



City of Newport Beach

## Coastal/Bay Water Quality Citizens Advisory Committee Minutes

**DATE:** 9/10/09    **TIME:** 3:00 P.M.    **LOCATION:** Fire Conference Room

### 1. Welcome/Self Introductions

#### Committee Members:

Chairwoman/Council Member Nancy Gardner  
Dennis Baker  
George Drayton  
Tom Houston  
Jim Miller  
Janet Rappaport

#### Guests:

Eric Chevalier, ZeroTrash.org  
Kevin Hunt, General Manager, Metropolitan Water District of Orange County (MWDOC)  
Chip McDermott, ZeroTrash.org  
Monica Mazur  
Scott Maloni, Poseidon Resources  
Karl Seckel, Assistant General Manager, MWDOC  
Jack & Nancy Skinner

#### City or County Staff:

Dave Kiff, Assistant City Manager  
George Murdoch, Utilities Director  
Shirley Oborny, Administrative Assistant

### 2. Approval of Previous Meeting's Minutes

The minutes from the July 9, 2009, meeting were approved.

### 3. Old Business

#### (a) Bay and Ocean Bacteriological Test Results

Ms. Mazur reviewed the latest bacti reports.

### 4. New Business

#### (a) Zero Trash Laguna

Mr. McDermott explained he was invited by John Kappeler to speak at this meeting to see if Newport Beach would be interested in his program. He presented a PowerPoint (attached). Mr. Hunt asked him why he thinks people don't consider throwing cigarette butts littering. Mr. McDermott said a *New York Times* study said a lot of people believe the filter is biodegradable. In addition to laziness, a study showed that 23% discarded

their butts on the ground because there were no ashtrays available.

Mr. McDermott said when he started his program he noticed there weren't enough trash bins in Laguna Beach on Coast Highway. When more trash cans are available and placed in a systematic way, people will use them. Mr. Chevalier talked about how he has helped the program grow by getting the message out using the Internet. He explained the importance of involving local businesses.

Discussion ensued regarding Newport Beach's past experiences with trash cleanups. Ms. Rappaport suggested Corona del Mar be included in the program if the City decides to participate. In response to Mr. Houston, Mr. McDermott said the City of Laguna Beach received grant money to buy more trash cans with attached ash urns.

Chairwoman Gardner said she would follow up with Mr. McDermott and the City's General Services division.

**(b) Poseidon Desalination Project**

Mr. Murdoch reminded the committee that he last updated them a few months ago about the water conservation ordinance. Southern California's water supply is still being challenged by issues with the Delta Smelt and other northern California issues. He explained that many agencies and cities have shown interest in purchasing water from Poseidon Resources. The City has not made a commitment either way and he feels a presentation to this committee is a good place to start.

Mr. Hunt discussed a number of water supply issues. In response to Mr. Miller, Mr. Hunt said a peripheral canal could be built around the Delta Smelt; however, the issue is one of politics and trust. In addition to resolving the Delta issue, using water conservation, recycling, etc., he said MWDOC is also looking at ocean desalination. He presented a detailed PowerPoint (attached). Discussion ensued on ocean desalination projects, purchase agreements, local voter perceptions and next steps.

Chairwoman Gardner asked what other things the City can do to conserve water. He explained that half of the northern part of Orange County is the groundwater basin. Half of the basin going north is permeable but going south it's underlain by a clay layer that doesn't percolate the water very easily. As such, he said encouraging more permeable pavement in north Orange County would help.

Mr. Murdoch said as more time passes without rain; the City becomes more dependent on its imported sources. He thinks this project is worth looking into as an alternate supply because at this time there is no commitment and later it could be much more expensive, if it's available. It could also be a source for emergency water. Mr. Maloni agreed that it's better to get in line. The agencies on the list have signed a memorandum of understanding that sets up the terms for negotiating. It basically gives Poseidon Resources a sense of what the demand is. In the end if they want to back out, they can, but at least they're in line.

In response to Ms. Mazur, Mr. Maloni said the site could physically be expanded to

enlarge the project in the future, but he's not sure about environmentally.

The committee agreed the City could benefit from joining the other agencies already signed up to negotiate with Poseidon Resources and they recommend the issue to the City Council for further consideration.

In response to a discussion between Mr. Skinner and Mr. Murdoch regarding the issue surrounding the City of Irvine expressing an interest in tapping into the main line of water to supply the area near the Dyer Well Road Field Project, Chairwoman Gardner asked Mr. Murdoch to follow up on Mr. Skinner's concerns.

#### **5. Public Comments on Non-Agenda Items**

Mr. Skinner mentioned two important meetings coming up that affect the City related to the TMDL. One is the renewal of the selenium permit. Chairwoman Gardner and Mr. Kiff agreed to meet and come up with a strategy and position on that issue. Mr. Skinner said the second meeting is on September 30 and has to do with the levels of DDT found in mullets and anchovies.

#### **6. Topics for Future Agendas**

- (a) DWR Model Landscape and Irrigation Ordinance
- (b) NOAA Grant Update
- (c) Update on Integrated Watershed Planning Efforts
- (d) NPDES Annual Water Quality Report
- (e) Bacteriological Dry-Weather Runoff Gutter Study
- (f) Greywater Recycling

#### **7. Set Next Meeting Date**

The next meeting was set for October 8, 2009.

#### **8. Adjournment**

The meeting was adjourned at 4:58 p.m.

# ZERO TRASH™

## Newport Beach





# The Mission

A community clean-up project dedicated to  
ridding **STREETS** of trash,  
reducing waste,  
supporting local business,  
fostering community & environmental responsibility.



## Our Values



**ZeroTrash** is built on **3 VALUES:**  
**Conservation, Community &  
Personal Responsibility.**

**ZERO TRASH**™

## Problem:

**Street litter & roadside trash** have become **commonplace** in cities & towns across the U.S.



**ZERO TRASH™**



## Problem:

# Get your **butts** in here!

### According to *Keep America Beautiful (KAB)*

- In 2003 filters, tips & tobacco packaging accounted for **38%** of U.S. litter; the #1 littered item in the world
- 2000 *Surfrider CA Coastal Clean Up Day* **230,000** butts were collected accounting for the #1 item found
- A recent *LA Public Works* study found over **600,000** butts are thrown to ground EACH MONTH in LA alone

- **Reasons for littering**

1. laziness 24%
2. **No ASHTRAY 23%**
3. **No BIN nearby 21%**
4. habit 6%



**ZERO TRASH**™



## Opportunity:

Millions of Americans are growing passionate about the **environment** & looking for an **opportunity** to make a difference.



Zero**Trash** is about empowering **community members, businesses & cities** to take action by giving them the **tools** to create a clean-up movement in their own community.

**ZERO**TRASH****™

Solutions:



# Public BINS



Research & experience shows, the more **obvious the placement** of bins, the more they'll be used.

Zero**Trash** first takes stock of a City's existing public **Trash, Ashtray & Recycling** infrastructure to ensure a systematic placement.

**ZERO**TRASH****™

**Solutions:**



# ASHTRAYS



A recent KAB Cigarette Litter Prevention Program resulted in a **55%** reduction in cigarette litter. **4 strategies:**

Enforce **Anti-Litter laws**

Distribute **Portable Ashtrays**

Install **Public Ashtrays**

Change behavior by **Public Campaigns/Postings**

**ZERO TRASH**™

Solutions:



# 1<sup>st</sup> SATURDAY

The cornerstone of ZeroTrash.  
**1st SATURDAY** is a monthly **open-house**  
bringing the community & local businesses together  
to clean up their town.



**ZERO TRASH**™



Solutions:



# 1<sup>st</sup> SATURDAY

Local Business and The Community



By recruiting local businesses as **1<sup>st</sup> SATURDAY** locations, Zero**Trash** provides a unique **community outreach program**: Community members rallying around business, receiving promotions and learning recycling tips while **'taking back'** their **streets** from trash. The business builds true **brand equity** in the **community**.

**ZERO**TRASH****™

Solutions:



# TRASH TALKS



Our **hands-on** education program goes to the **schools** to teach kids **personal responsibility** for reducing waste & keeping their **communities** free of trash.  
the Zero**Trash** mantra: **"If You See Trash, Pick It Up!"**

**ZERO**TRASH****™

Solutions:



Z T U

Zero**Trash** University empowers college students to bring the **ZT ethos** on-campus.



**ZERO**TRASH****™



## ZeroTrash Laguna

A grassroots movement . . .



The movement began in Laguna Beach,  
in **November 2007** with a  
**'1st SATURDAY Pick It Up!'** community event.  
Street **'Adopters'** met to remove neighborhood trash, then returned to  
dump their 'haul' into bins provided by  
Waste Management.  
Weights were published by WM the following Monday

**ZERO TRASH**™



## ZeroTrash Laguna

...grows



ZEROTRASHLAGUNA.ORG

Steadily, the movement grew.

By the end of 2008, ZeroTrash Laguna's Street Adopters removed over **5600 lbs** of **trash** + **3400 lbs** of **recyclables** from Laguna's streets, sidewalks gutters, parks & beaches.

**ZEROTRASH**™

## Getting the Word OUT

Utilizing traditional & new media..

facebook    twitter    YouTube™

ZEROTRASHLAGUNA.ORG

PICK IT UP! 10 AM TO NOON

# 1ST SATURDAY

JULY 4 AUG 1

5 LOCATIONS:

THALIA STREET    AVILA'S EL RANCHITO CRESS STREET    FOREST AVE    WHOLE FOODS OCEAN AVE    YOGAWORKS S. COAST HWY

facebook BECOME A FAN @ZEROTRASH

laguna beach    WM    US SERVICE    LAGUNA BEACH MAGAZINE    ECO    WYUNO

Our **RED ARMY** of 'adopters' grew to over **500** strong

# ZEROTRASH™



## expanding the City footprint



Over the year ZeroTrash Laguna grew to **6 local business** locations. This brought attention to the **community-wide** problem of **litter**, promoted the businesses, **taught recycling** & started to “close the circle” of sustainability.

**ZERO TRASH**™

bringing ZeroTrash to your city



Underwriting & manpower is needed to expand our **community-empowering** movement to new cities.

ZeroTrash then provides **communities** the supplies & marketing tools necessary to launch & sustain their programs, beginning with their inaugural **1st SATURDAY "Pick It Up!"** event





Where your Sponsorship dollars go

Example of equipment costs to start & run  
ZeroTrash in a new Community :

Ø 500 ZT shirts	\$3,000
Ø 100 pickers	\$1,000
Ø Bags & Gloves	\$850
Ø Storefront Banners	\$150
Ø Advertising	\$1000
Ø Website development for zerotrashnewport.org	\$2,000
<b>Total</b>	<b>\$7,000</b>



worthy !



We look forward to the opportunity to partner with  
**The City of Newport Beach**

Please contact: Chip McDermott or Eric Chevalier  
ZeroTrash Inc  
[chip@zerotrash.org](mailto:chip@zerotrash.org) [eric@zerotrash.org](mailto:eric@zerotrash.org)

*ZeroTrash is a 501(c)3 non-profit*



# Update on Water Supply Issues and Ocean Desalination in Orange County

Newport Beach Coastal/Bay Water  
Quality Citizens Advisory Committee

September 10, 2009

Kevin Hunt, GM MWDOC





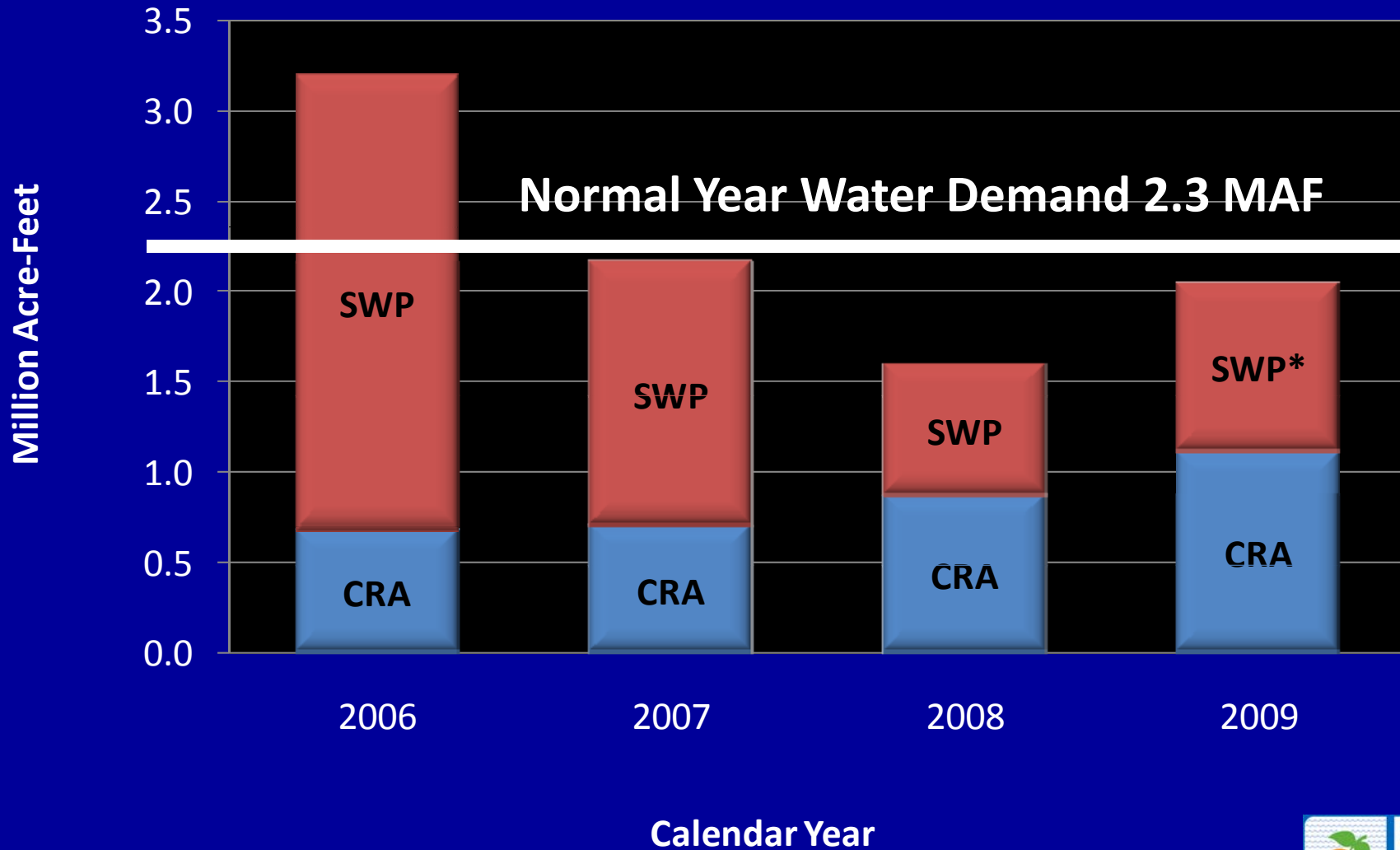
# Presentation Items

- Water Supply Outlook
- Discussion of Ocean Desalination in OC
- Discussion of Poseidon's Huntington Beach Project
  - Background
  - Process with Poseidon and Local Agencies
- Questions and Answers

# Imported Water Supply Issues

- Delta Smelt
- Other Environmental Issues
- State Budget Issues
- Non-functional Legislature
- Bay-Delta Issues
  - Lack of Agreement as to what to do
  - Fisheries/Levees/Other
  - Funding
  - 20 year process to fix
- Climate Change

# Metropolitan's Historical Supplies



*\*Based on 40%Table-A Allocation*



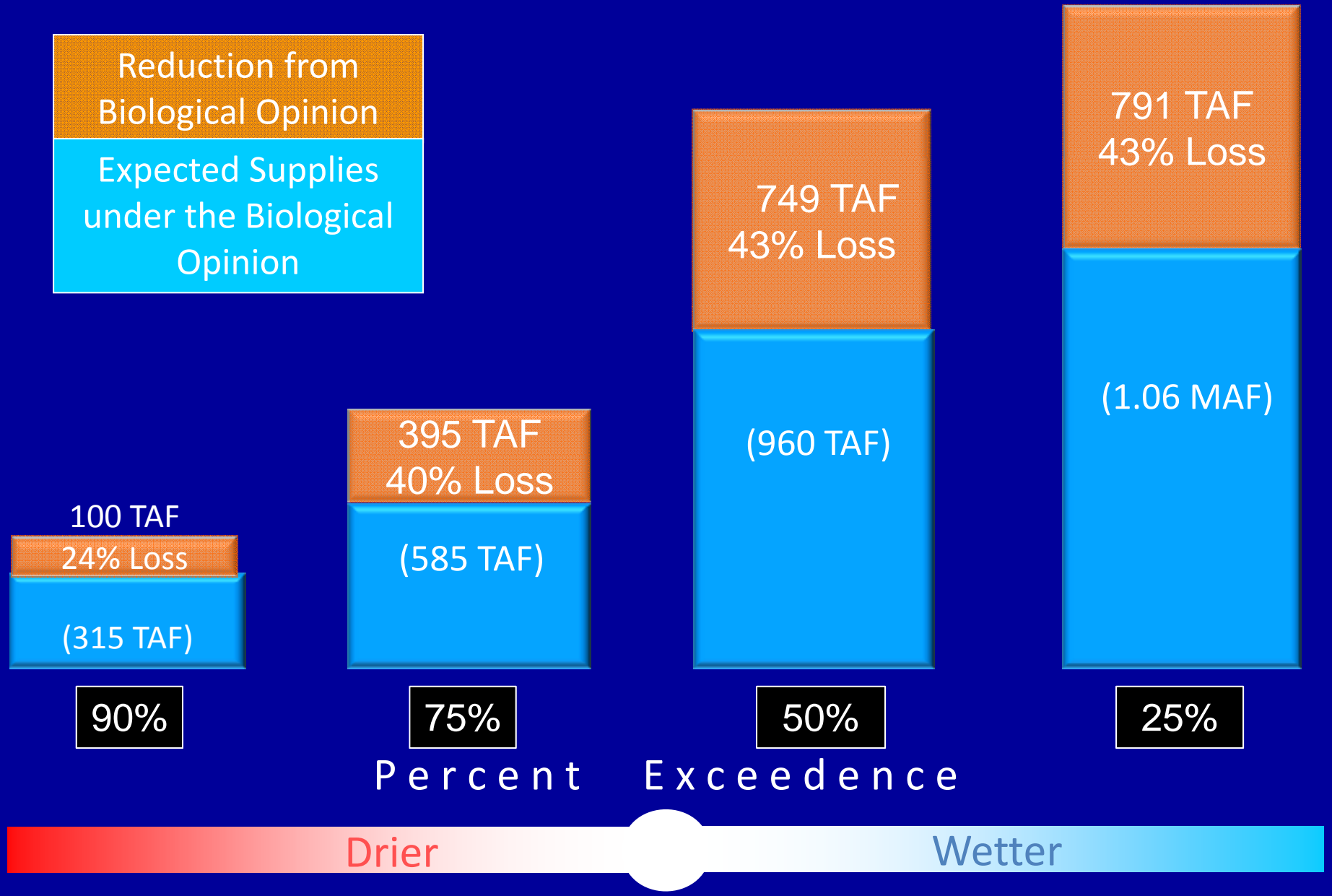


# Metropolitan Supplies for 2009

	<u>NOW</u>	<u>START of Year</u>
Colorado River =	1.12 MAF	0.89 MAF
State Water Project (40%) =	<u>0.93 MAF</u>	<u>0.32 MAF</u>
Total Supplies =	2.05 MAF	1.21 MAF
Demands =	2.09 MAF	2.09 MAF
Supply Gap =	0.04 MAF	0.88 MAF

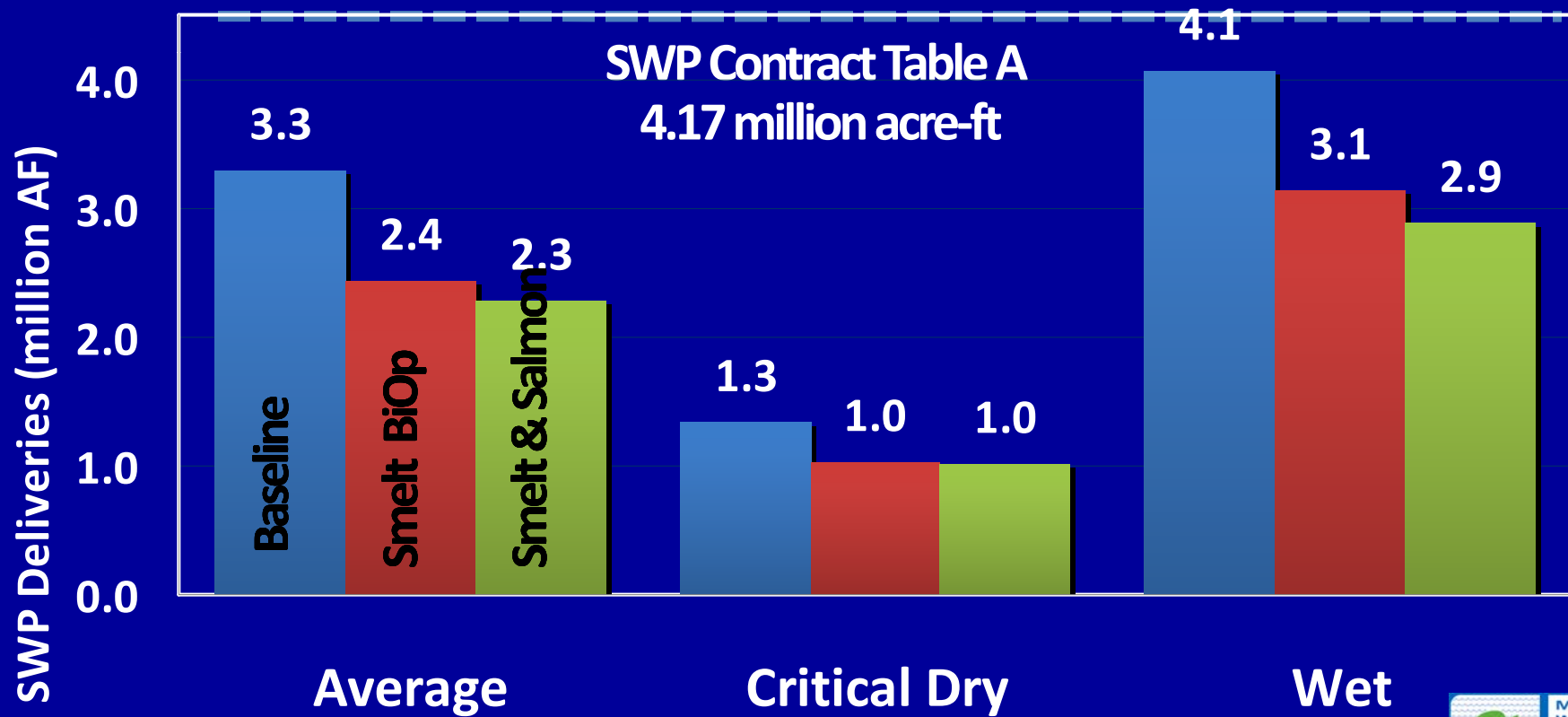
*A SWP Allocation of 40% still requires MET to draw on storage*

# Biological Opinion on Delta Smelt



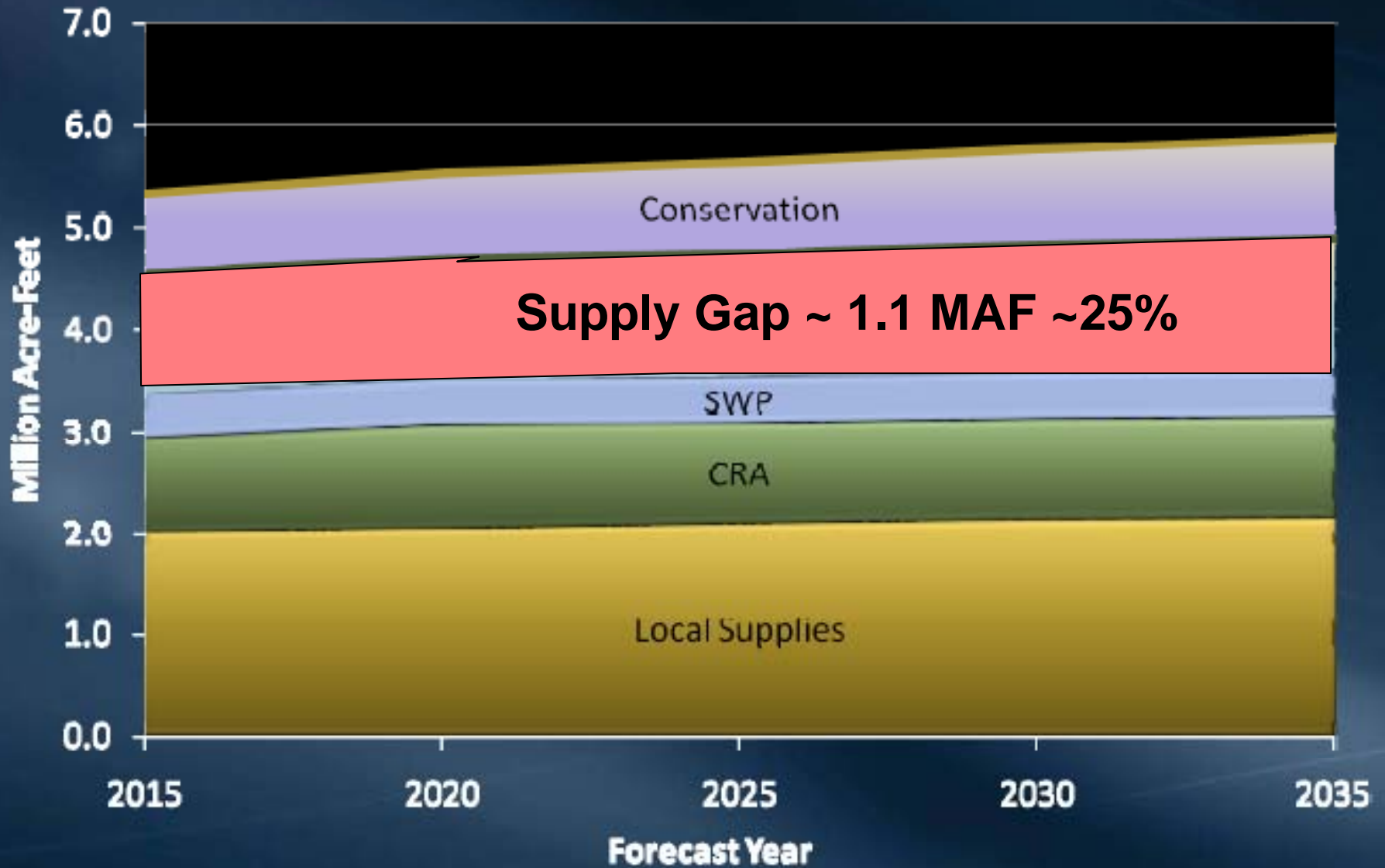
# Total SWP Deliveries

## Smelt & Salmon Biological Opinion Impacts



# Supply-Demand Balance

## Dry-Year Analysis





# Ocean Desal in Orange County

- **Huntington Beach** – 50 MGD facility being proposed by Poseidon Resources Corporation using the power plant intake and outfall
- **Dana Point** – 15 MGD facility using a subsurface intake system and existing wastewater outfall, under development by MWDOC and five local entities
- **San Onofre** – no longer under consideration

# California Counting On Desalination

- State Water Plan Update – need for 500,000 AF/Year of desalination by 2030
- MET – old IRP planning on 150,000 AF/Year of desalination by 2020; new IRP goals being established NOW
- Regional and local water agencies adopting desalination as part of water management plans
- Approximately 20 seawater desalination projects in various stages of development

## Proposed Seawater Desalination Plants in California

San Francisco Bay  
Area Regional Plant

LEAD Project (Crockett)

San Rafael (Marin)

Santa Cruz

Moss Landing/Monterey  
Bay Regional Project

Marina Coast Water District

Sand City

Cambria

Playa Del Rey

El Segundo

Long Beach

Huntington Beach

Dana Point

San Onofre

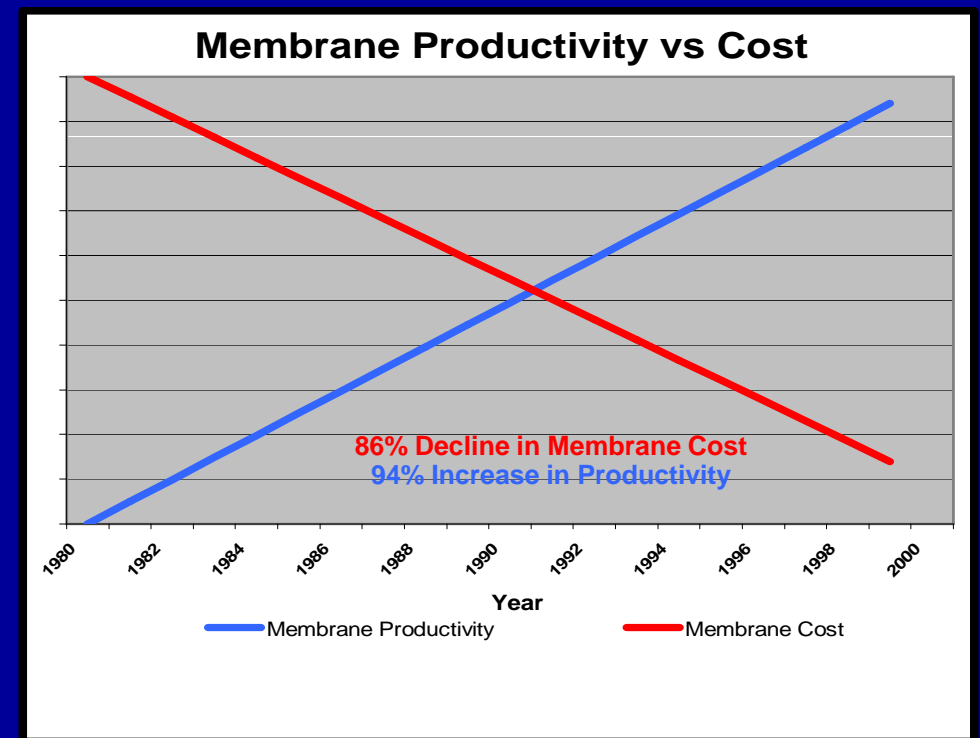
Carlsbad

**Northern  
California:  
10 Projects;  
Total  
Capacity –  
150 MGD +**

**Southern  
California:  
7 Projects;  
Total  
Capacity –  
200 MGD +**

# Desalinated Ocean Water Is Now Cost Competitive

- Desal Technology Costs Dropping
- Use of existing infrastructure
- Increased production efficiency
- Imported water costs rising
  - 20% increase in Sept. 2009 to:
    - \$701/AF (Tier One)
    - \$811/AF (Tier Two)
- Desal cost dropping
  - Currently about \$1,400/AF
  - MET \$250 incentive - \$1,150/AF

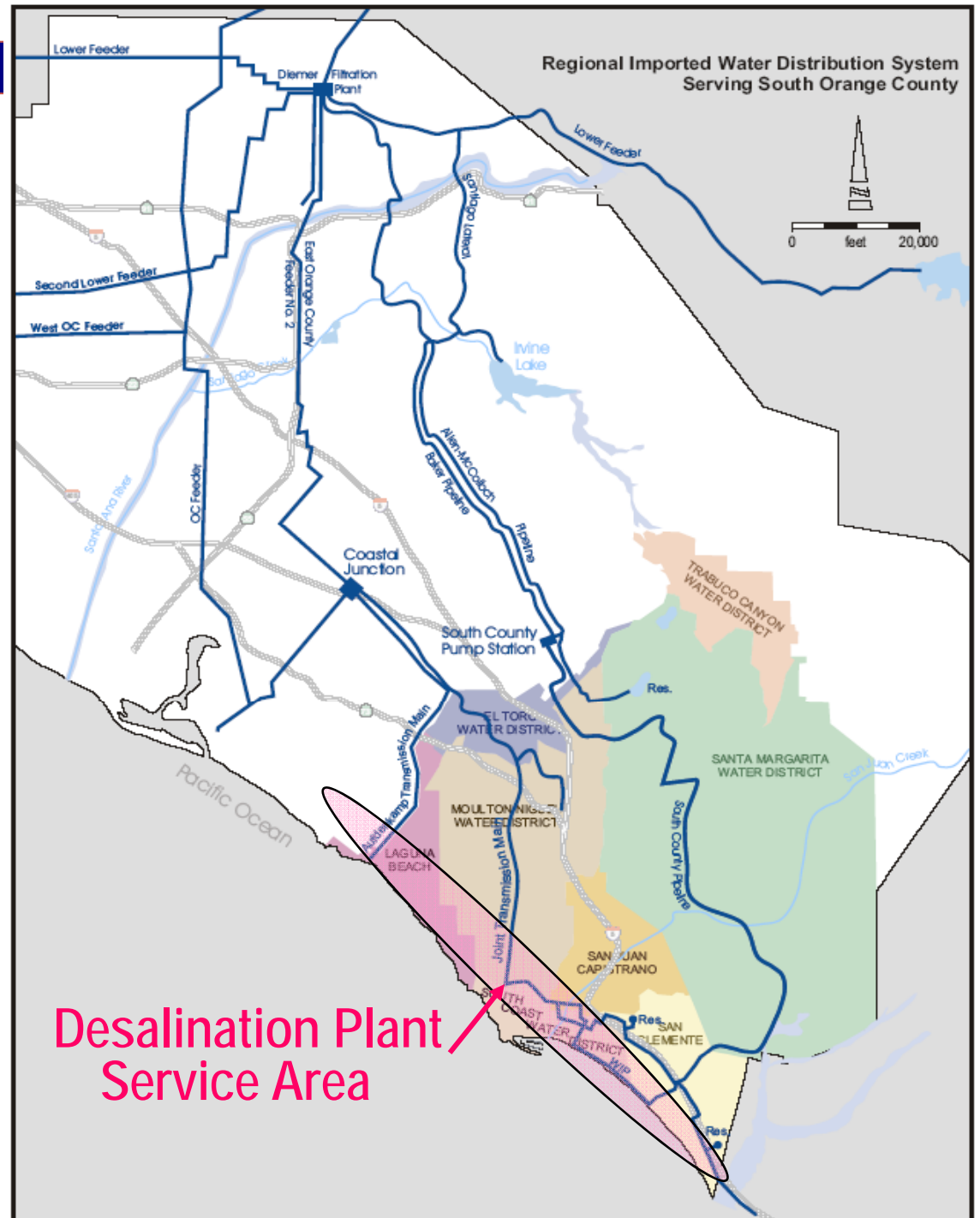






# South Orange Coastal Ocean Desalination Project

- 15 million gallons per day meets about 25% of the 2025 water demands for:
  - Laguna Beach
  - San Clemente
  - San Juan Capistrano
  - Moulton Niguel WD
  - South Coast WD
- All five agencies can physically receive the water into their systems



# Project is Unique and Well Supported

- NOT associated with a Coastal Power Plant
- Utilizes slant well intake system to be protective of the ocean environment
- Utilizes an EXISTING ocean outfall for brine discharge; makes discharge closer in salinity to that of the natural ocean water to improve mixing, reduces suspended solids
- Concept is supported by the local environmental community, local agencies (water and cities) and supported by the California Coastal Commission, Department of Water Resources, Bureau of Reclamation and State Parks

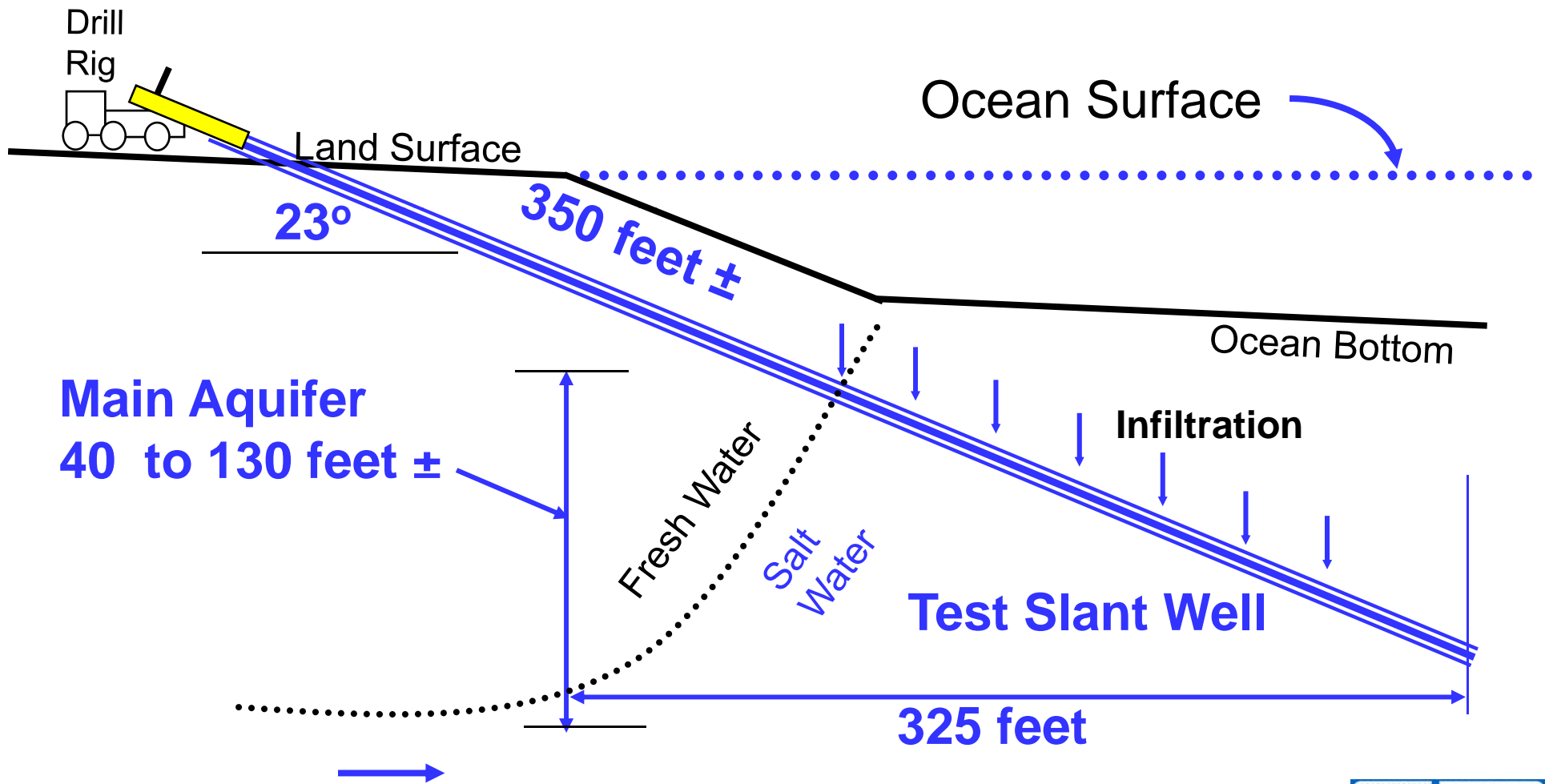


South  
Orange  
Coastal  
Ocean  
Desalination  
Project  
Concept  
Project  
Layout





# Test Slant Well Schematic





# Dana Point Ocean Desal Project

- Pilot Plant start-up March 2010
- Pilot Plant Testing Completed 2012
- Permitting/Design Completed 2013
- Construction Start 2014
- Start-up 2016

# Huntington Beach Desalination Facility

Location:	City of Huntington Beach
Size:	50 million gallons per day (56,000 AF per year)
Technology:	Reverse Osmosis Membrane Filtration using existing seawater circulating water intake and discharge piping infrastructure
Estimated Cost:	\$500 million; EPC contractor team selected
Water Supply:	100% capacity under consideration
Schedule:	On-Line 2013



***Huntington  
Beach Power  
Station without  
Desal Project***

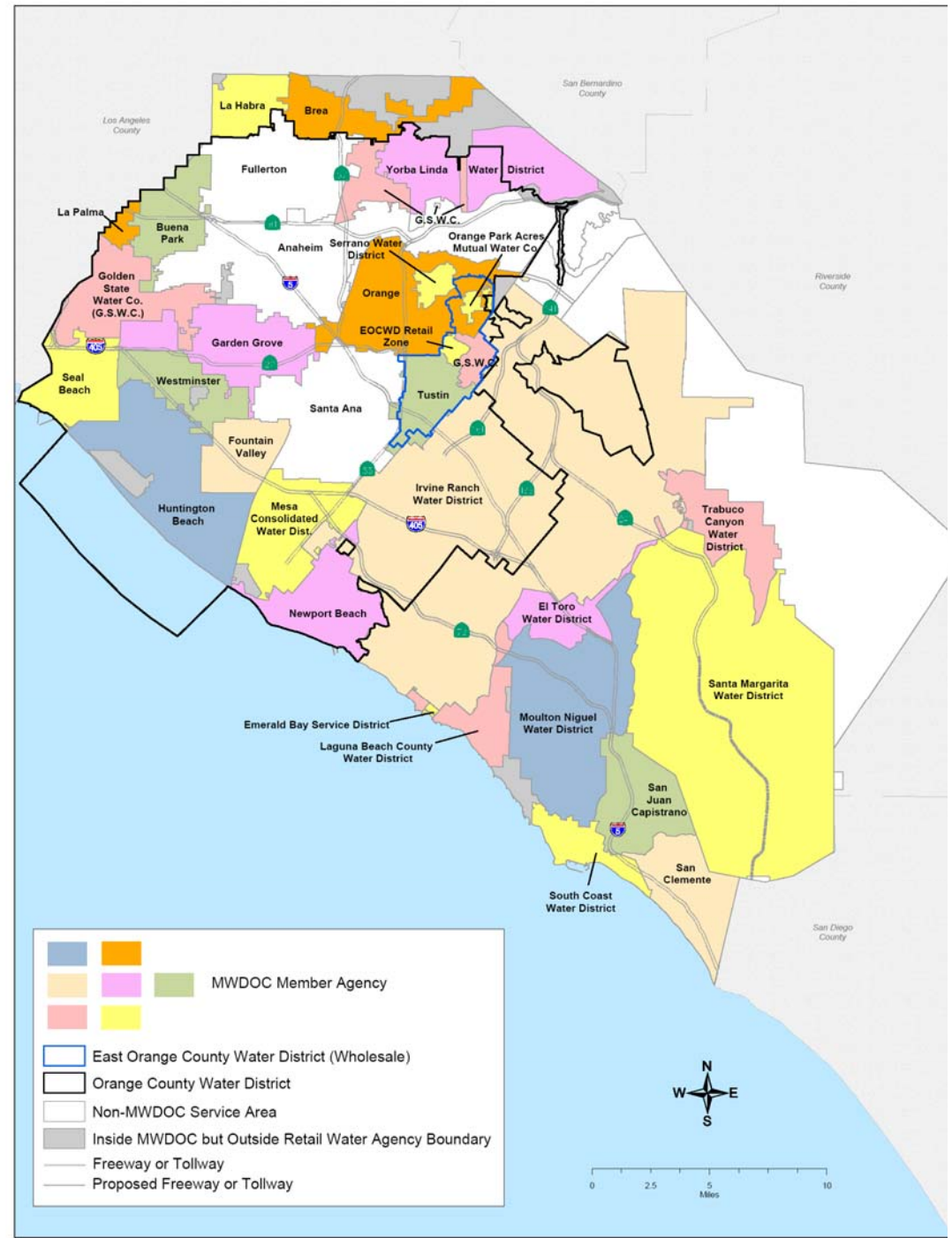
# Huntington Beach Permitting History

Local Land Use Permits:	City of Huntington Beach EIR Certified Sept 2005 (Appeal denied Nov 2006) Conditional Use Permit – Feb 2006 Coastal Development Permit – Feb 2006
NPDES Permit:	Discharge Permit – Aug 2006, Santa Ana Regional Board (Appeal denied Aug 2007)
CA Depart of Public Health:	Conceptual approval – Aug 2002
State Lands Commission:	Lease for intake and discharge piping – Hearing 2010
California Coastal Commission:	Coastal Development Permit – Hearing 2010



# Regional Benefits

- 50% of OC water is imported
- Diversification of Supplies
- Approximately 8 Percent of Orange County Demand
- Drought-Proof Source
- High Water Quality
- No Significant Environmental Impacts





# Economic Benefits

- Nearly \$70 Million in local and regional tax payments
  - \$1.8 Million per year in property tax paid to Huntington Beach
  - \$50,000 per year contribution to the City of Huntington Beach in utility tax
- 2,100 jobs during construction.
- Once fully operational, facility will create 18 Full-time jobs and 322 Indirect jobs
- Project Labor Agreement (MOU)

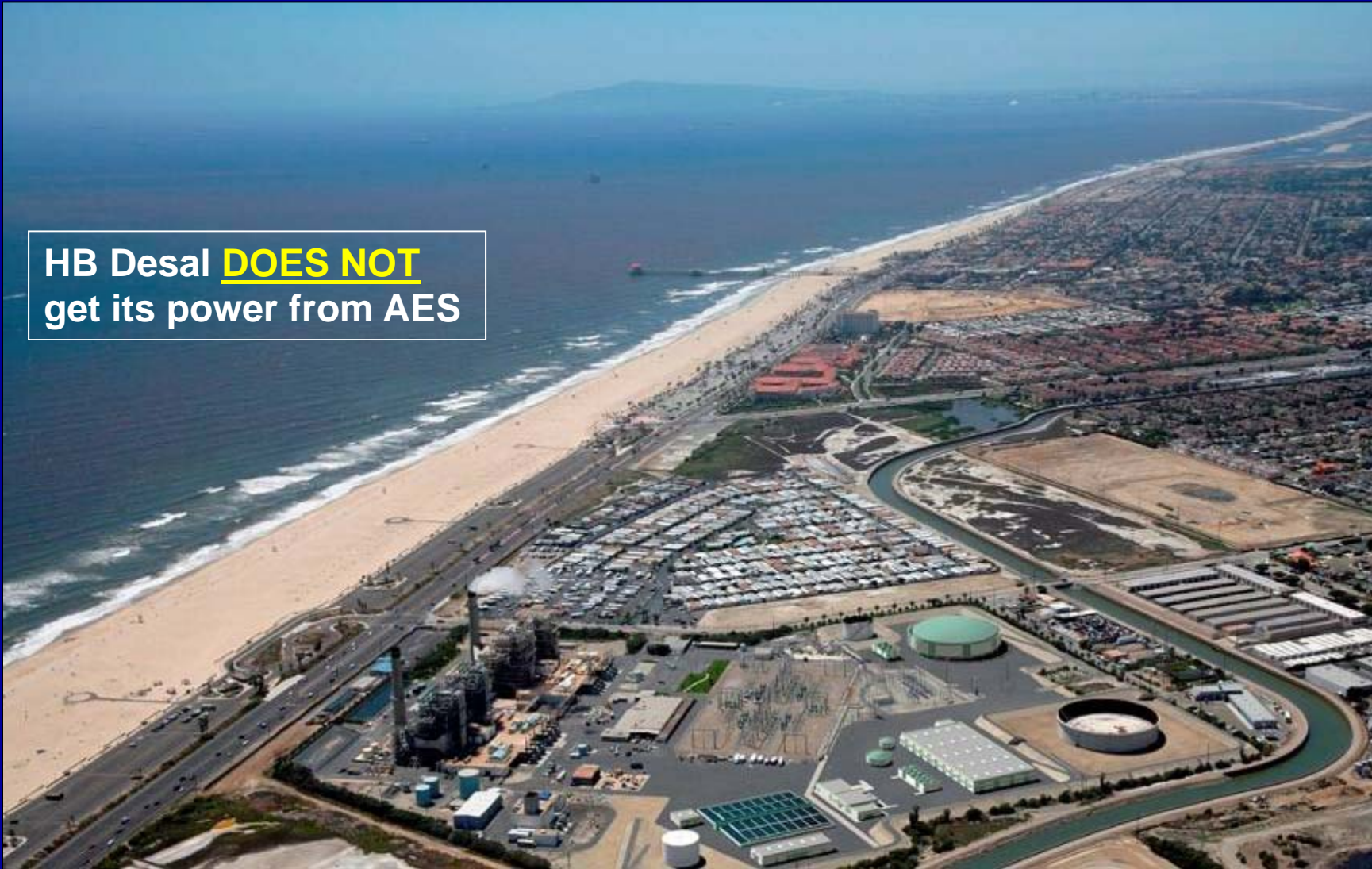
# Huntington Beach Generating Station





# Huntington Beach Desalination Facility

HB Desal DOES NOT  
get its power from AES



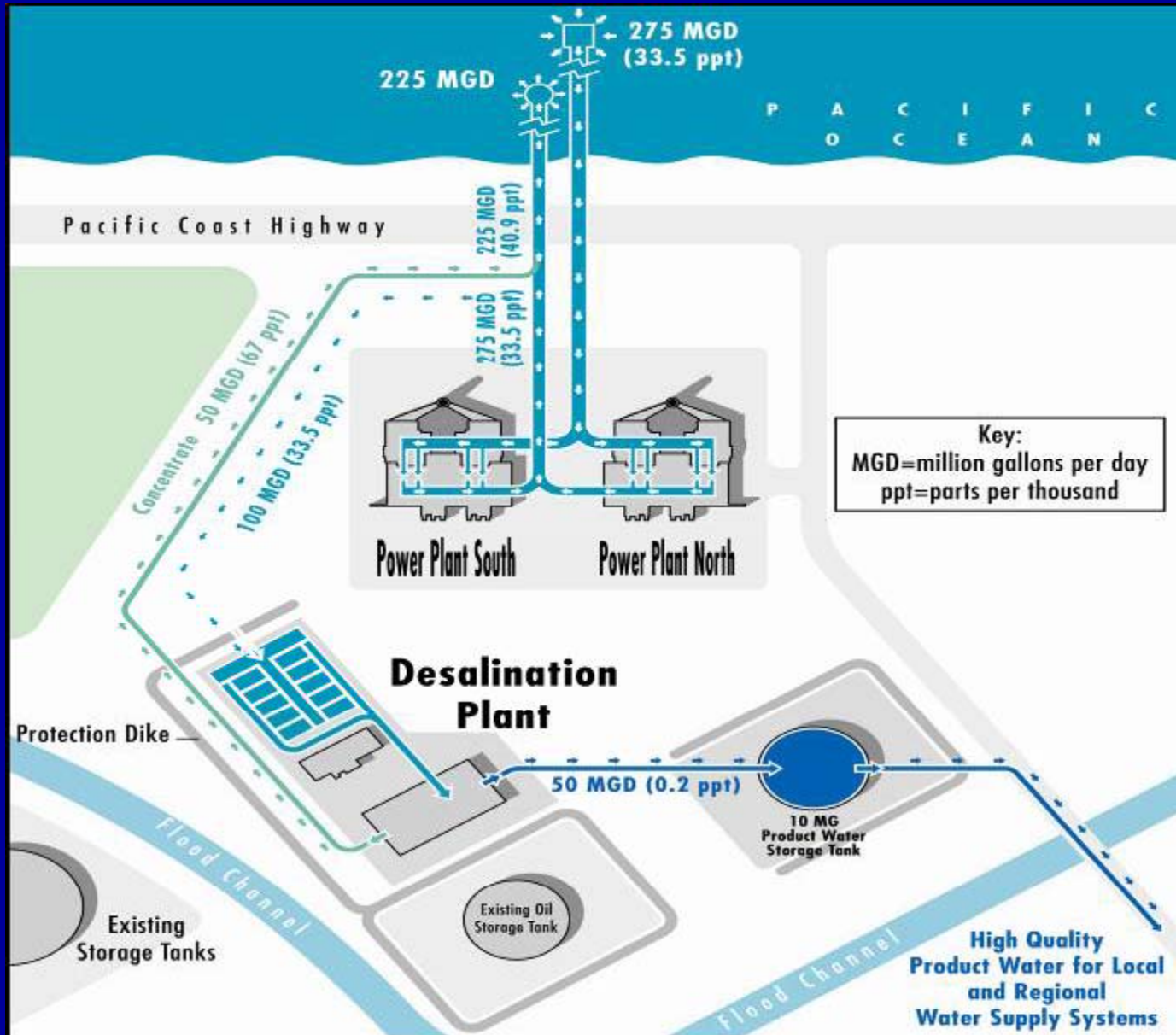
# Why Huntington Beach?

- Conforms to Existing Zoning Regulations
- Proximity to Ocean Source Water
- Proximity and Access to Regional Water Distribution Pipeline
- Existing Infrastructure Available



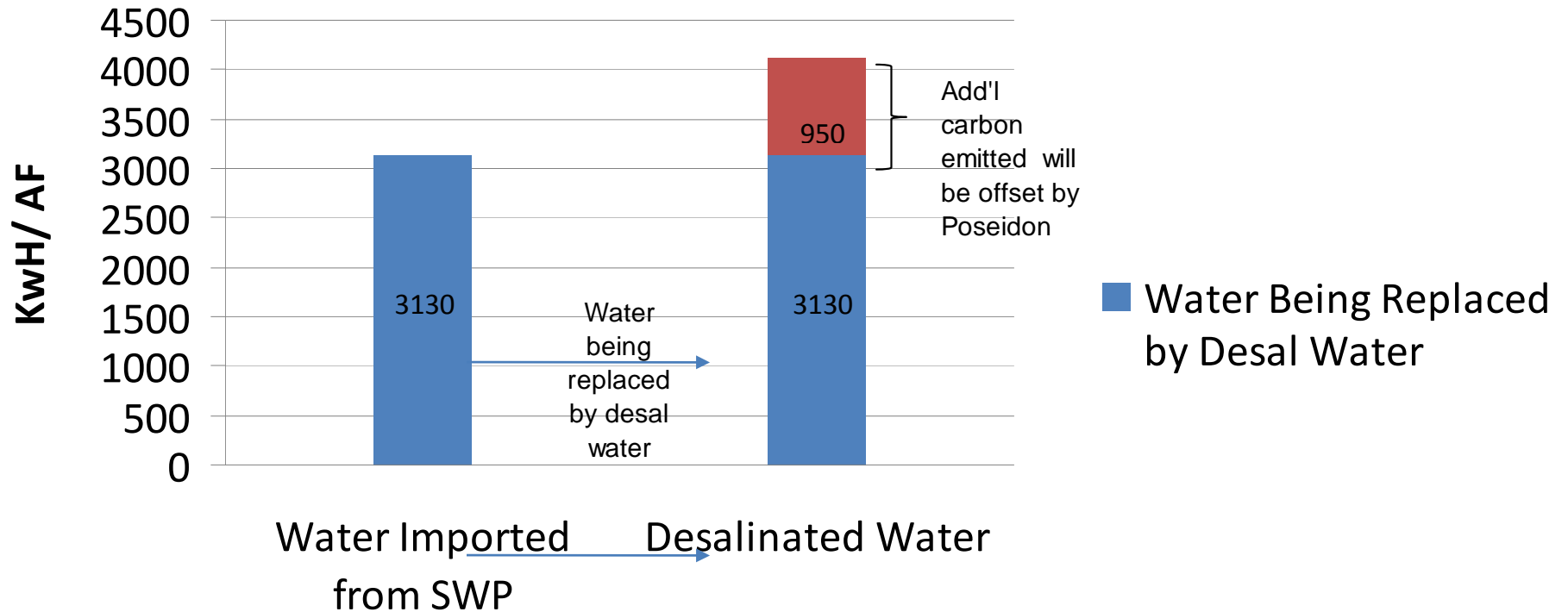


# Project Flow Schematic



# Energy Consumption – Indirect GHG Emissions

## Huntington Beach Desalination Project Energy Required for Imported vs. Desalinated Water



# Water Purchase Agreements – Status

- MOU with 14 OC Public Water Agencies
  - Municipal Water District of Orange County (MWDOC)
  - City of Anaheim Public Utilities Department
  - El Toro Water District
  - Irvine Ranch Water District
  - Laguna Beach County Water District
  - Mesa Consolidated Water District
  - Moulton Niguel Water District
  - City of Santa Ana Public Works Agency
  - Santa Margarita Water District
  - South Coast Water District
  - Trabuco Canyon Water District
  - City of Seal Beach
  - City of Garden Grove
  - Golden State Water Company

# Water Purchase Agreements – Status

- MWDOC and 14 Agencies in detailed discussions with Poseidon
  - Financial negotiations – form of water purchase agreement; outline obligations on behalf of all parties
  - Screen Environmental documents
  - Complete system integration analysis
  - Detailed review of design components
  - Screen of permit documents

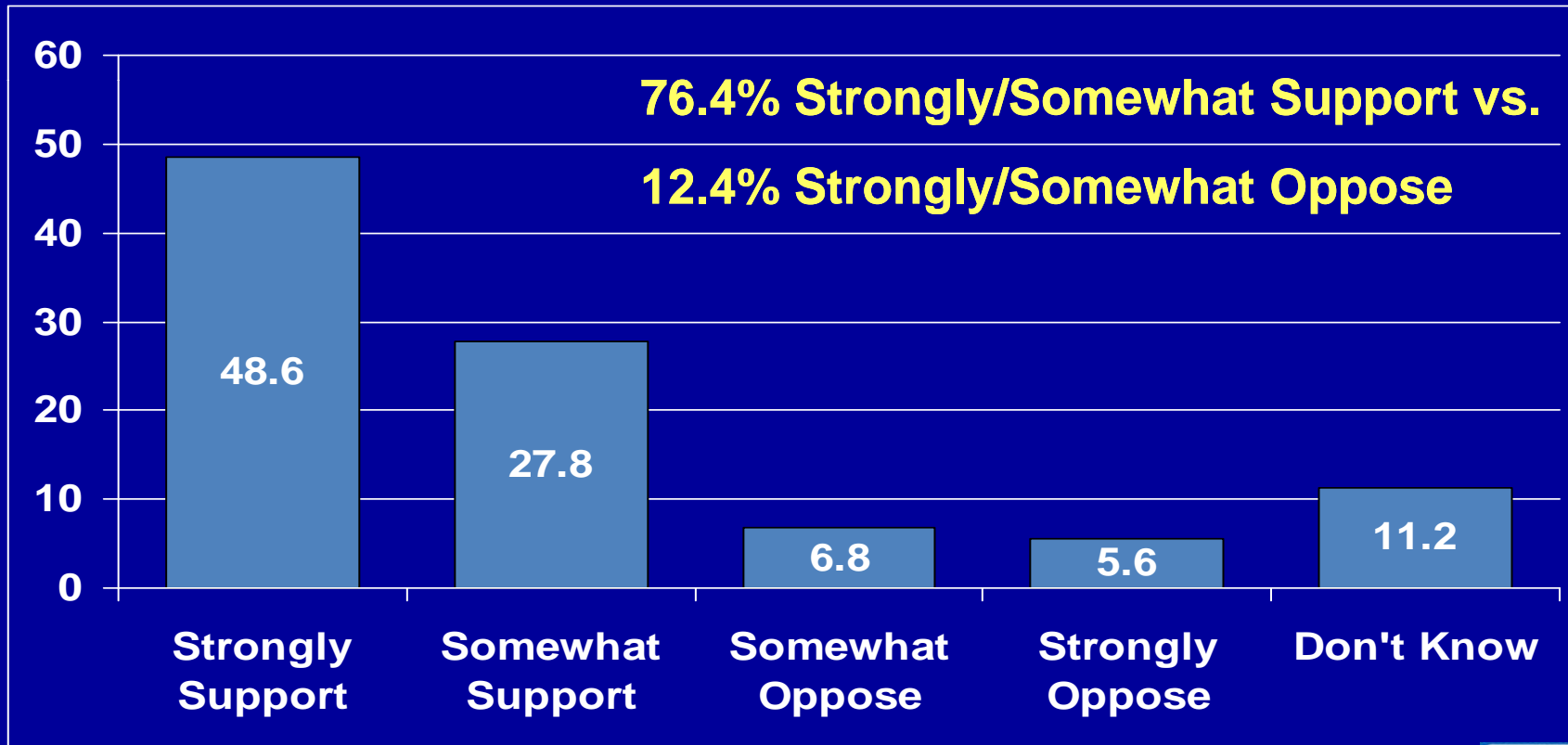


# Local Voter Perceptions

- A poll of 500 registered Orange County voters was conducted regarding water issues and desalination.
- Two major findings:
  - An overwhelming majority of OC voters are aware of the problems facing the county's water supply
  - 7 out of 10 voters consistently support projects to expand the county's water supply, including the proposed HB Desal Facility

# HB Plant Desal Opinions

There is a proposal by a private company to build and operate a seawater desalination facility in Huntington Beach. There would be no financial risk for taxpayers and the produced drinking water would serve Orange County residents. The facility also would take advantage of existing ocean pipeline infrastructure to create quality drinking water. Generally speaking, would you support or oppose this proposal?



# Next Steps

- Continue to negotiate and secure agreements with potential water customers
- Obtain State Lands Commission permit – 2010
- Obtain California Coastal Commission permit - 2010
- Break Ground – 2010
- Start-up 2013

