Santa Ana River Watershed Conference

21st Century Water Strategy:

Working Together to Make a Finite Resource Infinite

May 25, 2017 • Ontario Convention Center

ONE WATER ONE WATERSHED

SAWPA

WATER EDUCATION FOUNDATION

SAWPA
Celeste Cantú
General Manager
May 25,2017

New Santa Ana watershed agency to study river pollution problem

1968

By DON MacPHERSON
Daily Enterprise Staff Writer

The newly created Santa Ana Watershed Planning Agency yesterday voted to move as rapidly as possible to apply for a federal grant to study pollution problems of the Santa Ana River.

At its first meeting — held in Riverside for formal organization — the three-county agency agreed to invite officials of the Federal Water Pollution Control Administration (FWPCA) to meet later this month in Santa Ana to help prepare the grant application.

THE AGENCY HOPES to be the first in California to make a study of water quality problems of an entire river from the mountains to the sea. It will ask William Schreeder of San Francisco, FWPCA chief for California, and one of his assistants, Richard O'Connell, project director, of Alameda, to come to the Santa Ana session.

Answering fears expressed in Riverside, San Bernardino and Orange Counties, O'Connell is reported to have assured agency members they can take the initiative "and establish a program before the federal agency moves in and does it for us."

There has been widespread criticism of the newly created FWPCA in California over federal "dictation" of water quality for the Colorado River and for the Sacramento-San Joaquin Delta.

THE NEW AGENCY is the creation of Western Municipal Water District of Riverside County, San Bernardino Valley and Chino Basin Municipal Water Districts in San Bernardino County and the Orange County Water District.

The plan was proposed by Western. After nine months of negotiations, decision to organize under a joint pow- ers agreement was reached a couple of months ago and final action taken by the last of the four last month.

In honor of Western's leadership the agency elected Western's manager, Howard Hicks, president.

Don Owen, district engineer and assistant manager of the Orange County Water District, was elected vice president.

The meeting place will be rotated clockwise among the four agencies with the February and March meetings to be held in Cucamonga and San Bernardino and the April meeting in Riverside again.

Two of the four member agencies made it clear their respective boards of directors don't want the new joint agency to become involved in legal tangles.

BEAVER SAID San Bernardino Valley "doesn't want to get the work (of the agency) diluted with legal pander."

Owen said the engineers of the four Santa Ana watershed agencies are pretty well agreed (in contrast to the lawyers) on the physical data on the river.

"We're dealing with physical and factual conditions and there is no need for legal discussions," said Beaver.

"The agency shouldn't become a forum for legal debate."

OWEN CAUTIONED: "It's up to us four (the four men, one from each member agency, who constitute the board). Any one of us could get it into the legal field."

Beaver then declared the "physical facts" which he had mentioned "are going to get worse the longer we delay."

Owen called the new attempt at cooperation among elements along the river which already are involved in more than one lawsuit over the water in it "an experiment in regional government."

"We are dealng in the future," Owen said, "Not in the past, as in the lawsuit."

THE SUIT HE MENTIONED is the huge one, filed several years ago but still a long way from trial, by which his district seeks to limit the use of Santa Ana water by 2,550 users in Riverside and San Bernardino Counties.

Beaver described the new approach as a "cookbook operation — too many stews are made without a recipe."

To which Owen responded: "What you are trying to say is that too many cooks don't spoil the broth if a recipe is followed."

THE FOURTH MEMBER of the board is Richard R. Hall, manager of Chino Basin.

One reason for formation of the district — according to observers not directly involved — is to question whether Riverside County's plan for a $26 million industrial waste sewer to the sea is justified.

Just last week a consulting engineering firm told the San Bernardino district it is economically impractical for the San Bernardino area to join because it does not have enough land available there for heavy industry to justify the high cost of the line.

ORANGE COUNTY already has such a sewer. Chino Basin is building one to connect with a Los Angeles County line at Pomona.

Although water quality is to be the first concern of the new agency its backers hope it may eventually lead to a management plan for the entire Santa Ana.

Such a plan presumably would involve supplementing the admittedly inadequate amount of water in the river with Northern California water — of relatively high quality — brought in through the California Aqueduct.

Tuesday, January 9, 1968 Daily Enterprise

Formed in 1967

First meeting Jan 1968

To study water quality on a watershed scale

Later moved to comprehensive watershed management

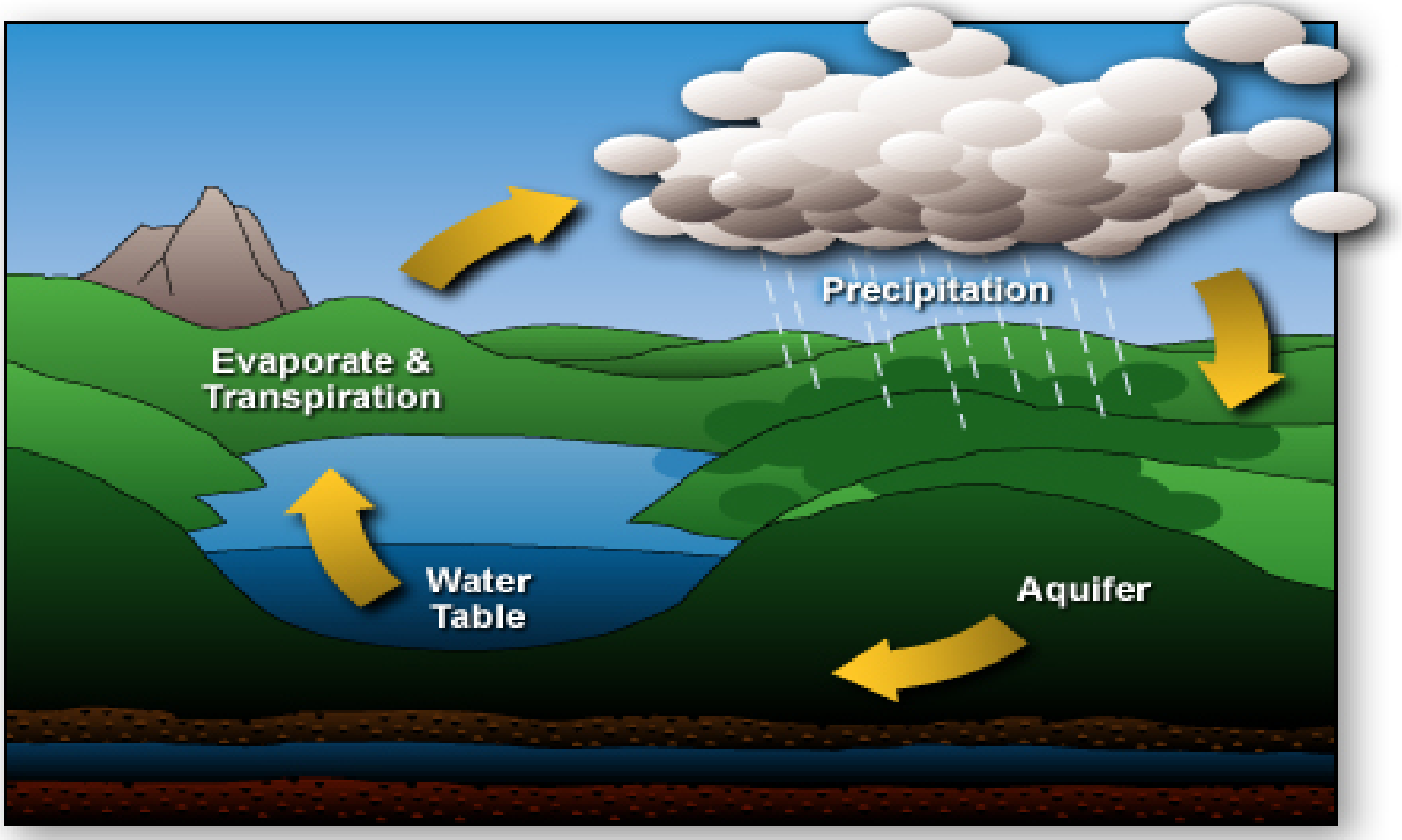
SAWPA


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

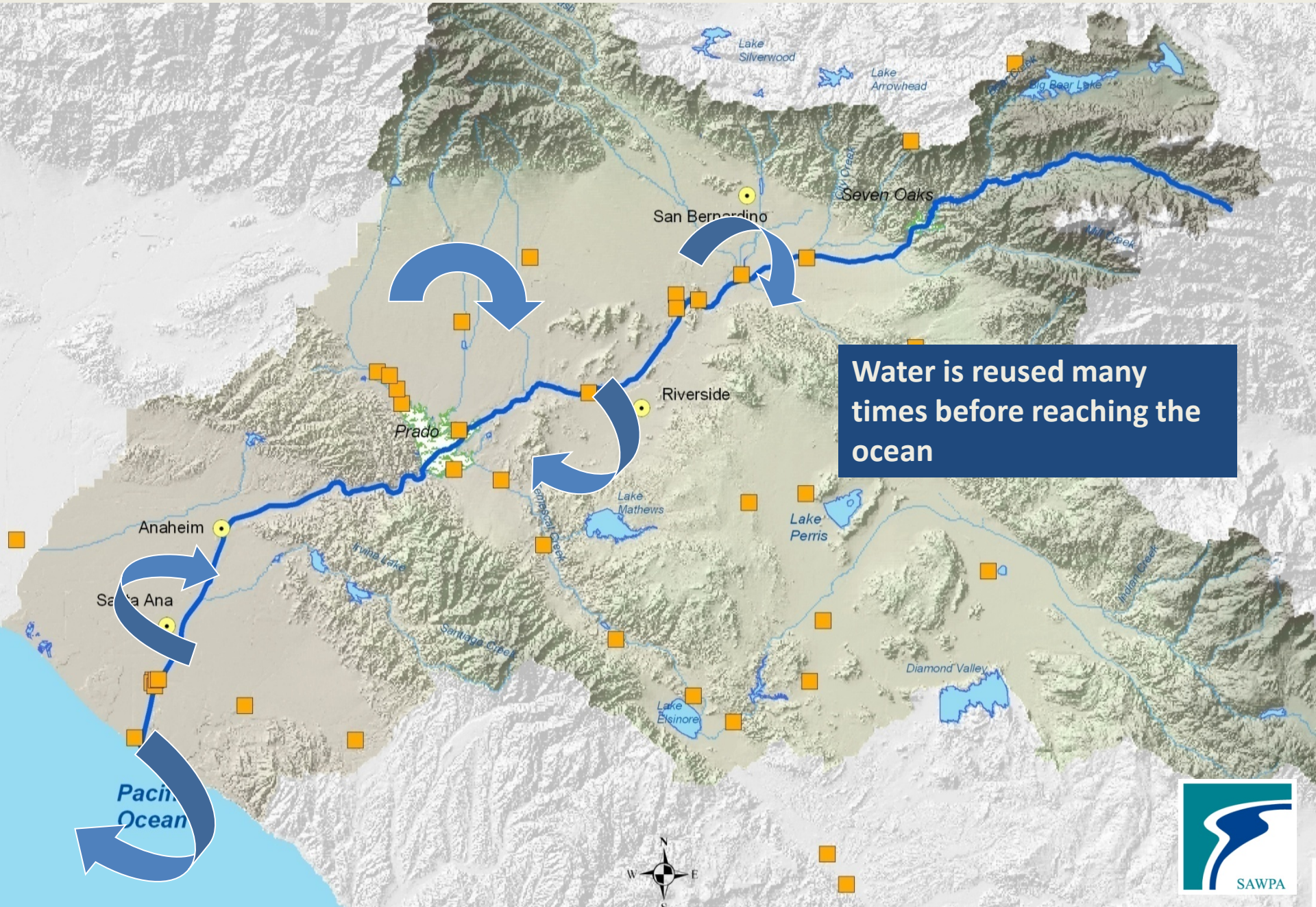
19th Century California Water Management

20th Century California Water: Conveyance Projects

The Hydrologic Cycle



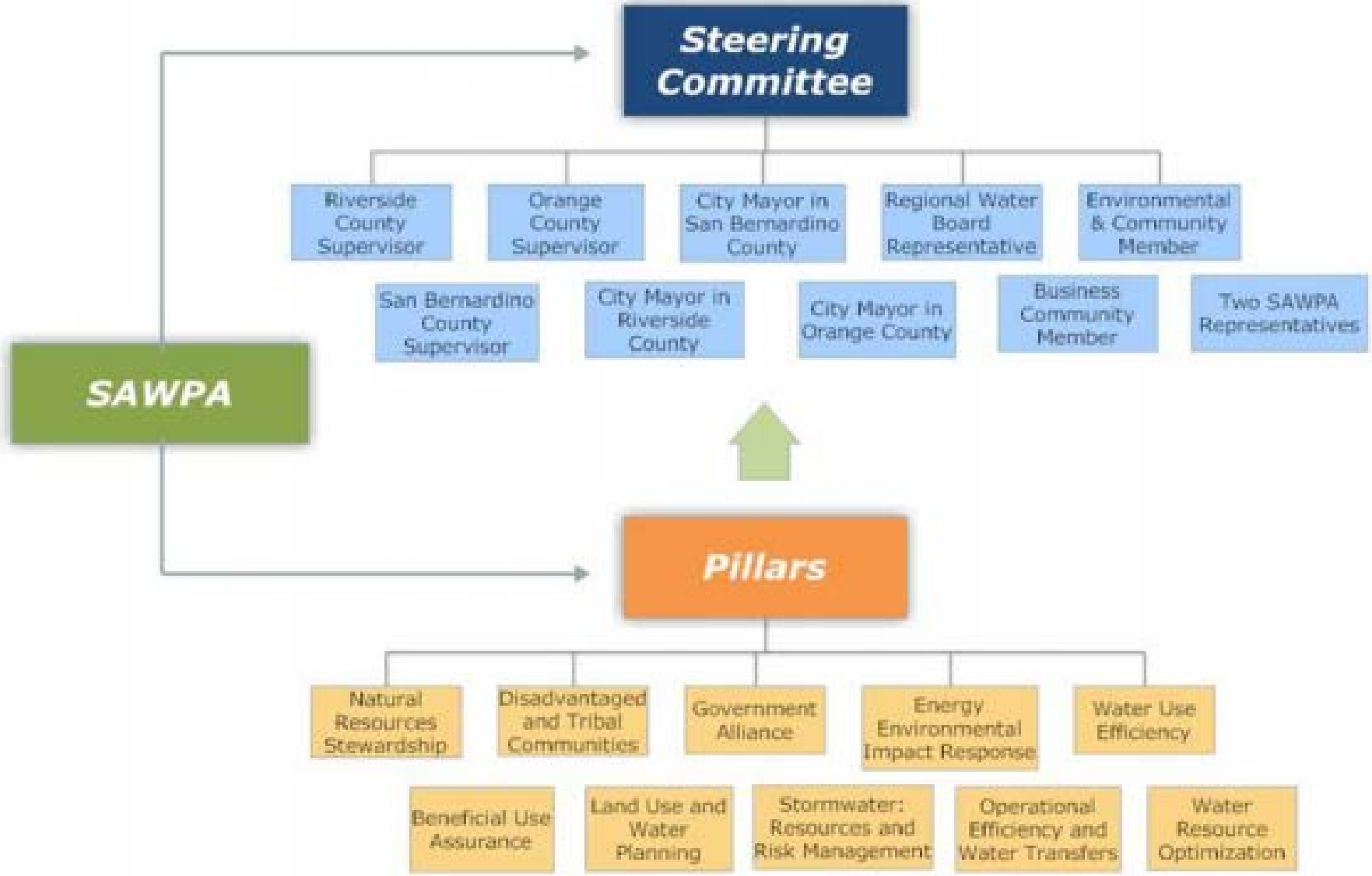
21st Century Water Management Strategy



First OWOW Meeting April 2007


Santa Ana River Watershed's
Six Horsemen of the Apocalypse
Fiscal Crisis
Colorado River
Climate Change
Sacramento Delta
Urban Hardscaping
Energy

OWOW Governance



The Watershed approach

1. The Watershed is a hydrologic whole
2. Working in concert with nature is cost effective
3. See each problem as interrelated, seek efficiencies and synergies

Create A New

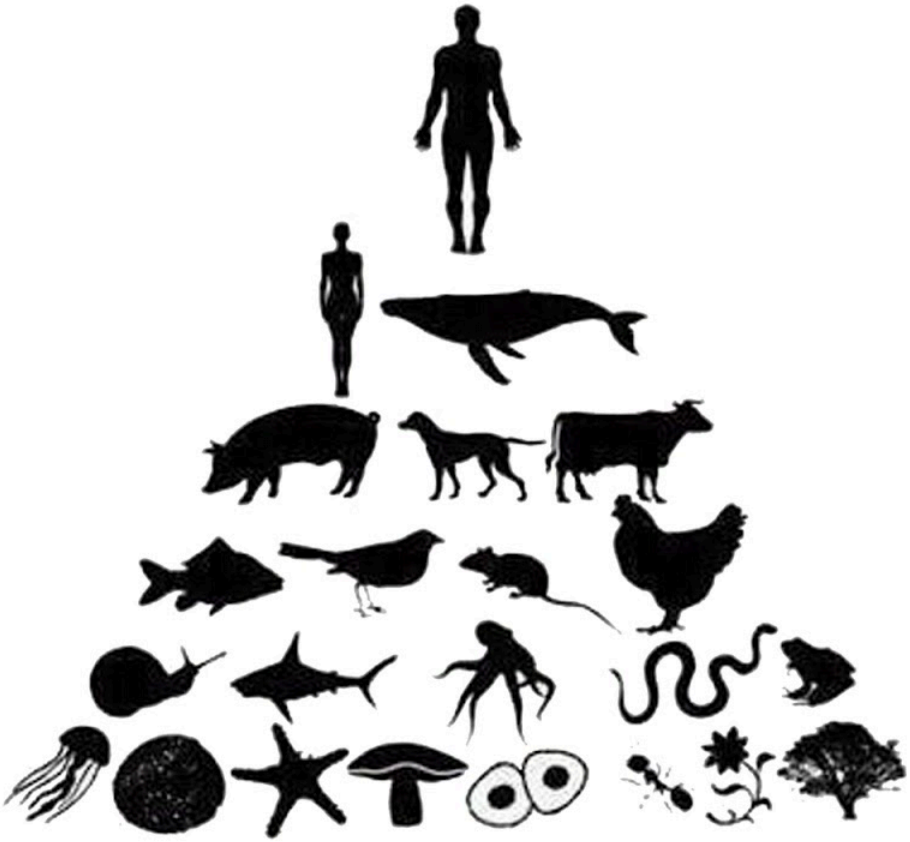
1. OWOW is a shared Vision for the Watershed
2. Breakthrough innovations
3. Create a Water Ethic

Collaborate Across Boundaries

1. As citizens of the Watershed, create synergies
2. No ONE can do it alone
3. **Think Big!**

Watershed Level Thinking

EGO



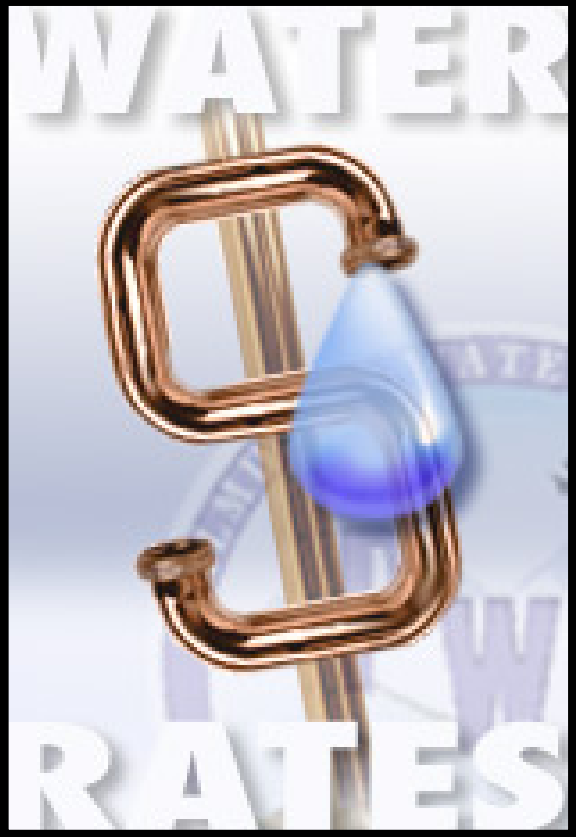
ECO

Collaboration
is not about gluing together
existing egos. It's about the
ideas that never existed until
after everyone entered the room.

@Daily.Dose

Meet Conflict and make him your friend.

Hard Path & Soft Path



Lake Oroville

June 2005: 897.12 Feet Elevation - 3,492,262 Acre Feet

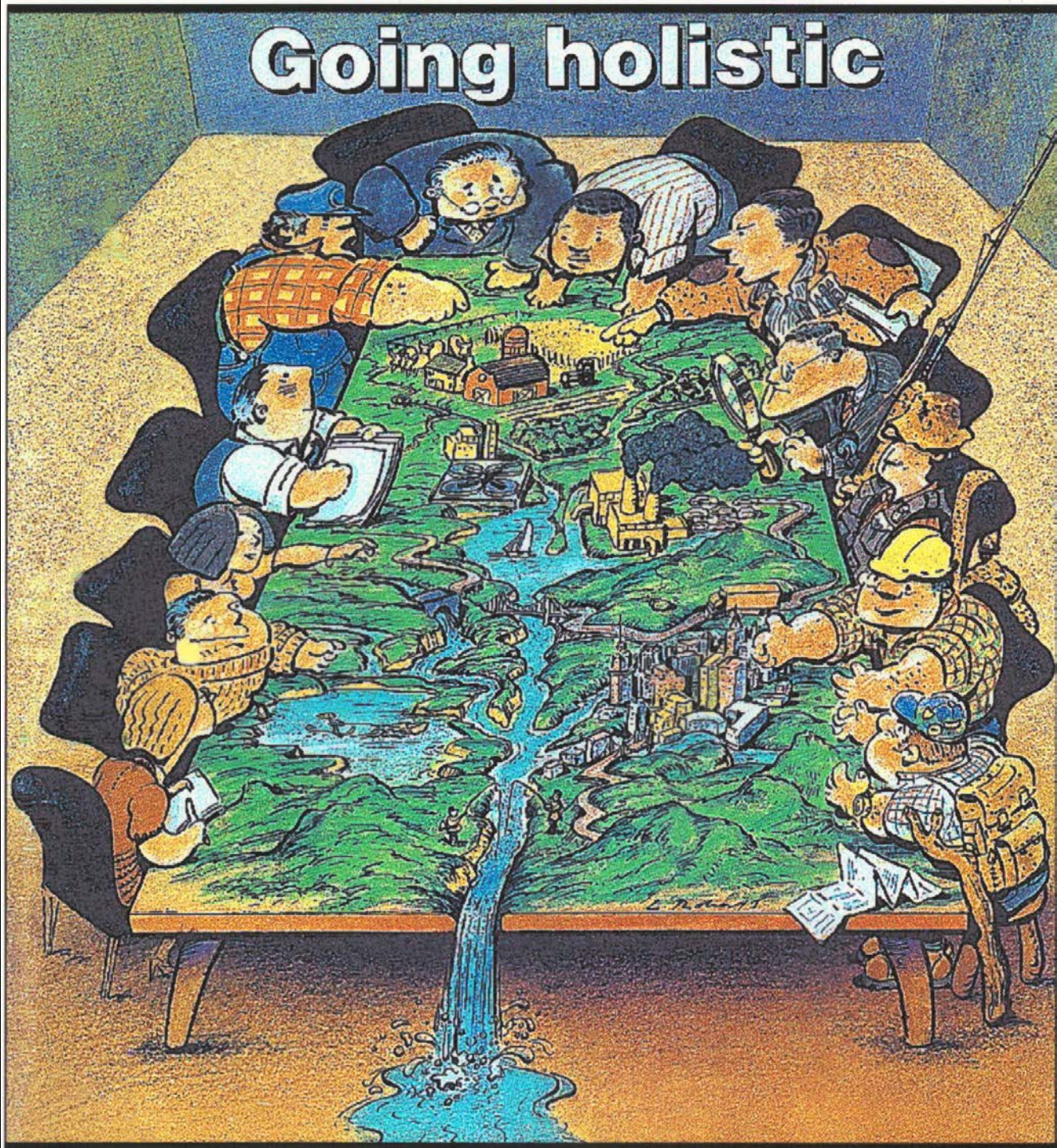
Lake Oroville Jan 2015

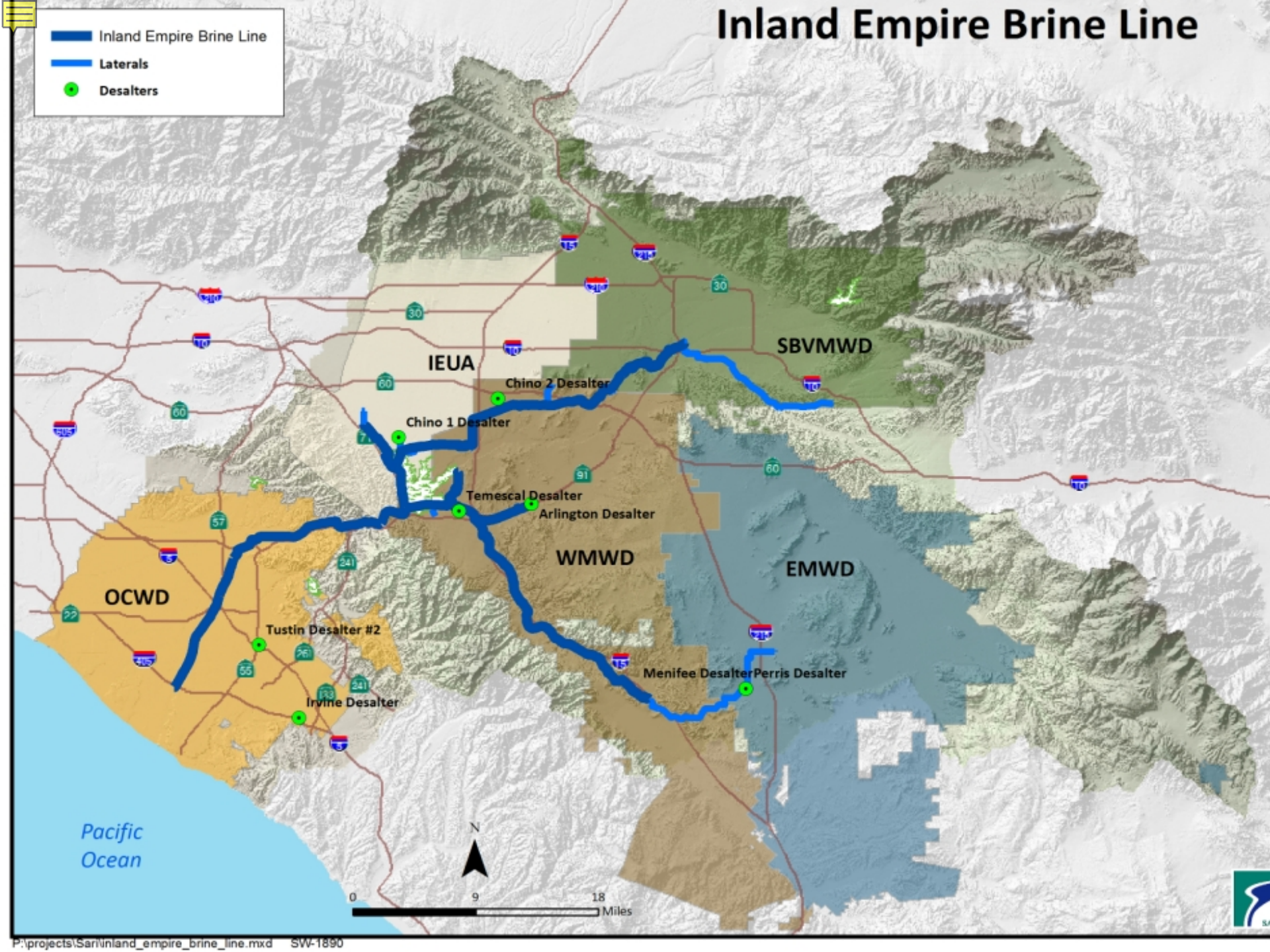

s Photo/KCRA

Improving Coordination Water Management & Land Use Planning


91
Riverside
EXIT 50
Main Street
1/2 MILE
Grand
Blvd
EXIT
498
ASHLEY
dialonesonshine.com

Water must be at the table





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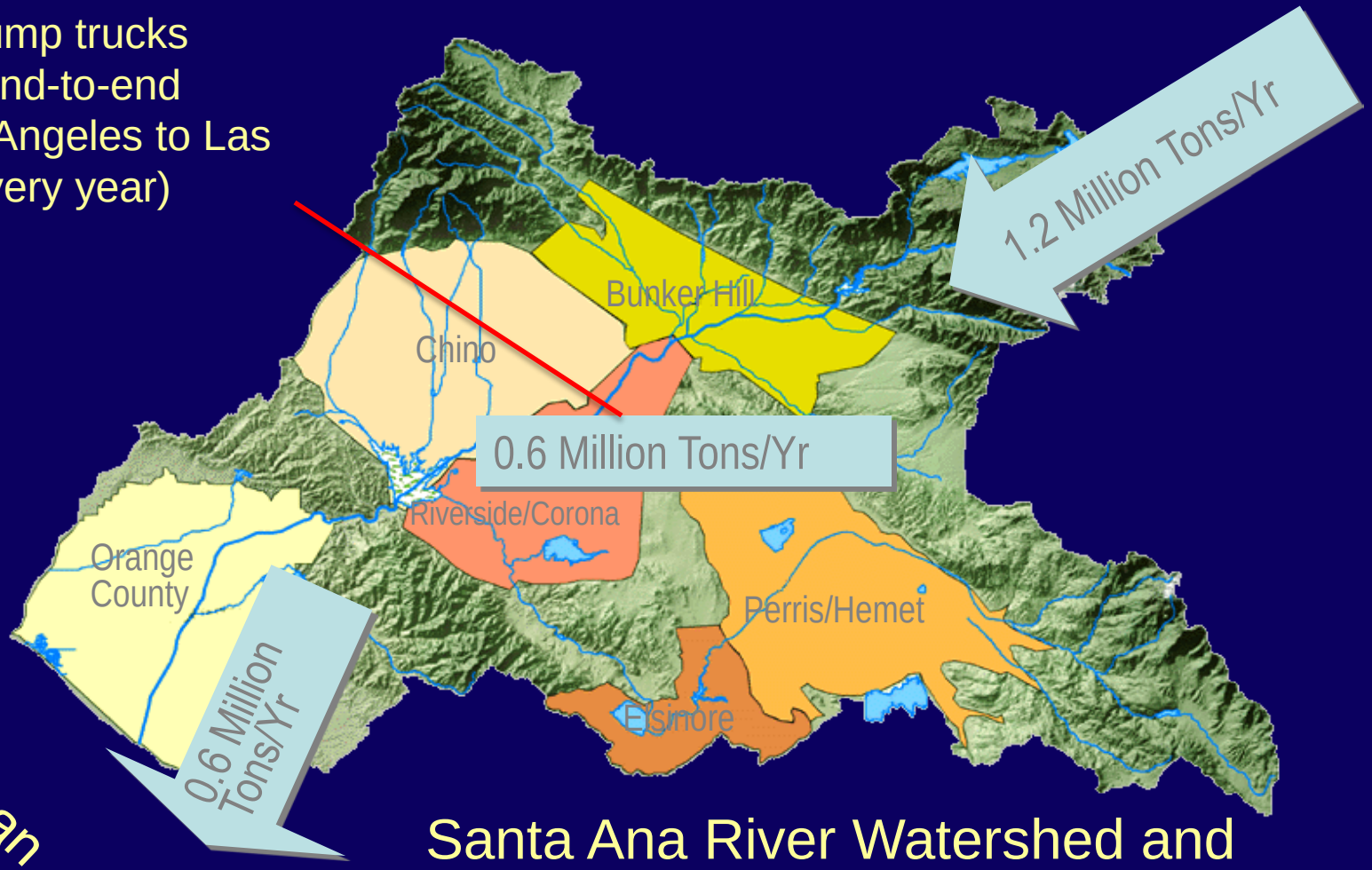
Salt Accumulation

37,000 dump trucks lined up end-to-end from Los Angeles to Las Vegas (every year)



Santa Ana River Watershed and Groundwater Basins

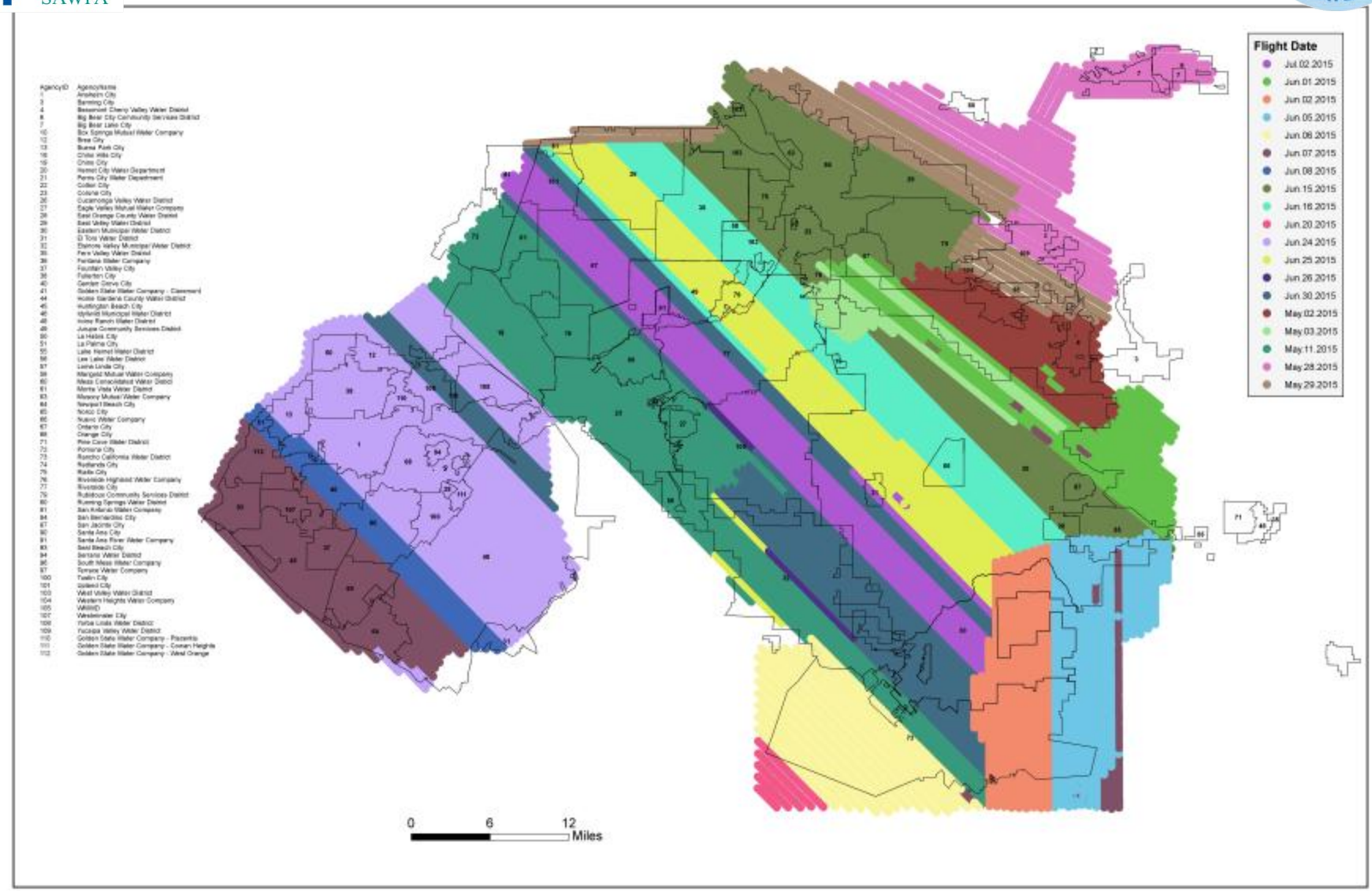
Brine Line Pretreatment TEAM

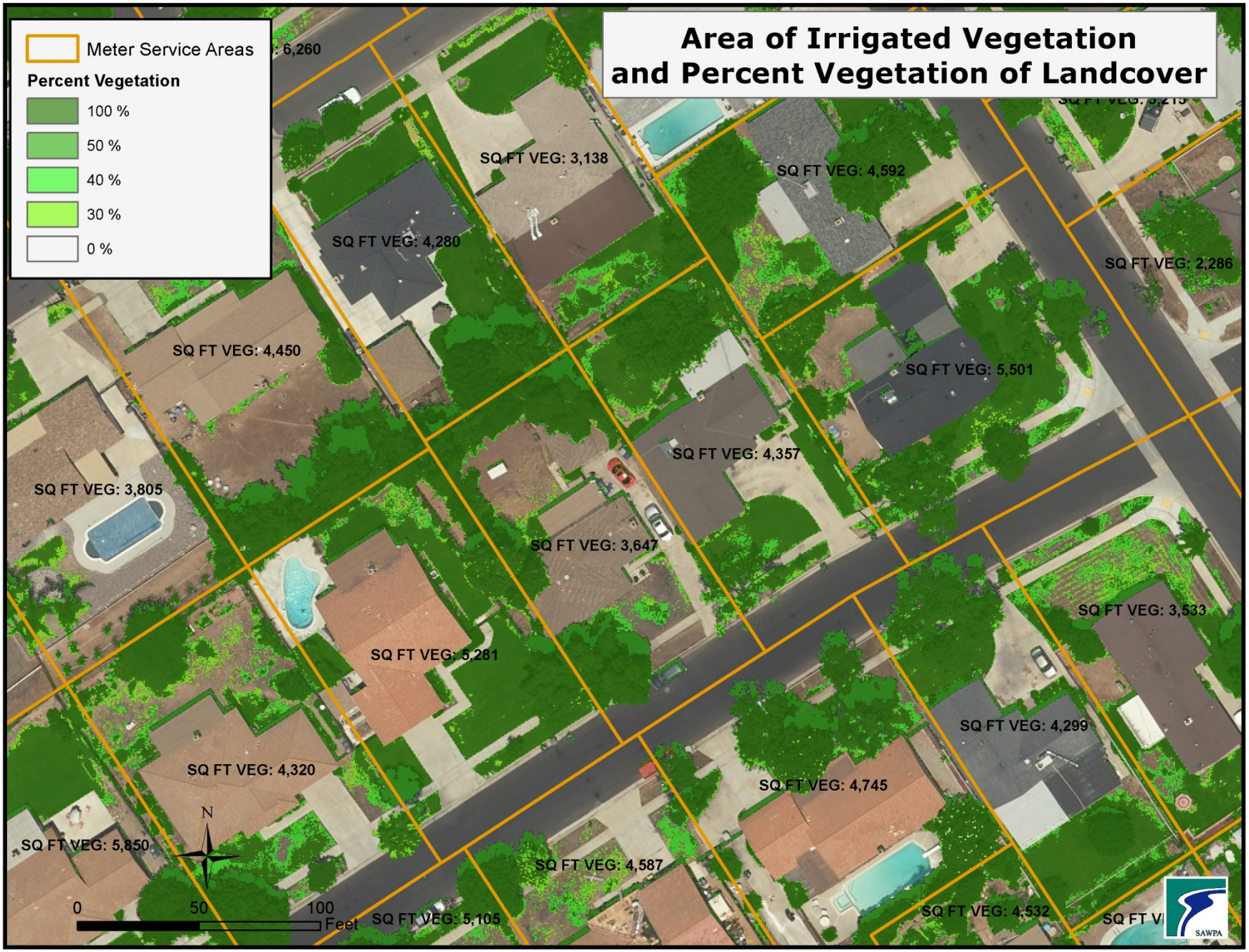

TETRA TECH
HOBAS
SARI MAINLINE RELOCATION

High Visibility Turf Removal and Replacement


Living Desert

SAWPA


Flight Date
Jul.02.2015
Jun.01.2015
Jun.02.2015
Jun.05.2015
Jun.06.2015
Jun.07.2015
Jun.08.2015
Jun.15.2015
Jun.16.2015
Jun.20.2015
Jun.24.2015
Jun.25.2015
Jun.26.2015
Jun.30.2015
May.02.2015
May.03.2015
May.11.2015
May.28.2015
May.29.2015
0
6
12
Miles



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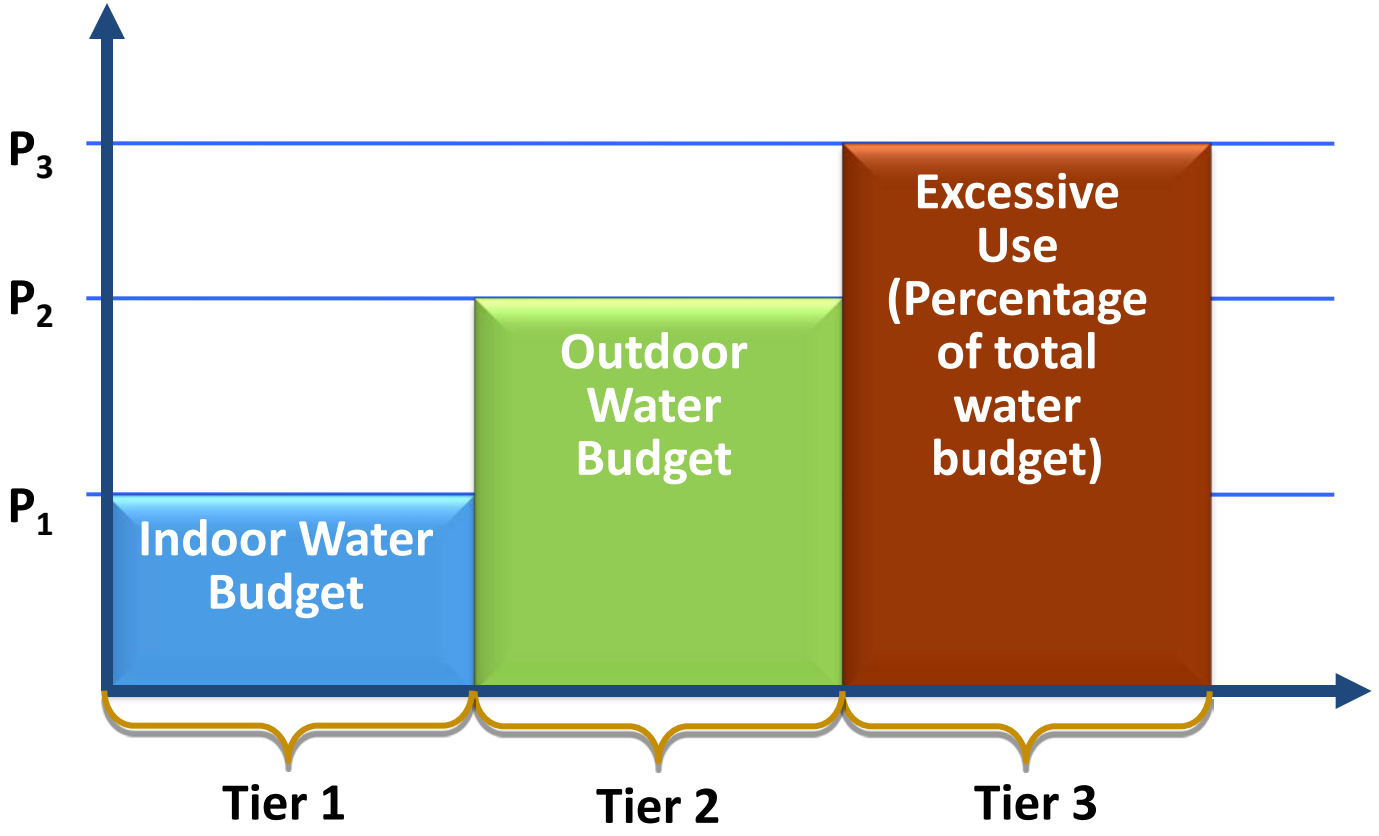
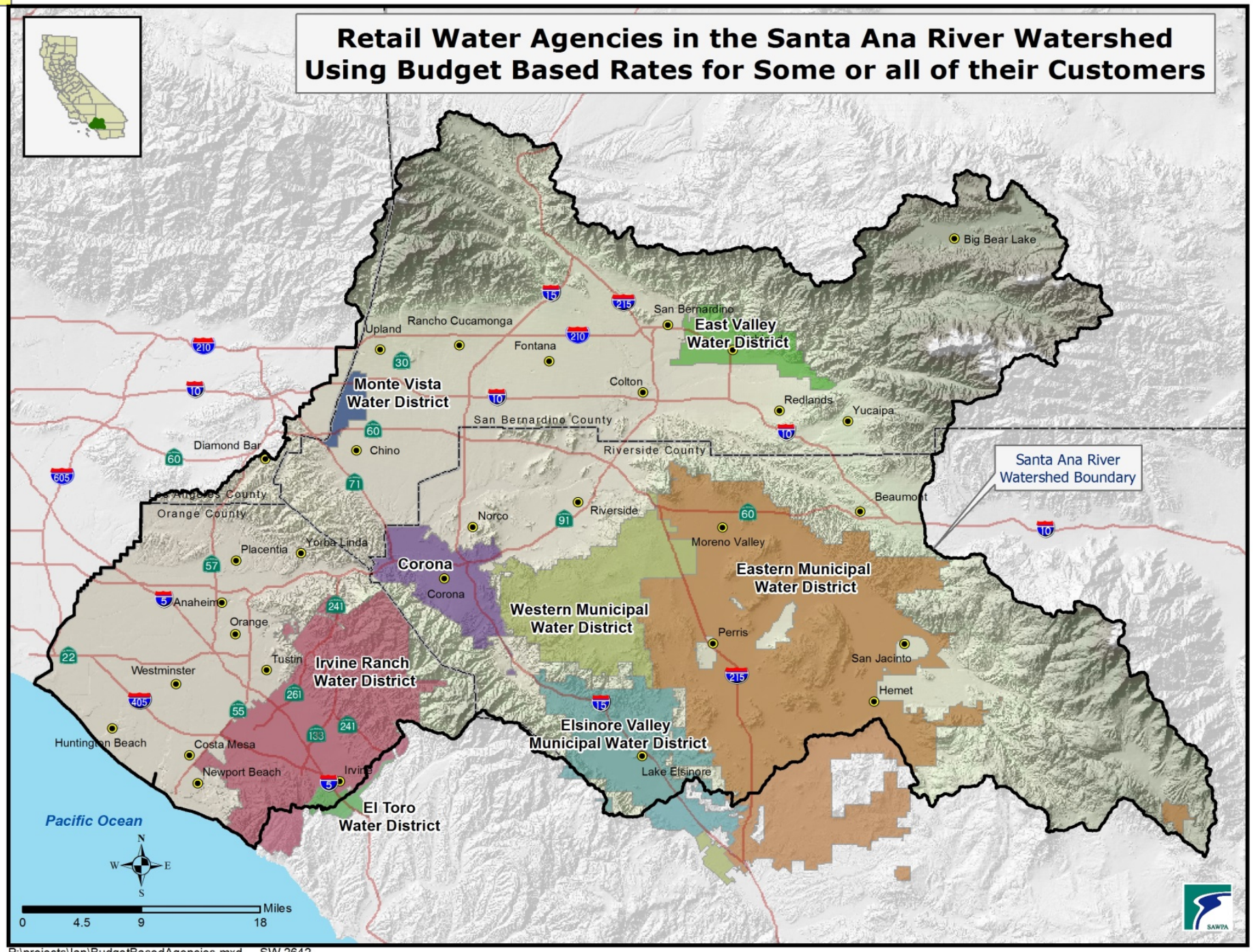
WATER BUDGET TIERED RATE




Retail Water Agencies in the Santa Ana River Watershed
Using Budget Based Rates for Some or all of their Customers
Big Bear Lake
San Bernardino
East Valley
Water District
Rancho Cucamonga
Upland
Fontana
Monte Vista
Water District
Colton
Redlands
Yucaipa
San Bernardino County
Riverside County
Diamond Bar
Chino
Santa Ana River
Watershed Boundary
Los Angeles County
Orange County
Norco
Riverside
Beaumont
Placentia
Yorba Linda
Moreno Valley
Corona
Corona
Eastern Municipal
Water District
Anaheim
Western Municipal
Water District
Orange
Perris
Tustin
Irvine Ranch
Water District
San Jacinto
Westminster
Hemet
Elsinore Valley
Municipal Water District
Huntington Beach
Costa Mesa
Lake Elsinore
Newport Beach
Irvine
El Toro
Water District
Pacific Ocean
N
W
E
S
Miles
0
4.5
9
18
SAWPA
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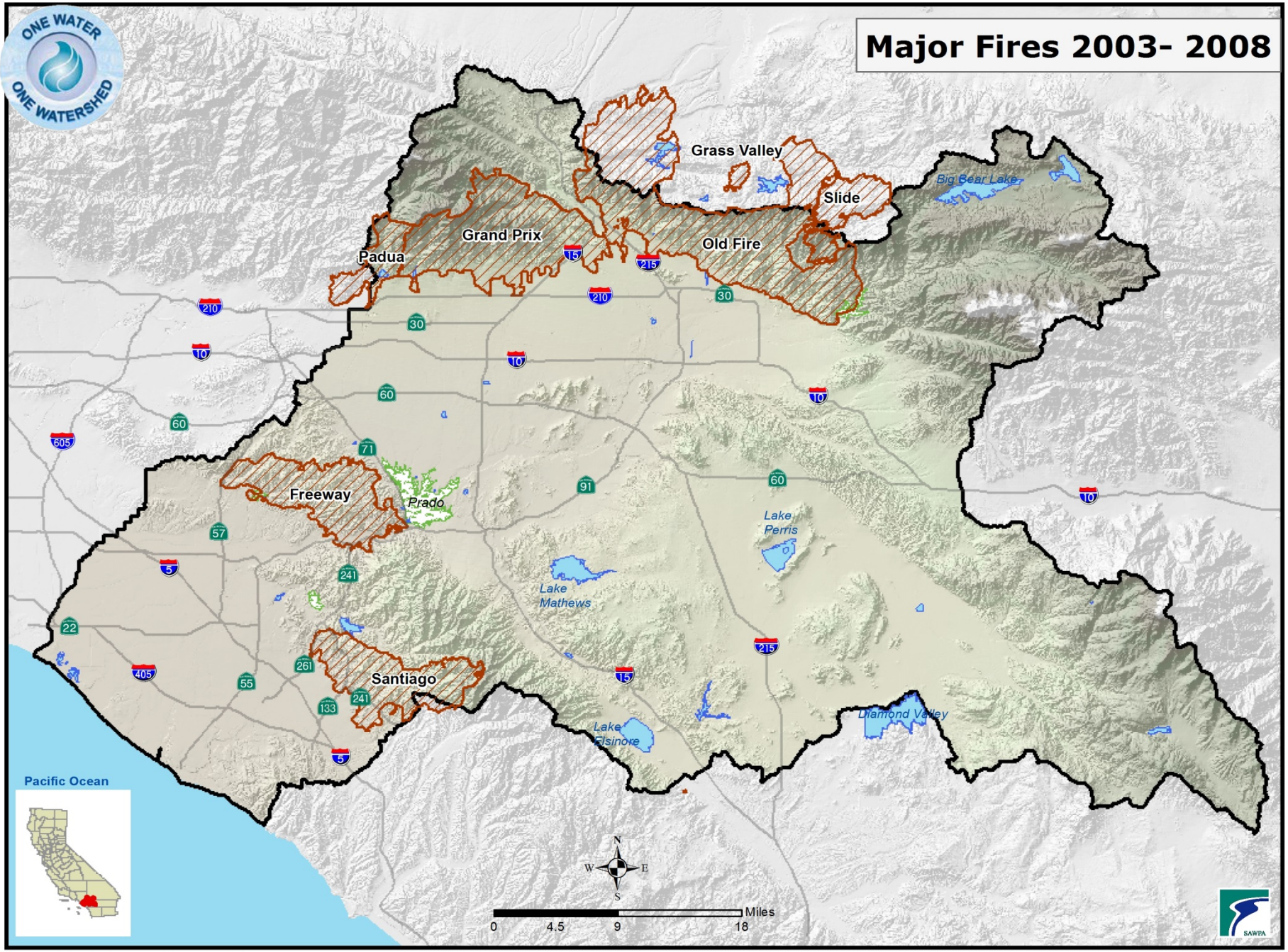
Forest First

Defining Ecosystem Services

Three Numbers to Remember

- 33%
- 90%
- 60%


Western Municipal Water District
Inland Empire Utilities Agen
District
Western Municipal Water District
ANTHONY
TERRY CATLIN
CELESTE CANTÚ



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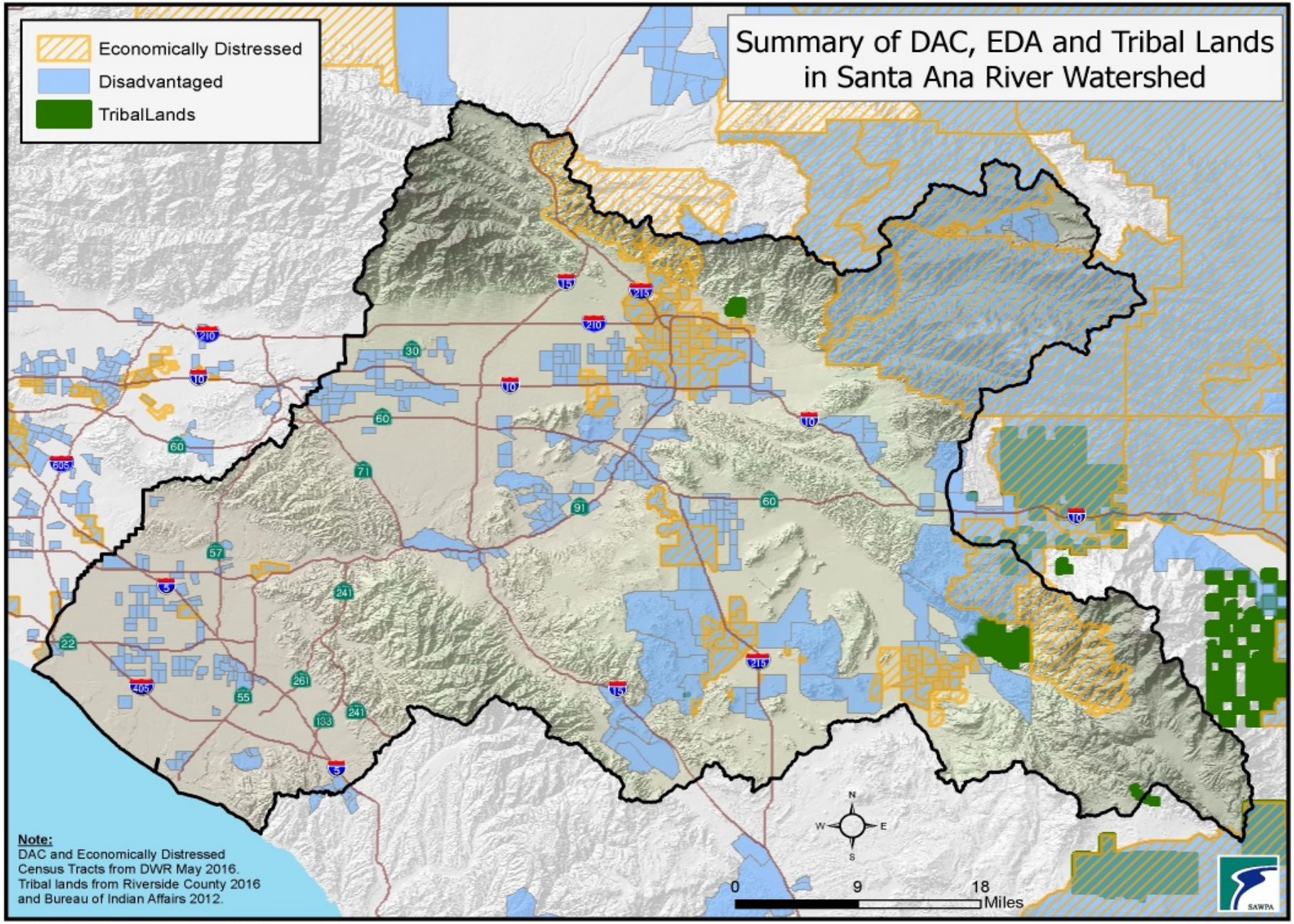
Disadvantaged Communities Involvement

1. Strengths and Needs Assessment
2. Education and Engagement
3. Project Development

- OWOW Steering Committee
- Disadvantaged and Tribal Communities Pillar
- DCI Program Technical Advisory Committee



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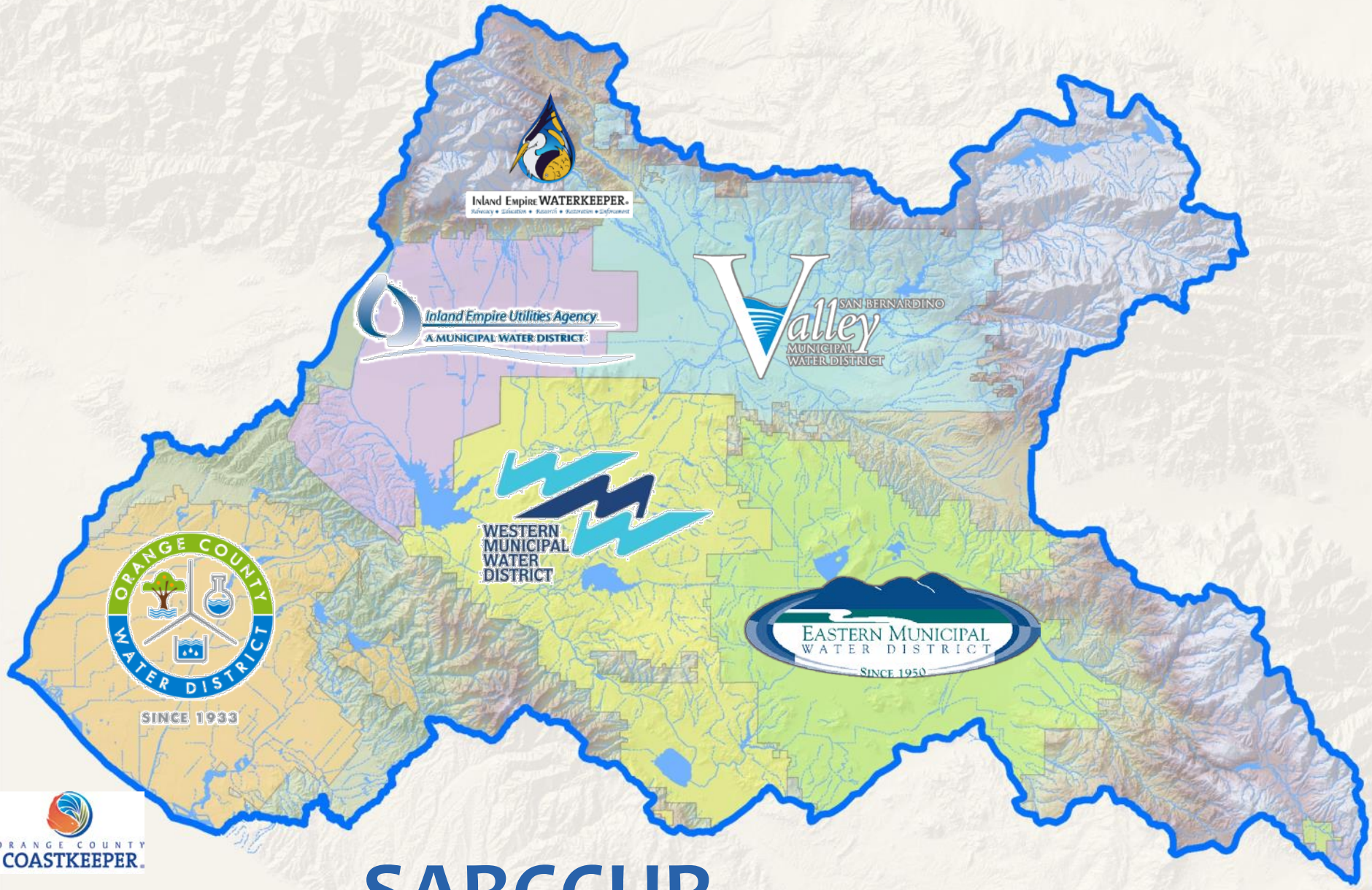
Water Energy Community Action Network

WE CAN

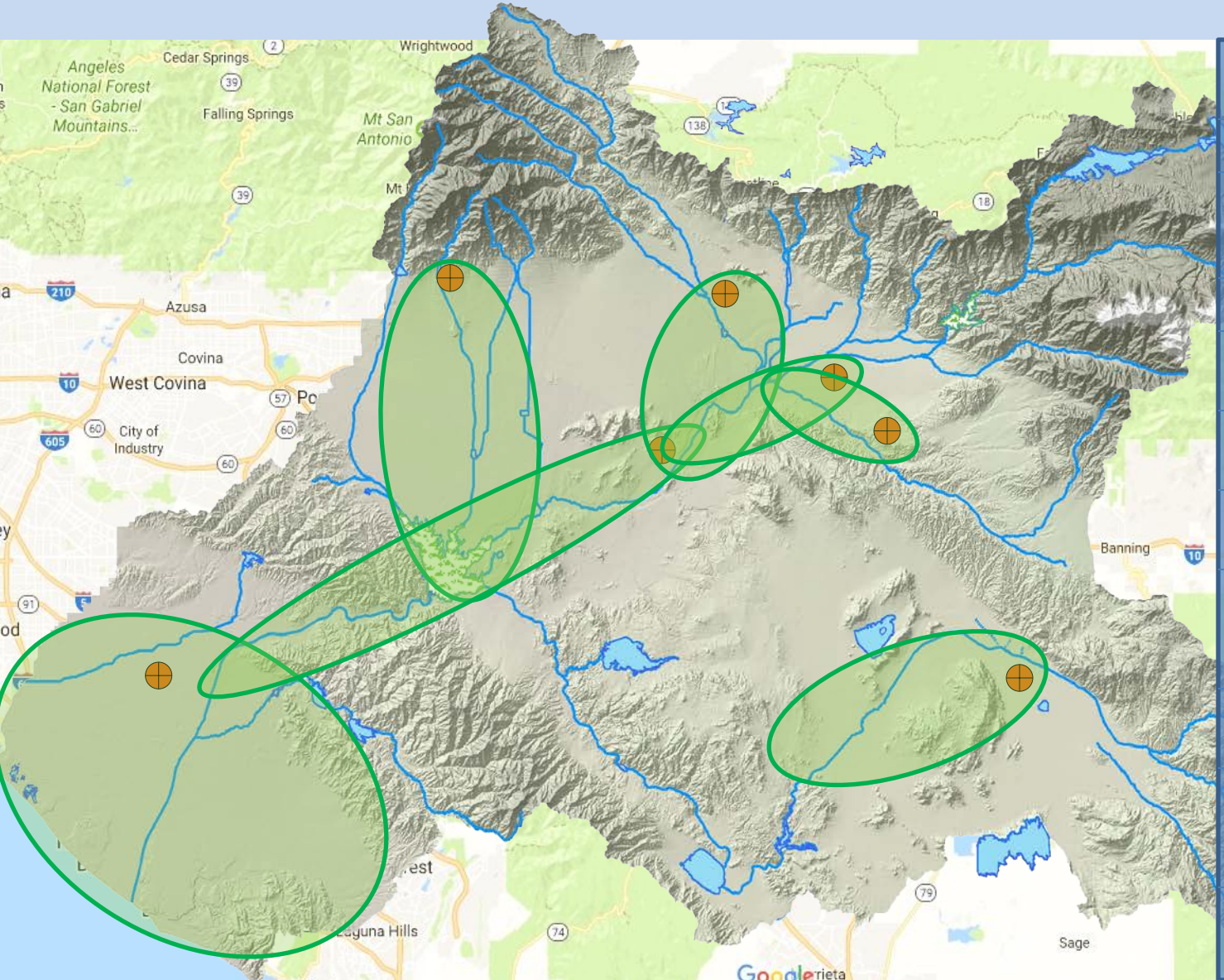
SAWPA

WATERSHED-SCALE COLLABORATION



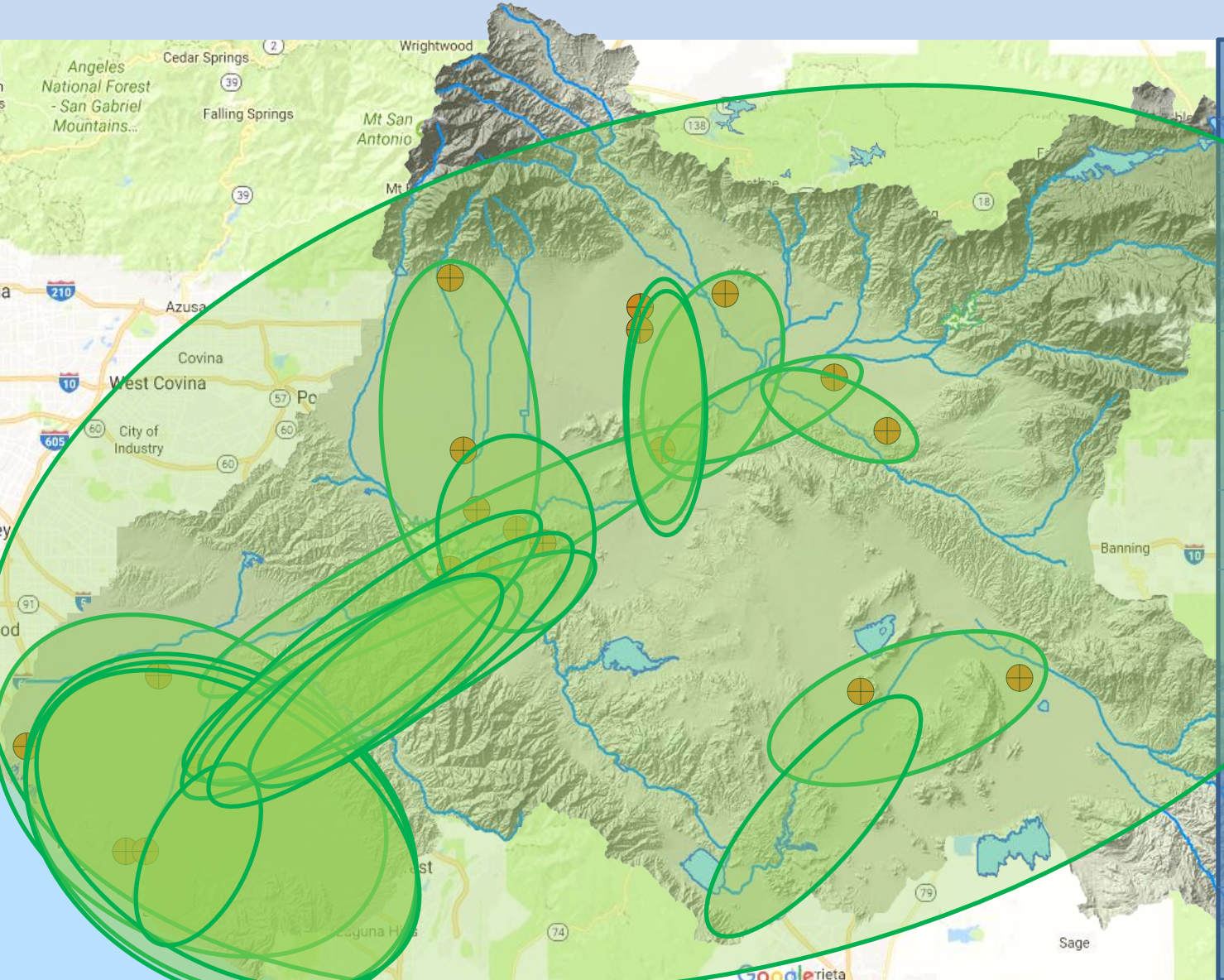
SARCCUP

OWOW Projects Map



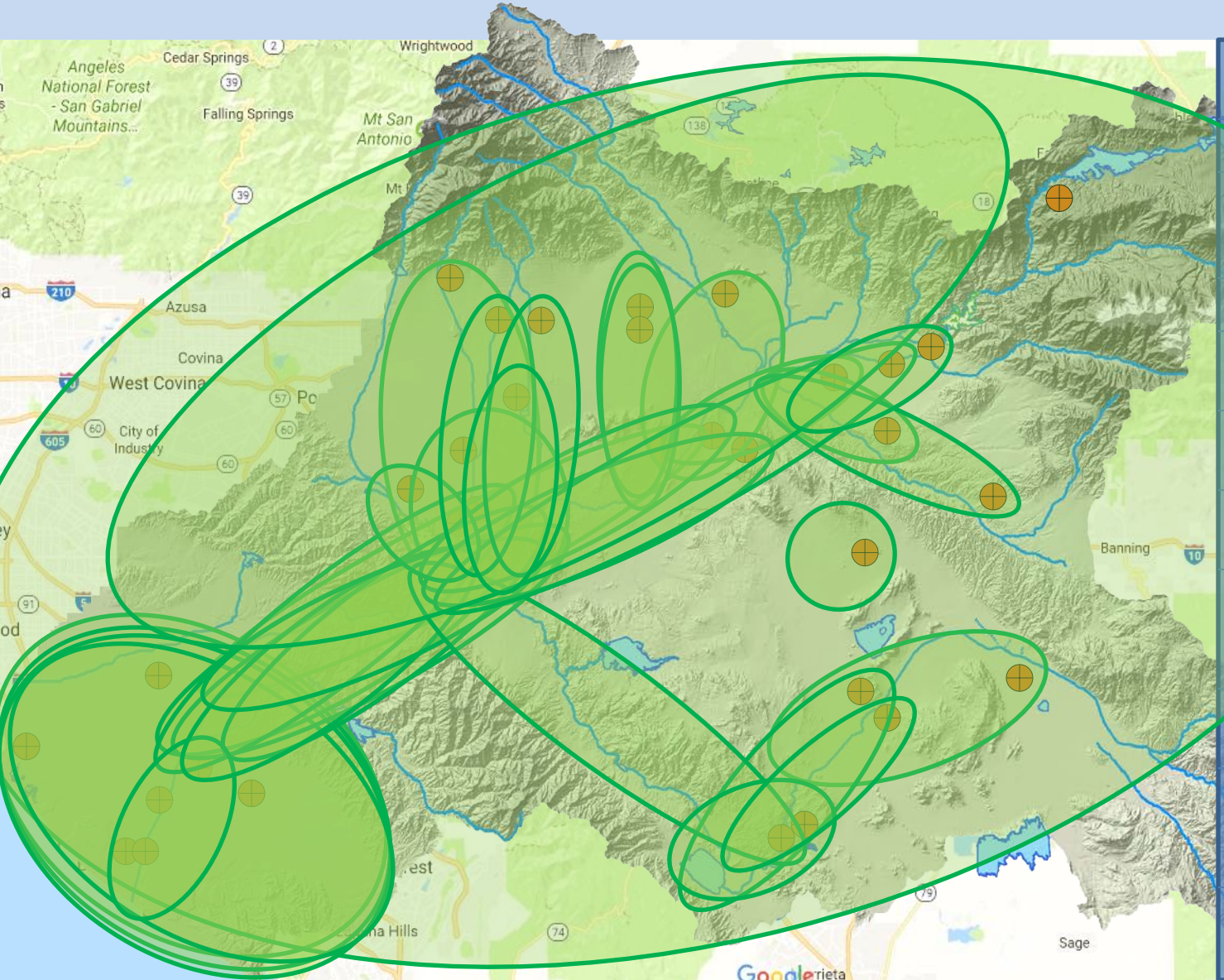
Recycled Water (AFY)	41,100
Recharge (AFY)	7,500
Arundo Removal Habitat Restoration (AC)	930
Habitat Restore (AC)	0
Sediment Removal (CY)	0
Salt Removal (Tons/Year)	0
Selenium/Nitrate Removal (Tons/Year)	0
Reduce Nonpoint Source Pollution (MGD)	0
Additional Potable Water (AFY)	21,000
Additional Non Potable Water (AFY)	8,000
Stormwater Capture (AFY)	0

OWOW Projects Map



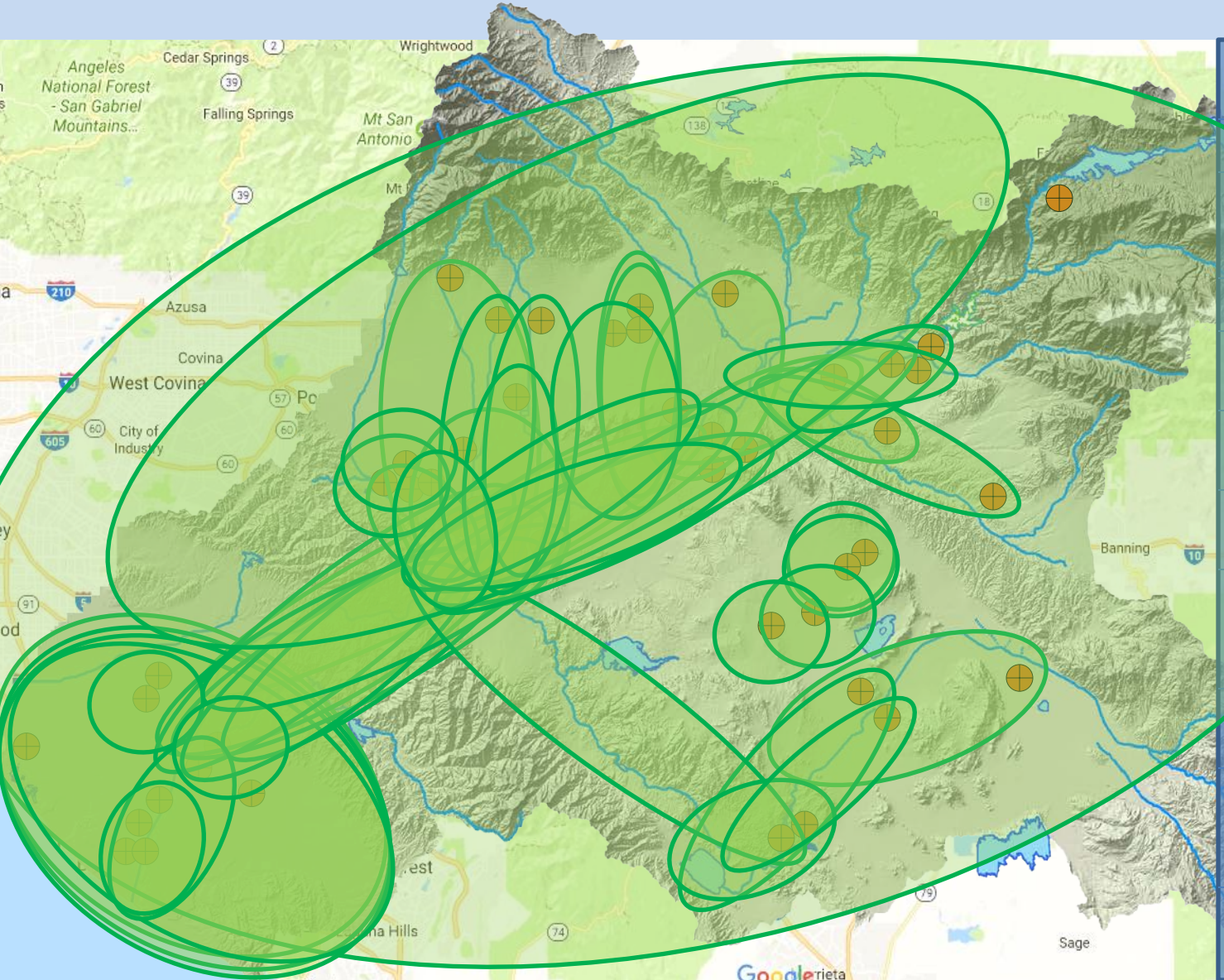
Recycled Water (AFY)	41,100
Recharge (AFY)	21,500
Arundo Removal Habitat Restoration (AC)	930
Habitat Restore (AC)	0
Sediment Removal (CY)	0
Salt Removal (Tons/Year)	32,000
Selenium/Nitrate Removal (Tons/Year)	0
Reduce Nonpoint Source Pollution (MGD)	0
Additional Potable Water (AFY)	26,382
Additional Non Potable Water (AFY)	8,000
Stormwater Capture (AFY)	2,370

OWOW Projects Map



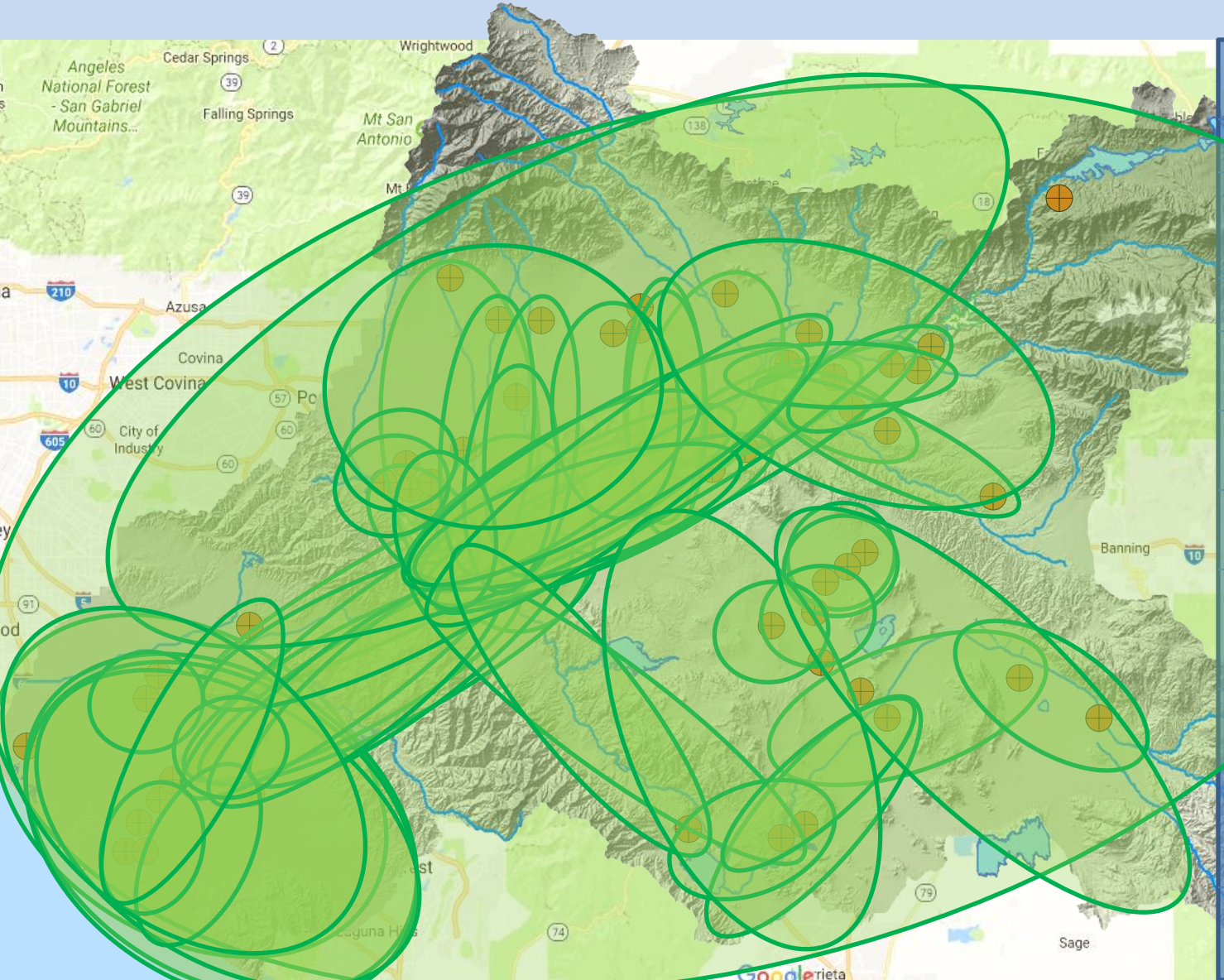
Recycled Water (AFY)	41,100
Recharge (AFY)	118,870
Arundo Removal Habitat Restoration (AC)	930
Habitat Restore (AC)	110
Sediment Removal (CY)	500,000
Salt Removal (Tons/Year)	32,000
Selenium/Nitrate Removal (Tons/Year)	35.03
Reduce Nonpoint Source Pollution (MGD)	2.36
Additional Potable Water (AFY)	80,927
Additional Non Potable Water (AFY)	86,000
Stormwater Capture (AFY)	2,370

OWOW Projects Map



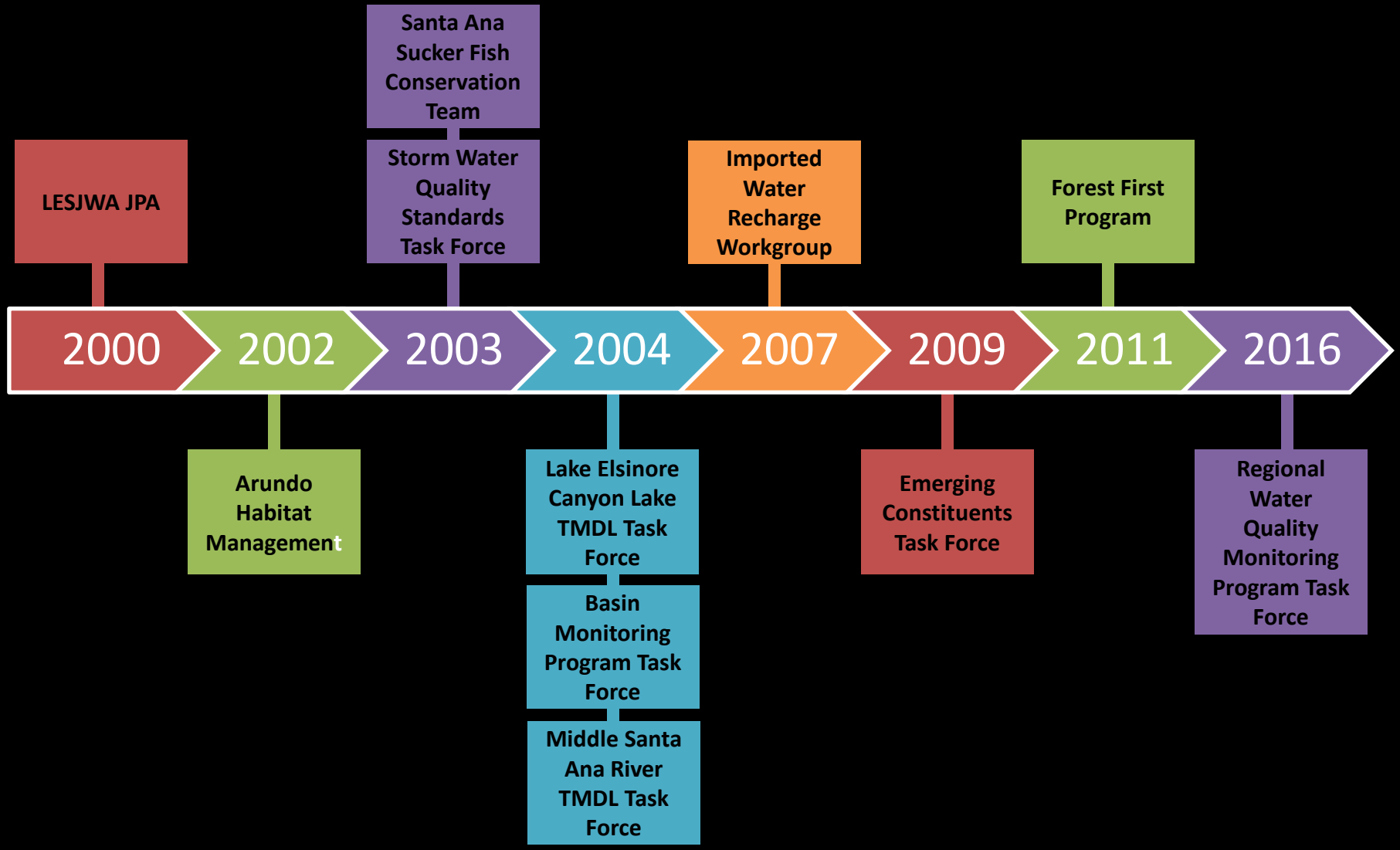
Recycled Water (AFY)	41,100
Recharge (AFY)	113,670
Arundo Removal Habitat Restoration (AC)	930
Habitat Restore (AC)	110
Sediment Removal (CY)	500,000
Salt Removal (Tons/Year)	32,000
Selenium/Nitrate Removal (Tons/Year)	35.13
Reduce Nonpoint Source Pollution (MGD)	2.33
Additional Potable Water (AFY)	38,940
Additional Non Potable Water (AFY)	16,100
Stormwater Capture (AFY)	3,170

OWOW Projects Map



Recycled Water (AFY)	41,100
Recharge (AFY)	114,870
Arundo Removal Habitat Restoration (AC)	1930
Habitat Restore (AC)	150.5
Sediment Removal (CY)	500,000
Salt Removal (Tons/Year)	32,000
Selenium/Nitrate Removal (Tons/Year)	35.13
Reduce Nonpoint Source Pollution (MGD)	2.33
Additional Potable Water (AFY)	288,570
Additional Non Potable Water (AFY)	16,100
Stormwater Capture (AFY)	3,170

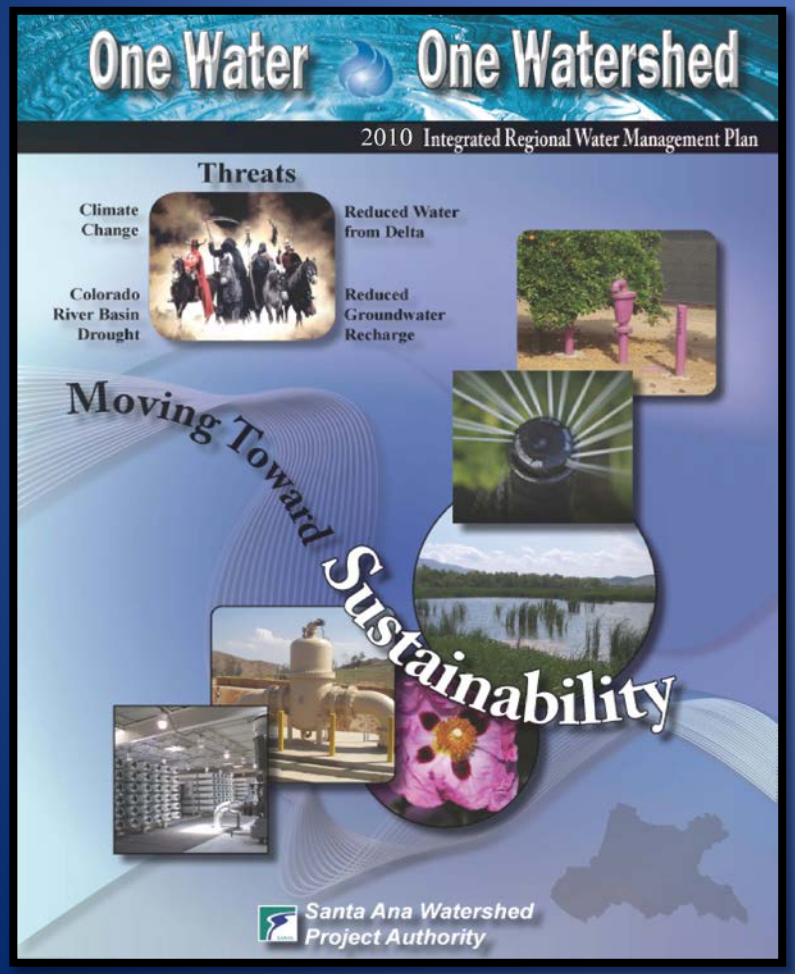
Roundtables



SAWPA's Stellar Staff.

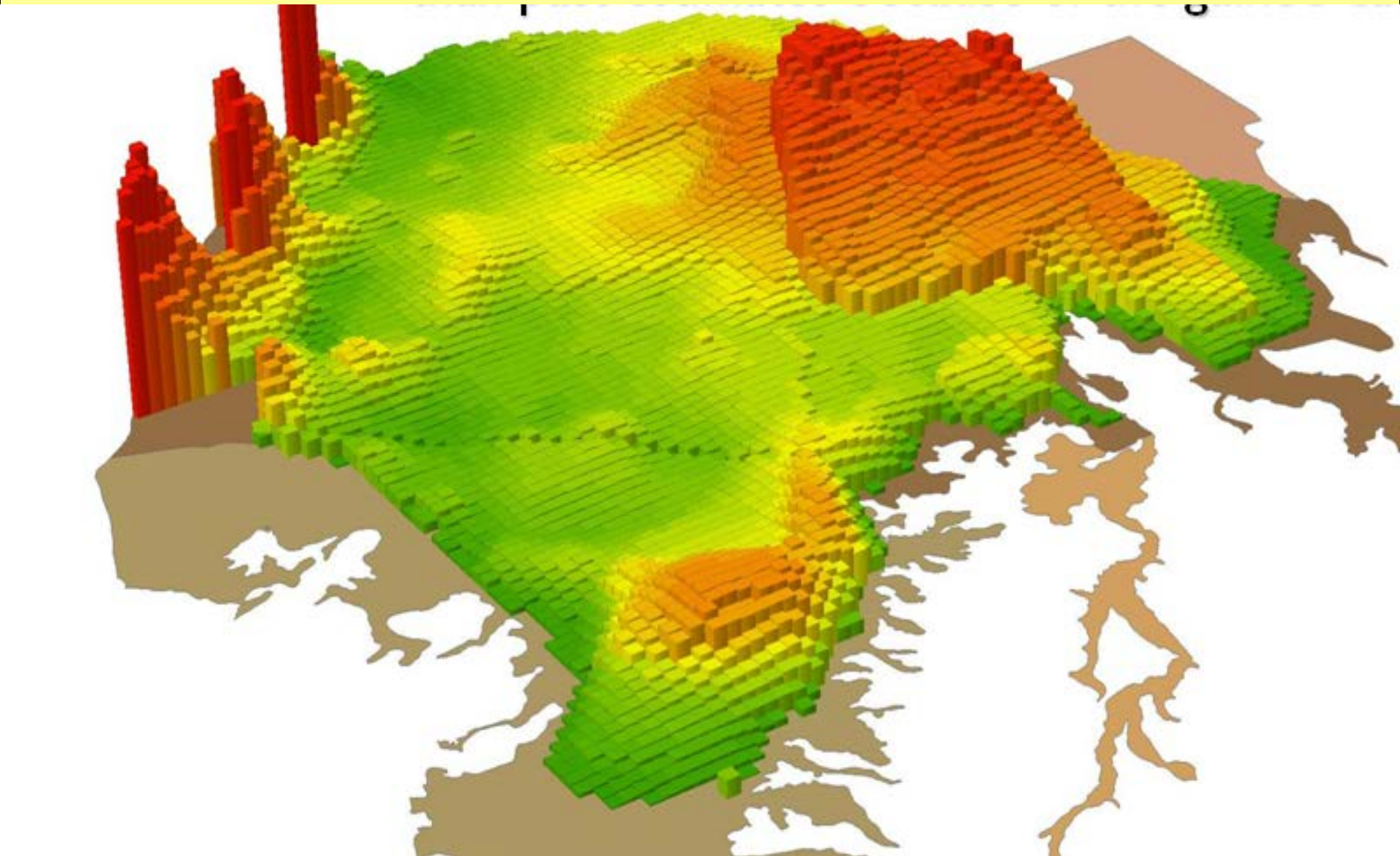

NEXT
BIG THING
AHEAD

One Water One Watershed:



HARVARD Kennedy School
ASH CENTER
for Democratic Governance and Innovation

Salt Concentration

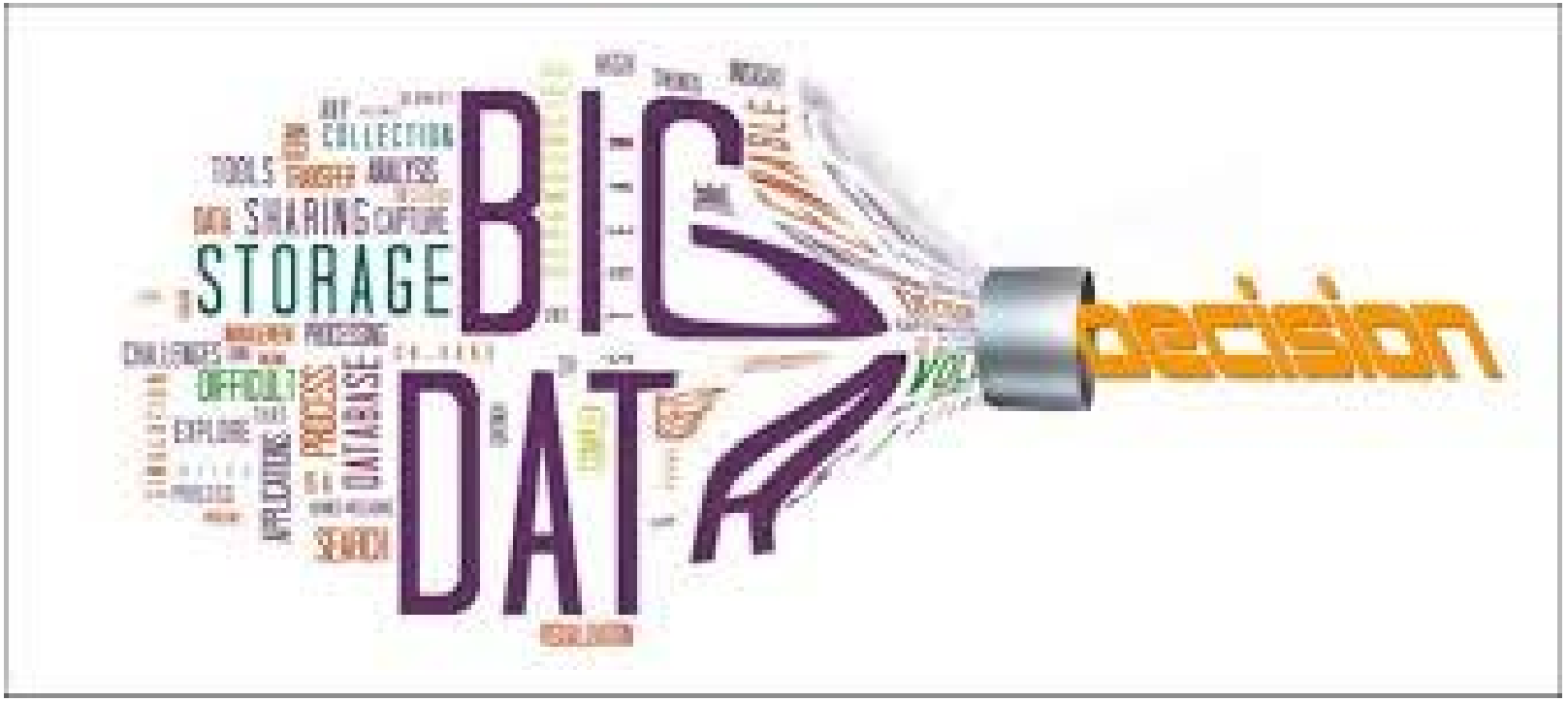


Increased Investment in the Forests

Photo: Jay Calderon/The Desert Sun)

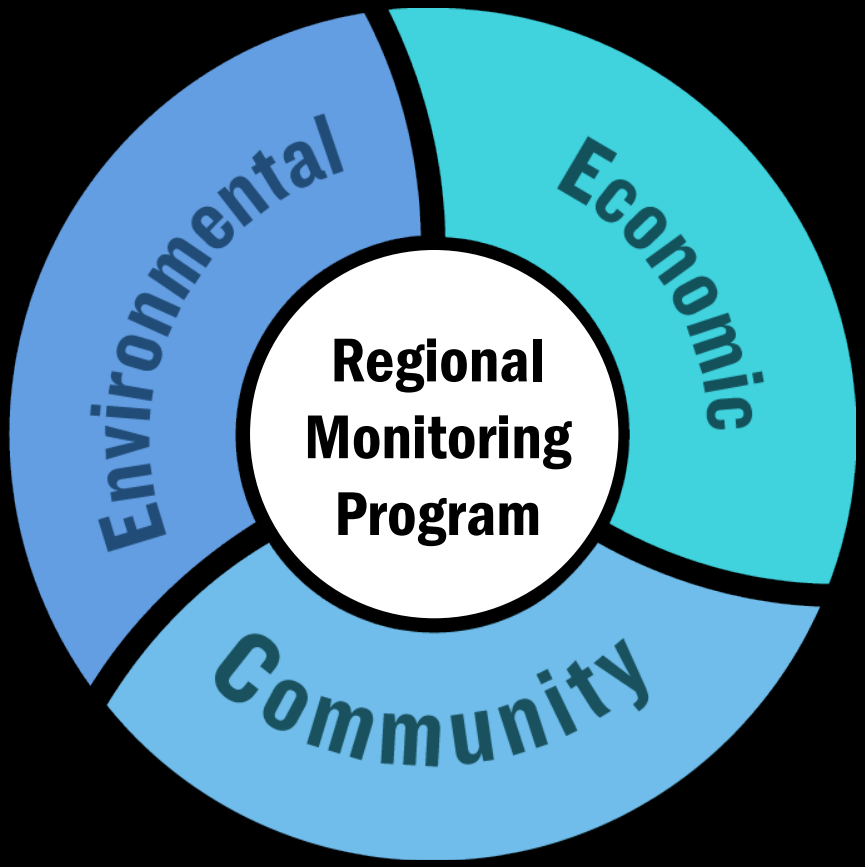
Commercial, Industrial Landscape Transformation

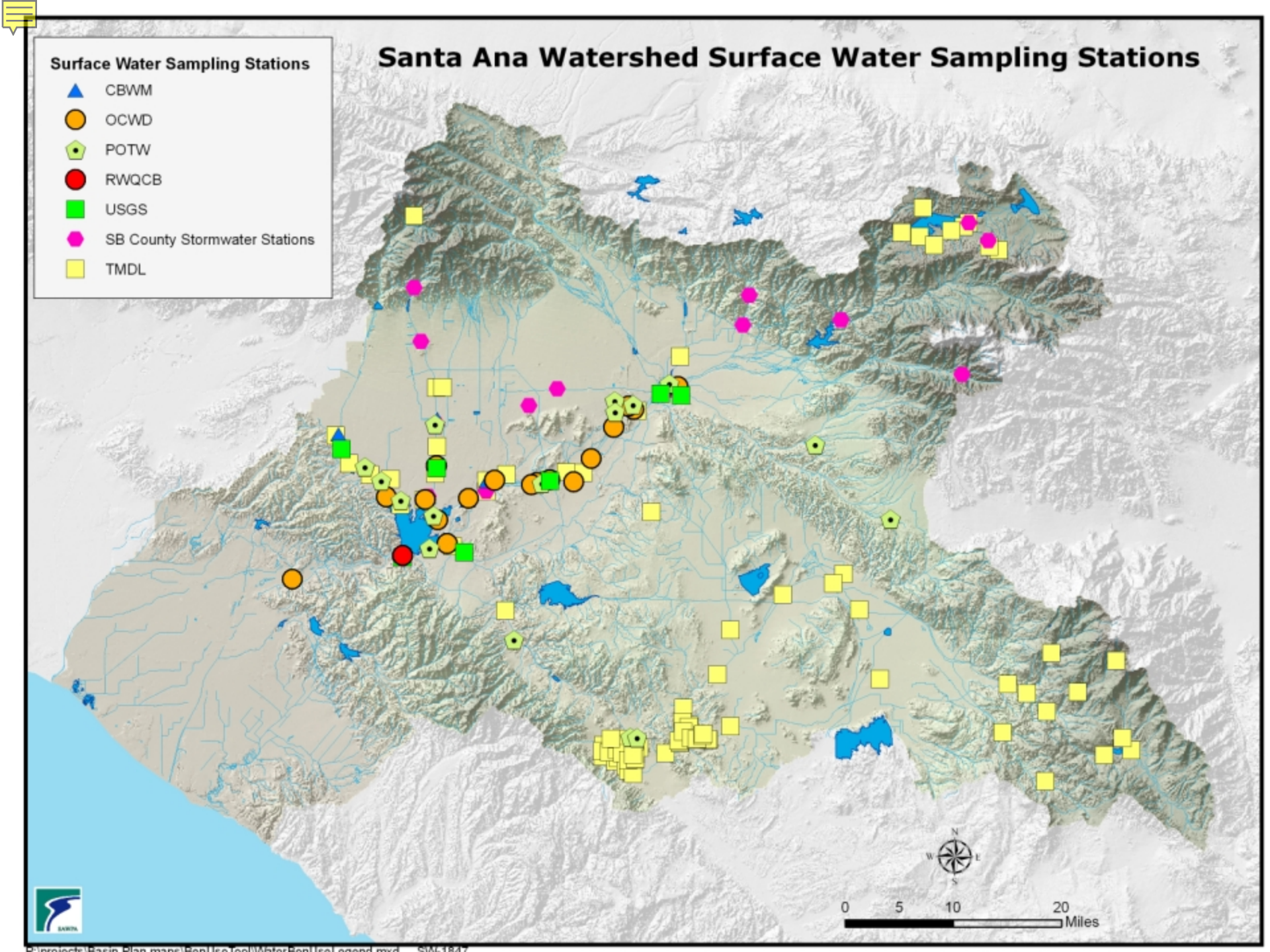
Data to create information, knowledge, and ACTION



Benefits of a Regional Monitoring Program

- Reduced region-wide monitoring costs
- Compliance – along with peace of mind – your staff won't need to do the field work
- Reduced paperwork (both stakeholders and Regional Board)
- Voluntary program




Santa Ana Watershed Surface Water Sampling Stations
Surface Water Sampling Stations
CBWM
OCWD
POTW
RWQCB
USGS
SB County Stormwater Stations
TMDL
N
W
E
S
0
5
10
20
Miles

Emerging Constituents

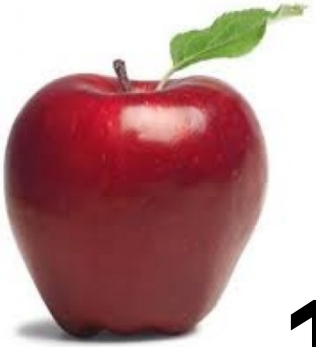
Santa Ana Watershed Project Authority

SAWPA

April, 2014


NO DIVING
FROM
BRIDGE

How many gallons to produce a...?



19

634

500

39,000

32

63

37

45

53