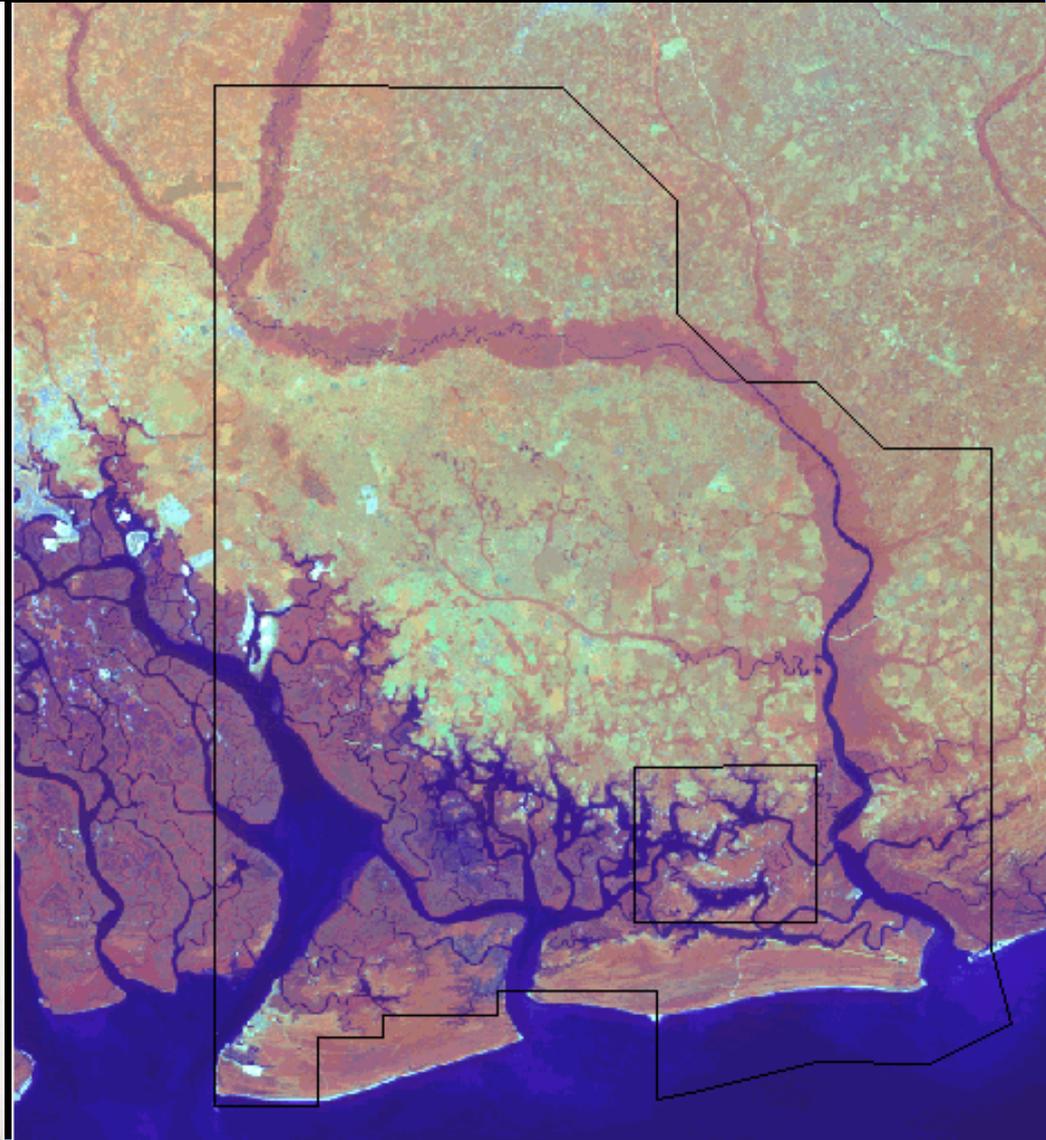
Prepared for:

Oil Producers Trade Section (OPTS)
Lagos Chamber of Commerce
Chevron Nigeria Limited
2 Chevron Drive
Lekki Peninsula, PNB 12825 Lagos
NIGERIA

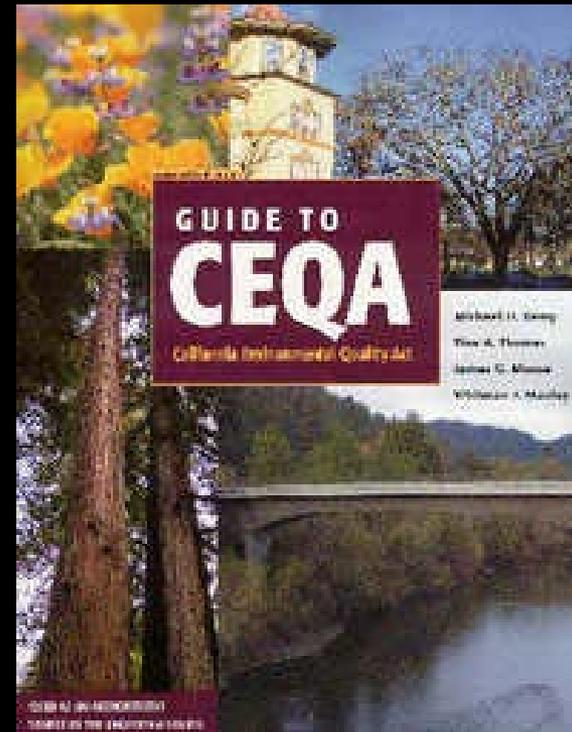
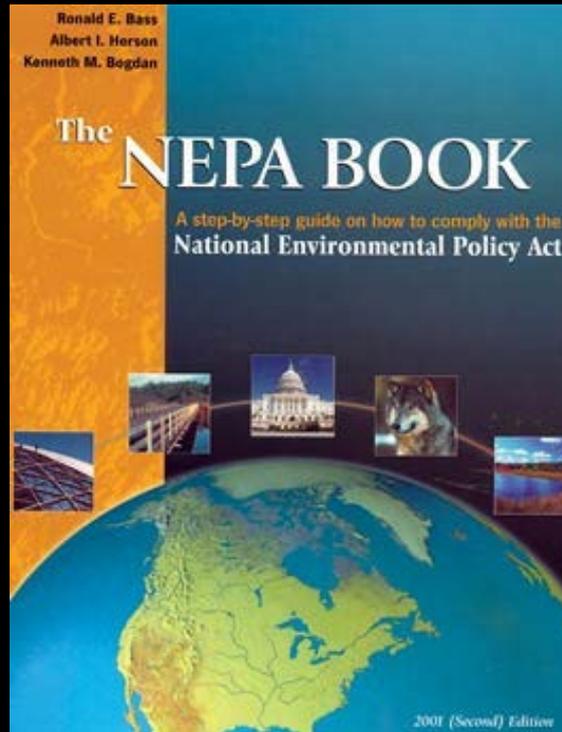
Prepared by:

ESRI
380 New York Street
Redlands, California 92373-8100

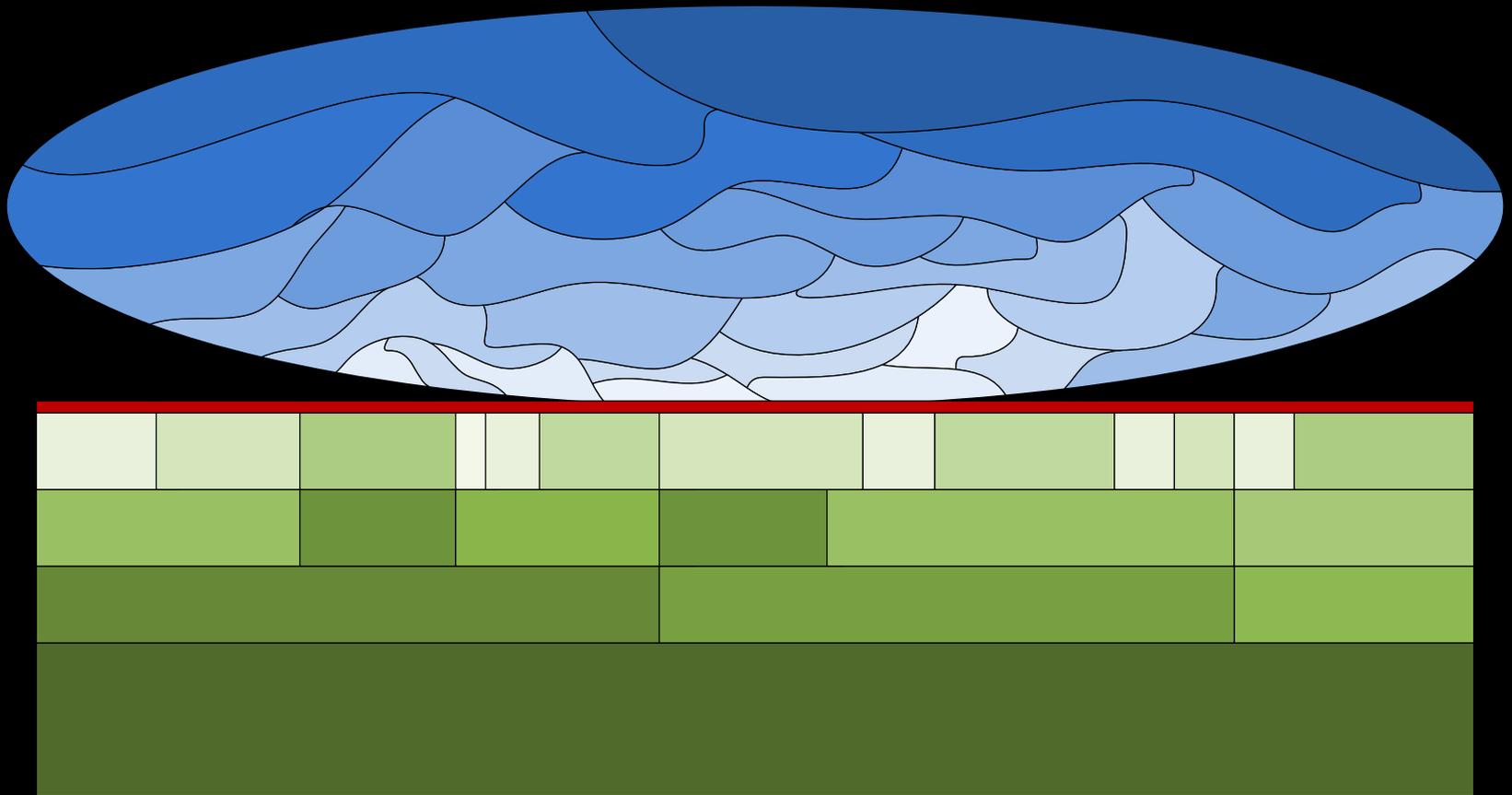
Environmental Resource Managers Ltd.
Plot 107A Imam Abibu Adetoro Street
Off Ajose Adeogun Street
Victoria Island, Lagos
NIGERIA



Policy and Regulatory Experience



Policy and Regulatory Experience



WRPI Activity

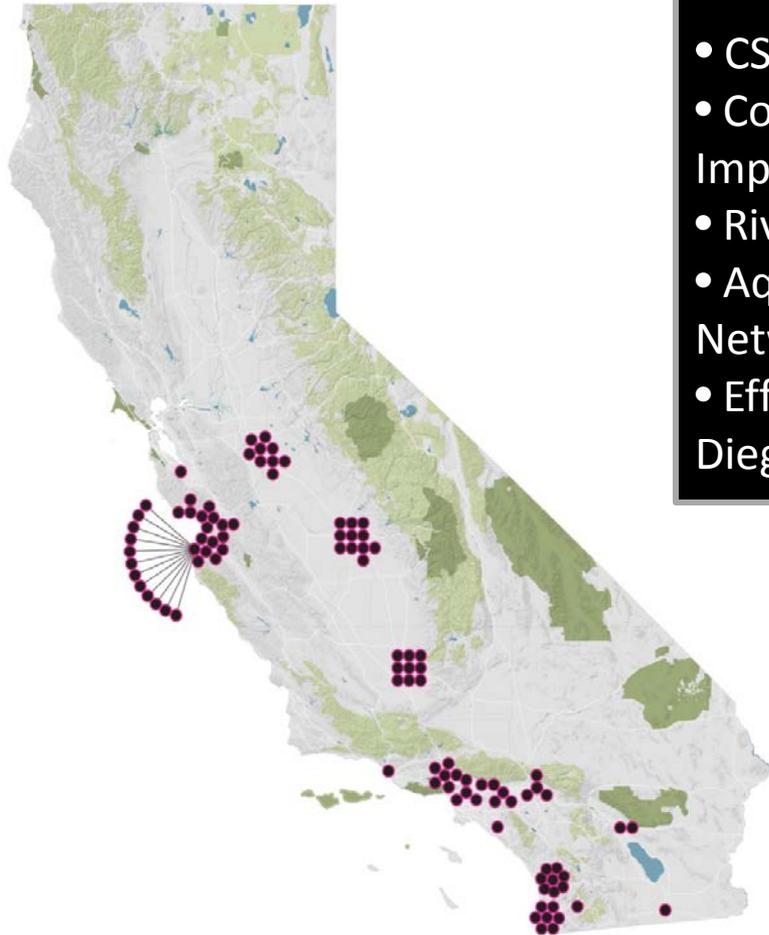
WRPI Internship Program

Program Specifics

- Objective: Increase awareness, retention, and graduation rate of qualified underrepresented CSU students, leading towards USDA career attainment
- Experiential approach to learning in the field of watershed management
- 50 Interns placed per year
- Total Salary: \$4,500
 - Undergraduate - \$12.50/hour
 - Graduate - \$15/hour
- Up to \$560 for approved supplies and/or mileage reimbursement
- \$40,000 scholarship for pursuit of Ph.D. in USDA relevant discipline
- Accepting applications for Year 3 now through October 1, 2013



WRPI Internship Program



YEARS 1&2

INTERNSHIPLOCATIONS

Examples of Projects:

- CSUB San Joaquin Valley Paleoriver Discharge Record
- Community Outreach and Draft Watershed Improvement Plan for Regional Stormwater Program
- Riverine Surface Water Quality Monitoring
- Aquifer Recharge Project and Wireless Irrigation Network Project
- Effects of Nutrient Loading on Water Quality in San Diego Reservoirs

Examples of Host Organizations:

- 14 CSU campuses
- USDA
- California Fish & Game
- RCD Santa Cruz County
- San Dieguito River Park
- Ventura Coastkeepers
- Tuolumne River Trust
- Monterey Co. Water Resources Agency

WRPI Internship Program Resources

Total Interns
Placed to Date:
100

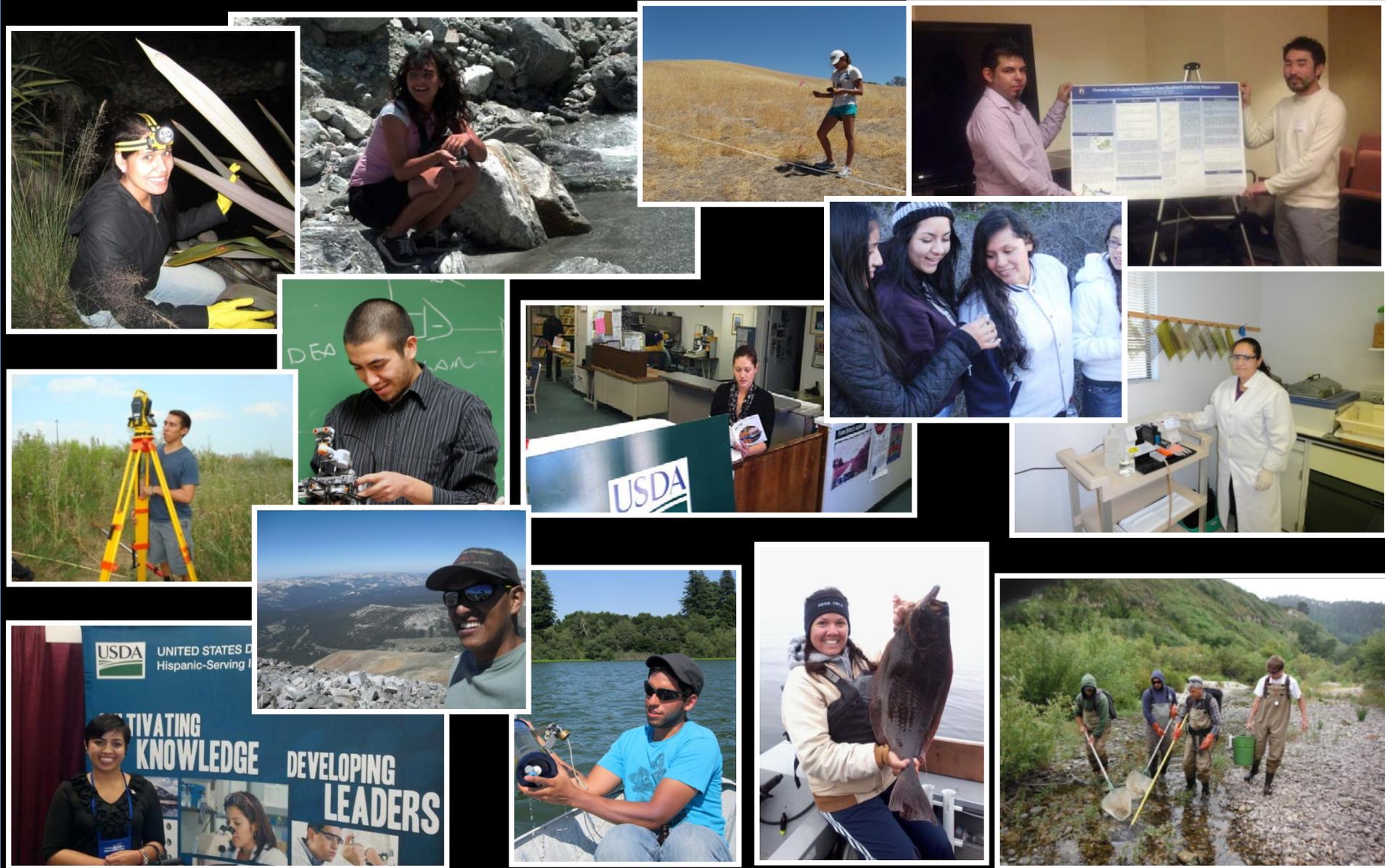
Total Funding
Received to
Date:
\$1,050,695

Over **69%** of the
dollars received go
directly to the
campus partners for
students

Amounts to CSU Partners:

Bakersfield \$60,075
Channel Islands \$6,675
Fresno \$73,425
Fresno (subaward) \$51,744
Los Angeles \$35,348
Monterey Bay \$200,250
Northridge \$44,040
Pomona \$33,375
San Bernardino \$42,119
San Diego \$66,750
San Marcos \$55,487
Stanislaus \$60,075
Total paid: \$729,363

WRPI Internship Students



WRPI USDA RUS Research

USDA Rural Utilities Services Grant \$150,000, one year

3 Detailed DAC Studies – CSU CEU Course Material

CSU Fresno and CSUSB



WRPI STEAM and DOE MSEIP Proposals

USDA STEAM

\$200,000 for 4 years

CSUSB, Cal Poly Pomona, CSU Fresno

Adds Ag to STEM

Similar to current USDA

New Concept Single student multiple years

First year with a professor

Subsequent years off site internship



DOE MSEIP

\$250,000 for 3 years

New Concept Single student multiple years

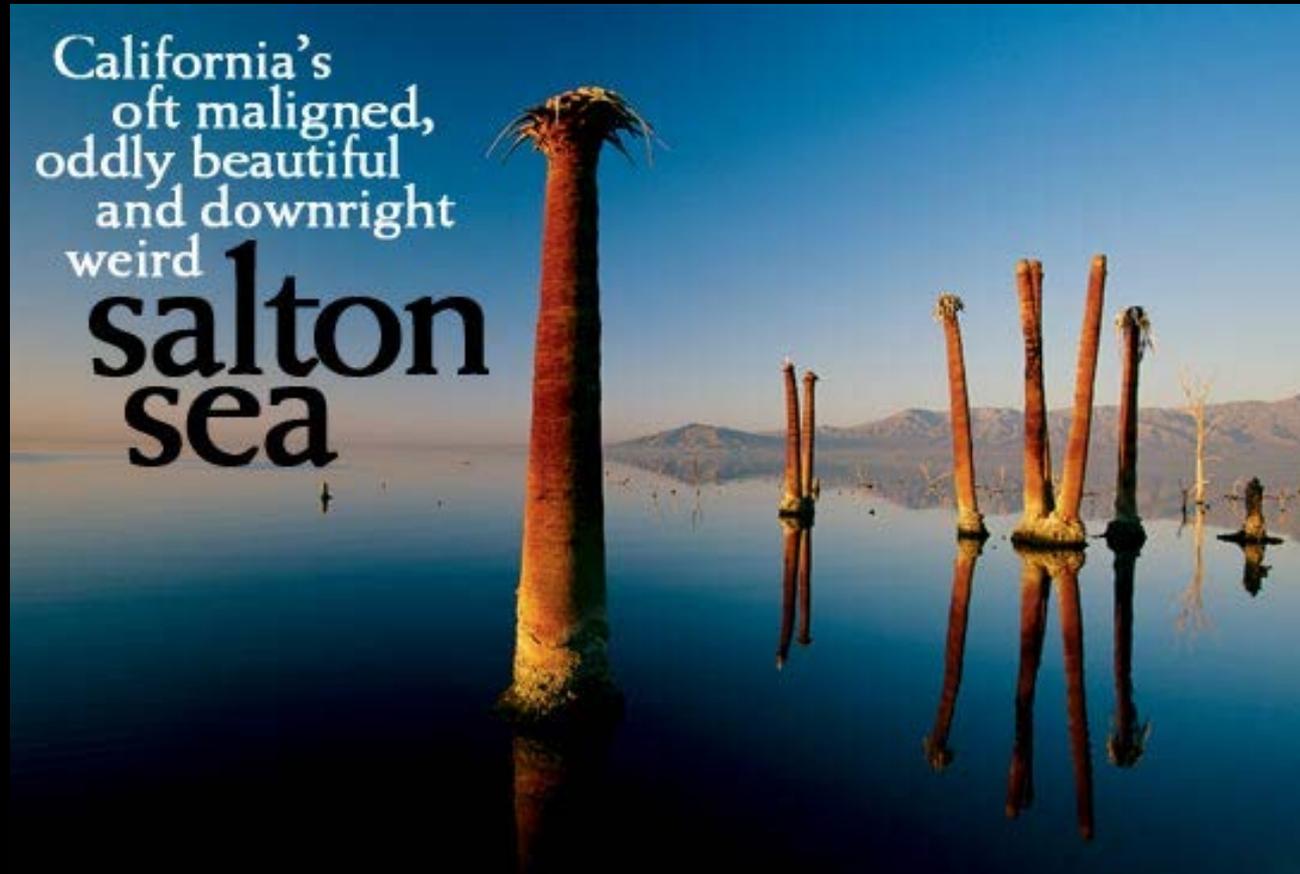
First year with a professor

Subsequent years off site internship



WRPI Initiatives

WRPI California Project Based Research



WRPI California Project Based Research



WRPI DWR IRWMP



INTEGRATED REGIONAL
WATER MANAGEMENT:

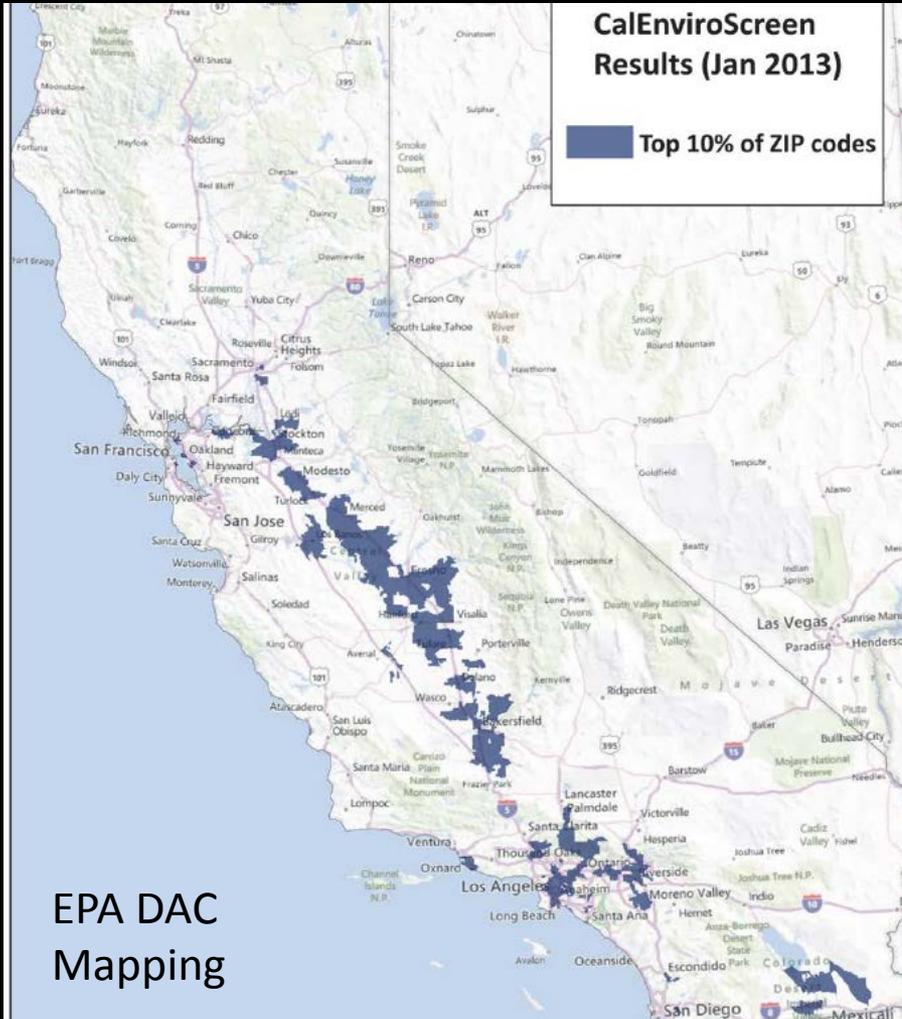
**Working Together for
California's Water Future**



WRPI DWR IRWMP

CalEnviroScreen Results (Jan 2013)

Top 10% of ZIP codes

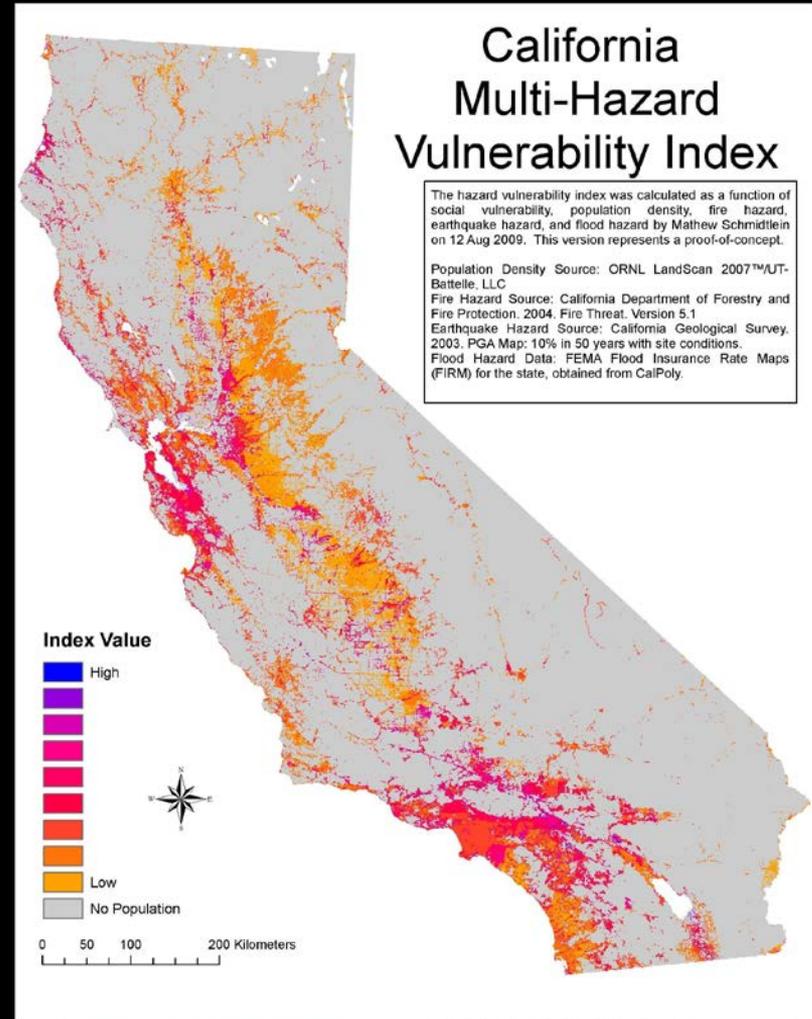


EPA DAC
Mapping

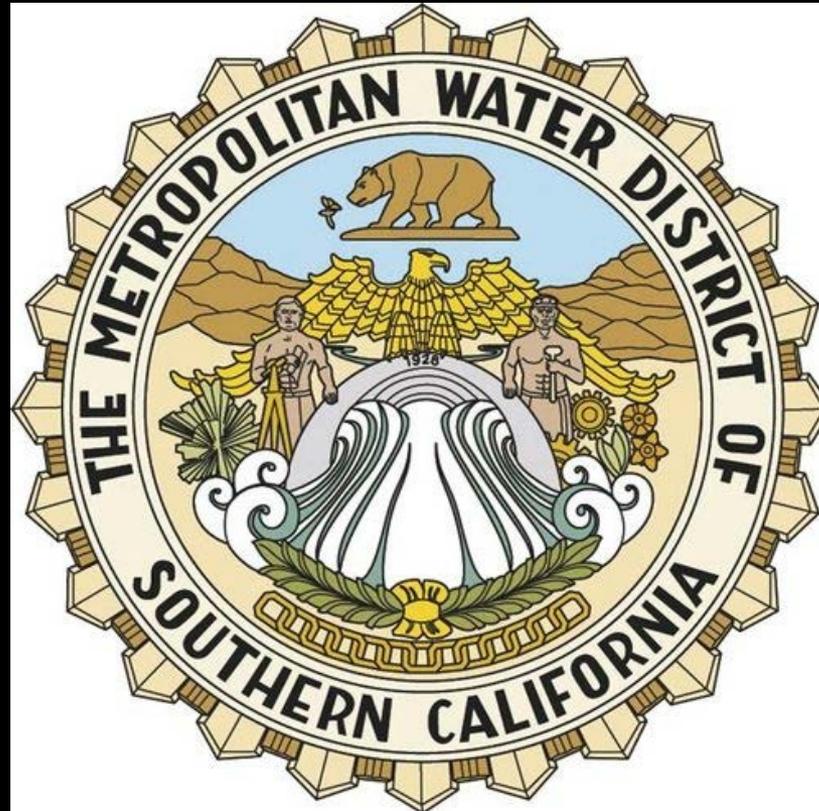
California Multi-Hazard Vulnerability Index

The hazard vulnerability index was calculated as a function of social vulnerability, population density, fire hazard, earthquake hazard, and flood hazard by Mathew Schmitlein on 12 Aug 2009. This version represents a proof-of-concept.

Population Density Source: ORNL LandScan 2007™/UT-Battelle, LLC
Fire Hazard Source: California Department of Forestry and Fire Protection, 2004, Fire Threat, Version 5.1
Earthquake Hazard Source: California Geological Survey, 2003, PGA Map: 10% in 50 years with site conditions.
Flood Hazard Data: FEMA Flood Insurance Rate Maps (FIRM) for the state, obtained from CalPoly.



WRPI Water Education (MWD)



WRPI MOU and Cooperative Agreements



WRPI MOU and Cooperative Agreements





Thank you very much...

Boykin Witherspoon III

Executive Director
CSU Water Resource & Policy
Initiative

Director of Programs
Water Resources Institute
Cal State San Bernardino