

MINUTES OF MEETING
BOARD OF DIRECTORS, ORANGE COUNTY WATER DISTRICT
July 6, 2016, 5:30 p.m.

President Green called to order the July 6, 2016 regular meeting of the Orange County Water District Board of Directors at 5:30 p.m. in the Boardroom at the District office. Following the Pledge of Allegiance to the Flag, the Secretary called the roll and reported a quorum as follows.

Directors

Philip Anthony
Denis Bilodeau (not present)
Jordan Brandman
Shawn Dewane
Jan Flory
Cathy Green
Dina Nguyen
Roman Reyna
Stephen Sheldon
Roger Yoh (arrived 5:49 p.m.)

Staff

Michael Markus, General Manager
Joel Kuperberg, General Counsel
Janice Durant, District Secretary

VISITOR PARTICIPATION

Visitor participation took place later in tonight's meeting following the staff presentations on the Poseidon Desalination Project.

CONSENT CALENDAR

The Consent Calendar was approved upon motion by Director Anthony, seconded by Director Dewane and carried [8-0] as follows, with the following abstentions by Director Brandman due to the Levine Act:

Ayes: Anthony, Brandman, Dewane, Green, Flory, Nguyen, Reyna, Sheldon

Absent: Bilodeau, Yoh

Abstain: Brandman (Item No. 1, *Cash Disbursements - Check No. 75556 to Townsend Public Affairs, Inc, and Check No. 75284 Environmental Advisors LLC.*)

Brandman (Item No. 3, *Agreement with Environmental Advisors for Preparation of EIR for Ball Road Basin General Plan Amendment and Zone Change*)

1. Approval of Cash Disbursements

MOTION NO. 16-90
APPROVING CASH DISBURSEMENTS

Payment of bills for the period June 9 through June 29, 2016 in the total amount of \$5,938,256.39 is ratified and approved.

2. Approval of Minutes of Board Meeting

MOTION NO. 16-91
APPROVING MINUTES OF BOARD MEETING

The minutes of the Board of Directors meeting held June 1, 2016 are approved as presented.

CONSENT CALENDAR ITEM FROM PROPERTY MANAGEMENT COMMITTEE
MEETING HELD JUNE 27, 2016

3. Status Update on the General Plan and Zone Change for the Ball Road Basin Property

RESOLUTION NO. 16-7-90
APPROVING CHANGE ORDER TO AGREEMENT WITH ENVIRONMENTAL ADVISORS
FOR PREPARATION OF ENVIRONMENTAL IMPACT REPORT FOR BALL ROAD BASIN
GENERAL PLAN AMENDMENT AND ZONE CHANGE

WHEREAS, the District staff has previously advised that the Initial Study to determine the appropriate California Environmental Quality Act (CEQA) documentation required for the District's application with the City of Anaheim (City) for a General Plan Amendment and Zone Change (GPA/ZC) for the Ball Road Basin property (Property) was finalized with the City and concludes that an Environmental Impact Report (EIR) should be prepared to comply with CEQA.

WHEREAS, in this regard, pursuant to Resolution No. 12-12-145 adopted December 19, 2012, OCWD issued an Agreement to Environmental Advisors for preparation of an Environmental Impact Report for a General Plan Amendment and Zone Change for the Ball Road Basin Property; and

WHEREAS, the Property Management Committee has recommended issuance of a Change Order to such contract with Environmental Advisors LLC, in the amount not to exceed \$39,100, for additional work on the Environmental Impact Report for Ball Road Basin General Plan Amendment and Zone change; and

WHEREAS, the Property Management Committee has further recommended payment to the City of Anaheim in an amount not to exceed \$4,000 as an additional deposit of funds for the General Plan Amendment and Zone Change application to cover District costs associated with the updated Traffic Study for the City of Anaheim's Environmental Impact Report peer review process;

NOW, THEREFORE, the Board of Directors of the Orange county Water District does hereby resolve as follows:

Section 1: Issuance of the aforementioned Change Order to the contract with Environmental Advisors LLC is authorized as outlined herein.

Section 2: Payment to the City of Anaheim is authorized in an amount not to exceed \$4,000 as an additional deposit of funds for the General Plan Amendment and Zone Change application to cover District costs associated with the updated Traffic Study for the City of Anaheim's Environmental Impact Report peer review process.

MATTER FOR CONSIDERATION

Director Yoh arrived at 5:49 p.m. during discussion of the following item.

4. Workshop #3 – Proposed Poseidon Resources City of Huntington Beach Ocean Desalination Project

Executive Director John Kennedy recalled that at its March Workshop on Poseidon the Board selected Options 2A, 2B, and 3 for further consideration. He advised that, should the Board approve the GWRS final expansion, Option #2A might not be available, and reported that staff has developed two new options: Option #5, a Coastal Pumping Transfer Program using Poseidon water, and Option #6, which is a combination/hybrid of the distribution options 1A and 5. Mr. Kennedy stated staff recommends selecting Option #6 for more detailed review.

Mr. Kennedy explained that under Option #5, the coastal Groundwater Producers (GWP) would discontinue taking groundwater and replace it with Poseidon water, and the 16 remaining GWP would pump more groundwater making it a large permanent coastal pumping transfer program. Mr. Kennedy explained the advantages of this option are reduced coastal groundwater pumping, help in preventing seawater intrusion, potential for elimination of future seawater barrier projects, placement of Poseidon water directly into potable water systems, less facilities needed to distribute Poseidon water, and the use of Poseidon water to help manage the groundwater basin. He noted that staff would need to model this Option to determine its feasibility.

Mr. Kennedy then outlined a new Option #6, which he stated is a combination of Option 1A (construction of 26 new injection wells to recharge the Poseidon water into the groundwater basin) and Option 5 (coastal GWP discontinue taking groundwater and replace it with Poseidon water). He requested Board approval to refine this option and begin to locate injection wells, coordinate with OCSD for use of its property, determine pipeline alignments in streets, meet with the coastal GWP to determine how much water they can take, model the groundwater basin with recharge amounts, assess each producers ability to pump a higher BPP, and update cost estimates.

Mr. Kennedy advised the Board that the Water Resources Control Board (WRQCB) Desalination Ocean Plan Amendment will require re-approval of the Poseidon Project, noting Poseidon expects to take the project before the RWQCB in early 2017. He also noted that Metropolitan Water District is constructing a 150 mgd reclamation plant similar to GWRS in Carson which could provide OCWD with 65,000 afy of water delivered to the Anaheim recharge basins through a new pipeline.

Engineer Sandy Scott-Roberts stated that Option #1A is currently being evaluated for CEQA as approved by the Board at its last meeting. She stated this option requires a pipeline from the desalination facilities to OCWD, where a desalination pump station would mix the water with GWRs and pump it up to Anaheim at a cost of about \$305 million.

The following individuals then expressed opposition to the Poseidon project.

Tim Geddes, Southeast Huntington Beach resident: Project is an expensive boondoggle and the coastal environment will suffer negative consequences.

Clem Dominquez: Project has not been defined and injecting Poseidon water into the ground is money wasted. Concerned about excess boron in soil from the desalinated water.

Norma Vander Molen, Huntington Beach resident: Requested to know the amount of money spent to date on this project and requested a phone call providing that information.

Mark Dixon, R4RD: Less expensive and less damaging options than desalination. Stressed the need for conservation, reclamation and replenishment.

Milt Dardis, Huntington Beach resident: Poseidon does not have the proper approvals and suggested that staff look at a way to dam Santa Ana River water to place it into the basin.

Mary Jo Baretich, Huntington Beach resident: Concerned with the toxic effects on fruits and vegetables of excess boron coming from the desalinated water. She noted it is cheaper to recycle wastewater as it takes three times more energy to desalinate.

Paul Cook, Irvine Ranch Water District: Questioned why OCWD keeps the Basin Production Percentage at such a high level, and expressed concern over OCWD's inability to take rainwater if it has "take or pay contracts" in place. He stated the priority should be GWRs expansion, and urged more involvement with MWD. He also urged the Board to raise the Replenishment Assessment (RA) and buy more water from MWD. He presented the Board with a letter dated July 6, 2016 outlining IRWD's concerns that Option #5 is expensive for the retail agencies, and Option #6 creates serious salt issues into the groundwater basin.

The following individuals then expressed support for the Poseidon project.

Scott Maloni, Poseidon Resources: Supportive of the staff recommendations and here to answer questions.

Sam Hurtado, sheet metal worker: New source of water is necessary for the ongoing drought.

John O'Neil, International Brotherhood of Electrical Workers: Urged the Board to move forward with the project, noting it is necessary for the County's future.

A Board discussion then ensued. Director Anthony urged staff to stop wasting time on Option #1A, noting that the desalinated water is drinking water quality and should be served directly to

the consumer. Director Flory expressed the need to explore other options such as the GWRS expansion and the MWD Carson reclamation plant, and noted that Poseidon should be paying for the project. Director Green requested that staff find out if the project could take advantage of low interest State Revolving Fund loans. Director Sheldon stated that the majority of opponents to the project are those who live near the proposed site and urged staff and the Board to dissect all of the arguments including the water quality concerns of IRWD. Director Dewane noted that the Board has a tremendous responsibility to review the project based on the facts. He noted that conservation does not come for free, and stated that OCWD's recent RA increase was the largest in OCWD history, and that a significant portion of that increase was due to demand reduction. He reported on a recent Chapman College forecast that reported that manufacturing jobs in Southern California have been hit hard due to lack of water needed for certain products. The Board requested that MWD attend the next Board meeting to provide an update on its Carson project.

MOTION NO. 16-92

DIRECTING STAFF TO INVESTIGATE AND REFINE OPTION #6 FOR THE POSEIDON
DESALINATION PLAN

Upon motion by Director Dewane, seconded by Director Sheldon and carried [6-3], with Directors Anthony, Flory, and Reyna voting "No," staff is directed to further investigate and refine Option #6.

Ayes: Brandman, Dewane, Green, Nguyen, Sheldon, Yoh

Noes: Anthony, Flory, Reyna

Absent: Bilodeau

INFORMATIONAL ITEMS

There was no discussion of the Informational Items on tonight's Agenda.

ADJOURNMENT TO CLOSED SESSION

The Board adjourned to Closed Session at 7:43 p.m. as follows:

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

[Government Code Section 54956.9(a)] – One case

Uribe v. OCWD, et al., Orange County Superior Court Case No. 30-2016-00858811-CU-OE-CJC

RECONVENE IN OPEN SESSION

The Board reconvened in Open Session at 8:03 p.m. whereupon General Counsel Kuperberg announced that the Board, by a vote of 7-0, took the following action in Closed Session.

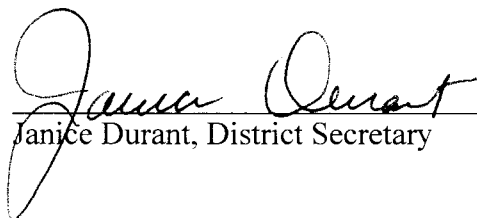
RESOLUTION NO. CS-16-7-1
AUTHORIZING DEFENSE OF THE CASE OF URIBE V. OCWD

Ayes: Anthony, Dewane, Flory, Green, Nguyen, Reyna, Yoh

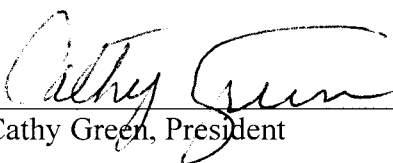
Absent: Bilodeau, Brandman, Sheldon

ADJOURNMENT

There being no further business to come before the Board, the meeting was adjourned at 8:03 p.m.



Janice Durant, District Secretary



Cathy Green, President

AGENDA
REGULAR MEETING BOARD OF DIRECTORS
ORANGE COUNTY WATER DISTRICT
18700 Ward Street, Fountain Valley, CA (714) 378-3200
Wednesday, July 6, 2016 – 5:30 p.m.

***Teleconference Site:**

Main Lobby of Fairmont Sonoma Mission Inn, 100 Boyes Blvd, Sonoma, CA 95476

*** Members of the public may attend and participate at both locations.**

PLEDGE OF ALLEGIANCE

ROLL CALL

ITEMS RECEIVED TOO LATE TO BE AGENDIZED

RECOMMENDATION: Adopt resolution determining need to take immediate action on item(s) and that the need for action came to the attention of the District subsequent to the posting of the Agenda (requires two-thirds vote of the Board members present, or, if less than two-thirds of the members are present, a unanimous vote of those members present.)

VISITOR PARTICIPATION

Time has been reserved at this point in the agenda for persons wishing to comment for up to three minutes to the Board of Directors on any item that is not listed on the agenda, but within the subject matter jurisdiction of the District. By law, the Board of Directors is prohibited from taking action on such public comments. As appropriate, matters raised in these public comments will be referred to District staff or placed on the agenda of an upcoming Board meeting.

At this time, members of the public may also offer public comment for up to three minutes on any item on the Consent Calendar. While members of the public may not remove an item from the Consent Calendar for separate discussion, a Director may do so at the request of a member of the public.

CONSENT CALENDAR (ITEMS NO. 1 - 3)

All matters on the Consent Calendar are to be approved by one motion, without separate discussion on these items, unless a Board member or District staff request that specific items be removed from the Consent Calendar for separate consideration.

1. APPROVAL OF CASH DISBURSEMENTS

RECOMMENDATION: Ratify/authorize payment of bills

2. APPROVAL OF MINUTES OF BOARD OF DIRECTORS MEETINGS HELD JUNE 1, 2016

RECOMMENDATION: Approve as presented

**CONSENT CALENDAR ITEM FROM PROPERTY MANAGEMENT COMMITTEE
MEETING HELD JUNE 27, 2016**

3. STATUS UPDATE ON THE GENERAL PLAN AND ZONE CHANGE FOR THE BALL ROAD BASIN PROPERTY

- RECOMMENDATION:
- 1) Approve and authorize execution of a Change Order to Environmental Advisors LLC Contract in the amount not to exceed \$39,100 for additional work on the Environmental Impact Report for Ball Road Basin General Plan Amendment and Zone change; and
 - 2) Authorize payment to the City of Anaheim in amount not to exceed \$4,000 as an additional deposit of funds for the General Plan Amendment and Zone Change application to cover District costs associated with the updated Traffic Study for the City of Anaheim's Environmental Impact Report peer review process

MATTER FOR CONSIDERATION

4. WORKSHOP #3 - PROPOSED POSEIDON RESOURCES CITY OF HUNTINGTON BEACH OCEAN DESALINATION PROJECT DISTRIBUTION OPTIONS

- RECOMMENDATION: Direct staff to further investigate and refine Distribution Option #6

INFORMATIONAL ITEMS

5. SANTA ANA WATERSHED PROJECT AUTHORITY ACTIVITIES

6. CONFERENCE/MEETING/COMMITTEE REPORTS

- June 27 – Property Management Committee meeting
- Reports on Conferences/Meetings Attended at District Expense (at which a quorum of the Board was present)

7. VERBAL REPORTS

- PRESIDENT'S REPORT
- GENERAL MANAGER'S REPORT
- DIRECTORS' REPORTS
 - ▶ Reports on Conferences/Meetings Attended at District Expense (at which a quorum of the Board was present)
- GENERAL COUNSEL REPORT

ADJOURNMENT TO CLOSED SESSIONS

- **CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION**
[Government Code Section 54956.9(a)] – One case
Uribe v. OCWD, et al., Orange County Superior Court Case No. 30-2016-00858811-CU-OE-CJC

RECONVENE IN OPEN SESSION

ADJOURNMENT

Agenda Posting: In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted in the main lobby of the Orange County Water District, 18700 Ward Street, Fountain Valley, CA and on the OCWD website: www.ocwd.com not less than 24 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the Assistant District Secretary. Backup material for the Agenda is available at the District offices for public review and can be viewed online at the District's website: www.ocwd.com.

Accommodations to the Disabled: Pursuant to the Americans with Disabilities Act, persons with a disability who require a disability-related modification or accommodation in order to participate in a meeting, including auxiliary aids or services, may request such modification or accommodation from the District Secretary at (714)378-3233, by email at jdurant@ocwd.com by fax at (714) 378-3373. Notification 24 hours prior to the meeting will enable District staff to make reasonable arrangements to assure accessibility to the meeting.

Availability of Agenda Material: As a general rule, agenda reports or other written documentation that has been prepared or organized with respect to each item of business listed on the agenda can be reviewed at www.ocwd.com. Copies of these materials and other disclosable public records distributed to all or a majority of the members of the Board of Directors in connection with an open session agenda item are also on file with and available for inspection at the Office of the District Secretary, 18700 Ward Street, Fountain Valley, California, during regular business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday. If such writings are distributed to members of the Board of Directors on the day of a Board meeting, the writings will be available at the entrance to the Board of Directors meeting room at the Orange County Water District office.

AGENDA ITEM SUBMITTAL

Meeting Date: July 6, 2016

To: Board of Directors

From: Mike Markus

Staff Contact: S. Scott Roberts /J. Kennedy

Budgeted: N/A

Budgeted Amount: N/A

Cost Estimate: N/A

Funding Source: N/A

Program/ Line Item No. N/A

General Counsel Approval: N/A

Engineers/Feasibility Report: N/A

CEQA Compliance: N/A

Subject: WORKSHOP #3 - PROPOSED POSEIDON RESOURCES CITY OF HUNTINGTON BEACH OCEAN DESALINATION PROJECT DISTRIBUTION OPTIONS

SUMMARY

In February and March workshops were held with the Board at which time staff presented eight options (Options 1A, 1B, 1C, 1D, 2A, 2B, 3 and 4) for distributing 50 million gallons per day (mgd) of the proposed Poseidon ocean desalination water. Five of those options were removed from further consideration over the course of the two meetings. Staff will review and discuss a new Option #5. Staff recommends selecting a new Option #6 for more detailed review which is a combination/hybrid of the distribution options being considered.

Attachment(s): Presentation material

RECOMMENDATION

Direct staff to further investigate and refine Distribution Option #6.

BACKGROUND/ANALYSIS

The Orange County Water District works to provide reliable water supplies to nineteen retail agencies (13 cities, 5 retail water districts and 1 investor owned water utility) and 2.4 million residents within its service territory. Approximately one-third of necessary water supplies to meet water demands within OCWD currently must be imported from either Northern California or the Colorado River. Both of these sources of imported water face competing interest and possible uncertain futures with changing weather patterns.

The proposed Poseidon Resources Huntington Beach Ocean Desalination plant offers OCWD a unique opportunity to reduce the areas need for imported water. OCWD and Poseidon Resources have negotiated a Term Sheet to further consider and potentially develop the proposed 50 million gallons per day (MGD) Huntington Beach Ocean Desalination Facility. Under the Term Sheet, Poseidon Resources is responsible for constructing the project treatment plant and OCWD is responsible for distributing the water.

The following table summarizes the distribution options that have been considered by the District. Staff has also developed a new fifth and sixth option which will be presented to the Board for consideration.

Table 1 – Desalinated Water Distribution Options Summary Table

Option	Summary
1A	OCWD recharges all 50 mgd of the desalinated water - 26 new injection wells are required for recharge including, pipelines, and a pump station in Fountain Valley
1B	OCWD recharges all 50 mgd of the desalinated water - 16 new injection wells are required for recharge, including pipelines, and two pump stations in Fountain Valley and Santa Ana
1C	OCWD recharges all 50 mgd of the desalinated water – New 20-acre recharge basin in Anaheim is required for recharge including 16-mile pipeline and a new pump station in Huntington Beach
1D	OCWD recharges all 50 mgd of the desalinated water - 4 new injection wells are required for recharge, including two pump stations in Fountain Valley and Anaheim. <i>This options uses recharge facilities originally set aside for the GWRS Final Expansion Project.</i>
2A	OCWD recharges 42 mgd of desalinated water –Pipelines, turnouts and pump stations in Fountain Valley and Anaheim. The remaining 8 mgd of desalinated water is sold directly to Newport Beach (NB) and Huntington Beach (HB) in-lieu of taking MWD water. <i>This option uses recharge facilities originally set aside for the GWRS Final Expansion Project.</i>
2B	OCWD recharges 15 mgd of desalinated water – New pump station, pipelines and turnouts are required for distribution. The remaining 35 mgd of desalinated water is sold to NB, HB, Westminster, Garden Grove (GG), Golden State Water Company (GSWC) and Seal Beach in-lieu of taking MWD water.
3	OCWD recharges 15 mgd of desalinated water – New pump station, pipelines and turnouts are required for distribution. The first 25 mgd of desalinated water is sold to NB, HB, Westminster, GG, GSWC and Seal Beach in-lieu of taking MWD water. The remaining 10 mgd of desalinated water is sold to South Orange County.
4	No desalinated water is recharged by OCWD - All desalinated water is distributed to Producers and South Orange County to replace MWD water. <i>This is the original proposal from Poseidon.</i>
5 - New	No desalinated water is recharged by OCWD – New pipelines and turnout facilities are required for distribution. The desalinated water is directly distributed to coastal Producers in-lieu of groundwater pumping, and in-land Producers increase their annual groundwater pumping.
6 - New	Combination of Option 1A and 5

PRIOR RELEVANT BOARD ACTION(S)

03/10 – Entered into MOU with Poseidon Resources along with other OC agencies to consider purchasing ocean desalination water

04/10 – Entered into confidentiality agreement with Poseidon Resources along with other OC agencies to receive project information

01/13 – Adopted resolution stating it is the District’s goal to achieve and sustain a 75% Basin Production Percentage

05/22/13 R13-5-48 – Adopt resolution stating that ocean desalination supplies should be considered in the District’s water supply portfolio and that OCWD should ensure sufficient water supplies are always available to the residents and businesses.

07/24/13 R13-7-97 - Authorize execution of a confidentiality agreement and receive information from Poseidon Resources to study the economic feasibility of a seawater desalination facility in Huntington Beach that may lead to a water purchase agreement for the entire productive capacity of the plant; and Establish a “Citizen’s Advisory Committee” for the potential project;

11/11/13 – Support California Coastal Commission approval of the proposed Poseidon Project

01/08/14 M14-2 – Received a project financial report and directed staff to arrange a Board meeting with the consultants used by SDCWA for their Carlsbad desalination project.

02/19/14 M04-36 - Request proposals from the three firms that assisted the SDCWA with the City of Carlsbad desalination project

04/02/14 M14-61 – Authorize staff to issue financial RFP’s

05/21/14 M14-87 – Defer action to select a financial consultant to June 4, 2014

06/04/14 R14-6-80 – Approve agreement to Clean Energy Capital for \$49,720 to provide financial analysis on the proposed Poseidon Resources City of Huntington Beach Ocean Desalination Project

11/14 – Adopted the Long Term Facilities Plan which included the proposed Poseidon project as one of 17 prioritized projects that should receive focused consideration.

12/03/14 R14-12-155– Increase the Clean Energy Capital contract by \$27,000 to respond to comments on the financial analysis report.

01/07/15 M15-5 – Direct staff to begin negotiating a Term Sheet with Poseidon Resources and began establishing a Citizens Advisory Committee

03/18/15 – Directed that meetings of the Ocean Desalination Citizens’ Advisory Committee begin

5/14/15 – Approved a Term Sheet with Poseidon

2/3/16 – Eliminated options 1A, 1B and 1C from the original eight distribution options considered for the project.

3/2/16 – Eliminated options 1D and 4 from further consideration

6/1/16 – Directed staff to begin CEQA for the project, extended the Poseidon confidentiality agreement and executed a CEQA reimbursement agreement with Poseidon Resources



Workshop #3

Distribution of Poseidon

Resources Ocean Desalinated

Water

Board of Directors

July 6, 2016



Workshop #3 Topics

- Continue distribution options discussion
- Review new distribution option (Option #5)
- Consider new Option #6 (Combination of Options #5 and 1A)
- New project information update



Previous Workshop History

- February 2016 – Workshop #1
 - Considered 8 Distribution Options
 - Eliminated 3 options (1A, 1B, 1C)
- March 2016 – Workshop #2
 - Considered the remaining 5 Distribution Options
 - Eliminated 2 additional options (1D, 4)

	Option	Poseidon Distribution Options	Capital Cost
OCWD 100% Recharge	1A	26 New Injection Wells, FV pump station and necessary pipelines	\$305 M
	1B	16 New Injection Wells, FV pump station and new pipeline to Kraemer	\$316 M
	1C	New 16 mile pipeline from HB to a new Anaheim Recharge Basin	\$325 M
	1D	Four New Injection Wells, Burris Booster pump station, FV pump station, necessary pipelines, and use of GWRS final expansion facilities	\$160 M
Combine Recharge & Direct Purchases	2A	Burris Booster pump station, necessary pipelines/turnouts to sell directly to NB & HB and use of GWRS final expansion facilities	\$131 M
	2B	Pipelines/turnouts to sell directly to NB, HB, SB, FV, GG, GSW, and pump station for use of WOCWB line	\$97 M
	3	Pipelines/turnouts to sell directly to NB, HB, SB, FV, GG, GSW, and pump station for use of WOCWB line, and South Orange County Agencies	\$161 M
Poseidon Original	4	All water distributed to Producers (no recharge)	\$107 M
	New 5	Coastal Pumping Transfer Program using Poseidon Water	TBD
	New 6	Combination of option #5, and 1A	TBD



Remaining three Options (2B, 2C & 3) Involve Selling Poseidon Water To Producers at the MWD Rate

- Producer reduces MWD purchases to take Poseidon Water - pays the MWD rate to OCWD
- OCWD absorbs cost difference – increases Replenishment Assessment to all Producers
- Propositions 26 and 218
 - Proportionality of cost to rates
 - Cost of service to manage the basin
 - Non-subsidization
- Need to determine the groundwater basin benefit



Other Issues

- Option 2A may not be available pending GWRS Final Expansion decision (September 2016)
- Option 2B involves selling water to 6 Producers and use of West Orange County Water Board pipeline
- Option 3 requires MWD approval to use EOCFD#2 (or construction of a bypass pipeline), selling water to 6 Producers and selling water to SOC agencies



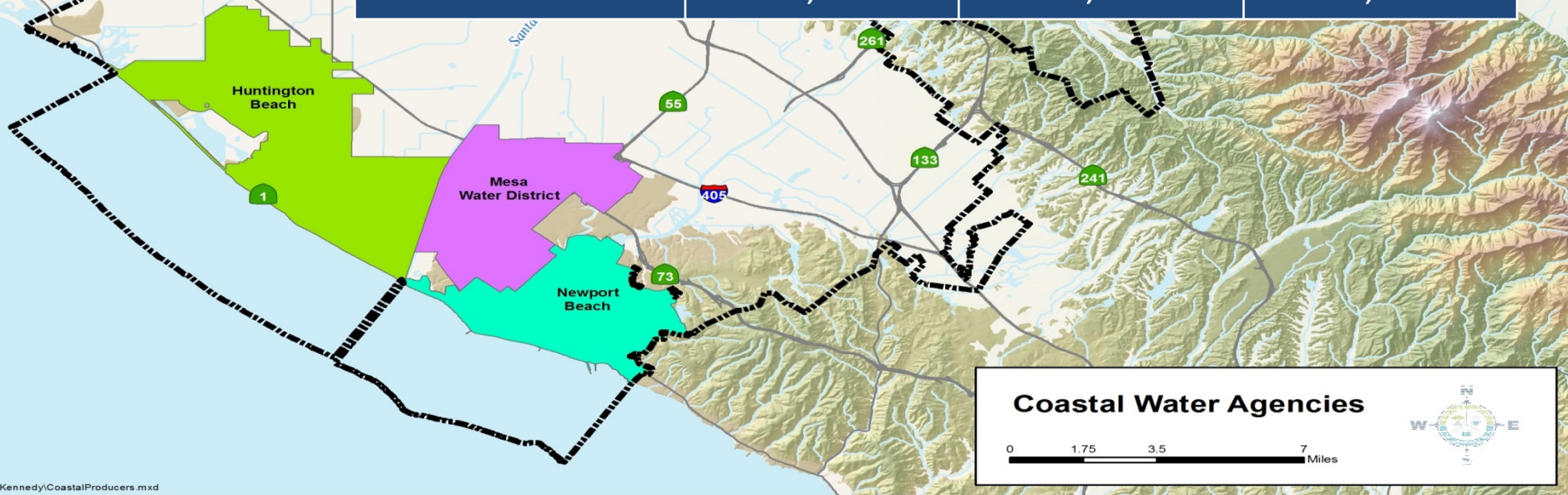
New Distribution Option #5



New Option 5 Concept

- Coastal Producers discontinue taking groundwater and replace it with Poseidon Water
 - City of Huntington Beach
 - Mesa Water
 - City of Newport Beach
- 16 remaining Producers to pump additional groundwater
- Large permanent Coastal Pumping Transfer Program (CPTP)

Producer	Groundwater	Imported Water	Total Demands
Huntington Beach	19,604	8,147	27,751
Newport Beach	11,208	4,336	15,544
Mesa Water	<u>17,600</u>	<u>200</u>	<u>17,800</u>
Totals - Rounded	48,400	12,700	61,100





Option 5 Concept

- Similar to a CPTP program but using Poseidon water instead of MWD water
- OCWD would sell Poseidon water to the 3 coastal Producers at the variable cost of Groundwater – Producer is kept financial whole
 - Replenishment Assessment - \$402/af plus
 - Avoided well energy cost - \$80/af
- OCWD absorbs the cost differential between Poseidon water and what the coastal producer pays to OCWD
 - Increase the RA
- BPP for remaining 16 Producers would be higher



Advantages

- Reduces coastal groundwater pumping
- Will help effort in preventing seawater intrusion
- OCWD may avoid the cost of future seawater barrier projects
- Poseidon water is directly sent into potable water systems
- Less facilities needed to distribute Poseidon water
- Poseidon project being used to help manage the groundwater basin



Possible Issues

- Requires HB and NB City councils/Mesa Board cooperation to enter into long-term contracts to take Poseidon water in-lieu of GW
- Possibility for coastal GW levels to become too high potentially creating issues – especially during years when the groundwater basin is relatively full
- Need to model
- How much additional groundwater can the remaining 16 Producers pump above the normal BPP?

Total Water Demands
(groundwater and
imported water) of
Remaining 16 Producers
= **343,000 afy (FY14-15)**
369,000 afy (FY13-14)

The map displays the geographical layout of coastal water agencies in Southern California. A thick black dashed line outlines the boundary of the 16 producers. Three agencies are highlighted with solid colors: Huntington Beach (green), Mesa Water District (purple), and Newport Beach (cyan). Major highways are shown as grey lines with their respective shields (Interstates 5, 15, 605, 405, 90, 71, 83, 91, 39, 55, 261, 133, 241, 73, 1). The terrain is shown in shades of green and brown, indicating elevation. A blue arrow points from the text box to the right, towards the 'Average of 356,000 afy' text.

**Average of
356,000 afy**

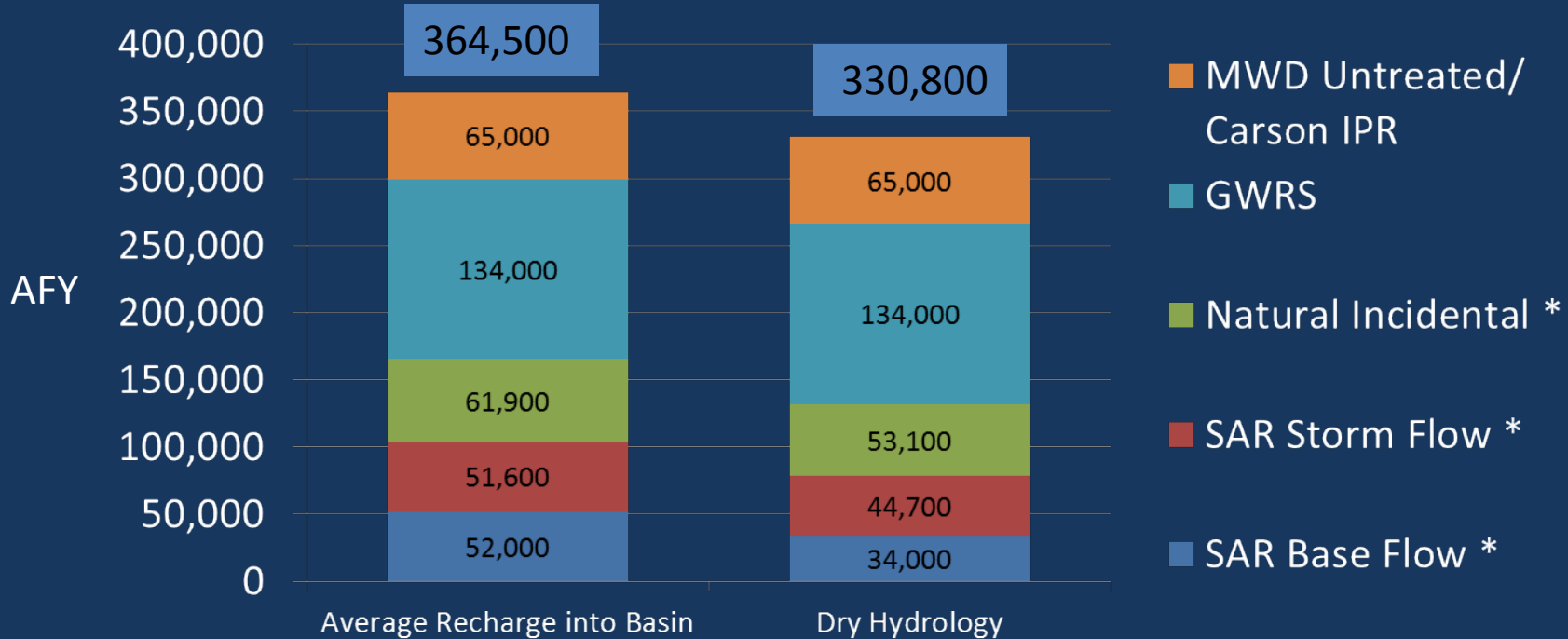
Coastal Water Agencies

0 1.75 3.5 7 Miles





Possible Future Groundwater Basin Recharge (afy)



* See charts #45 & 46 for how amounts were derived – 70% probability used for “Dry Hydrology” column for Natural Incidental and Storm Flows



Possible Issues

- Possible 100% BPP in an average year for the remaining 16 OCWD Producers
- Few OCWD Producers can pump up to the higher BPP
 - FY07-08; 80% BPP; 8 Producers achieved
- Will have two groups of Producers
 - Those pumping lower percentage
 - Those pumping higher percentage
- The remaining 16 Producers need to preserve 22,000 afy of excess pumping capacity to respond to MWD CUP storage program request to extract stored supplies?



Possible Issues

- Change in operations for the three coastal Producers – would be blending groundwater, imported water and Poseidon Water
- Can Poseidon deliver water that matches the three Producers seasonal and daily water demands? May need to build in greater flexibility into the Poseidon system.
- Asking three Producers to not utilize groundwater production infrastructure they have constructed over the years
- With higher coastal water levels, OCWD may not be able to inject as much GWRS water into Talbert Barrier



Option 5 Conclusions and Recommendation

- Smaller program is more feasible for Poseidon Project (up to 10,000 afy)
- Meet with HB, NB and Mesa Water
- Determine interest in program
- Poseidon water these agencies directly take is water that does not need to be injected into the groundwater basin
- Match this option with Option #1A



Distribution Option #1A

Desal Option 1A



Ball Road Basin Inj. Wells

ARTIC Inj. Well

Campesino Park Inj. Wells

Dyer Wellfield Inj. Wells

SAR Injection Wells

Desal Distribution Pump Station

Southeast Talbert Inj. Wells

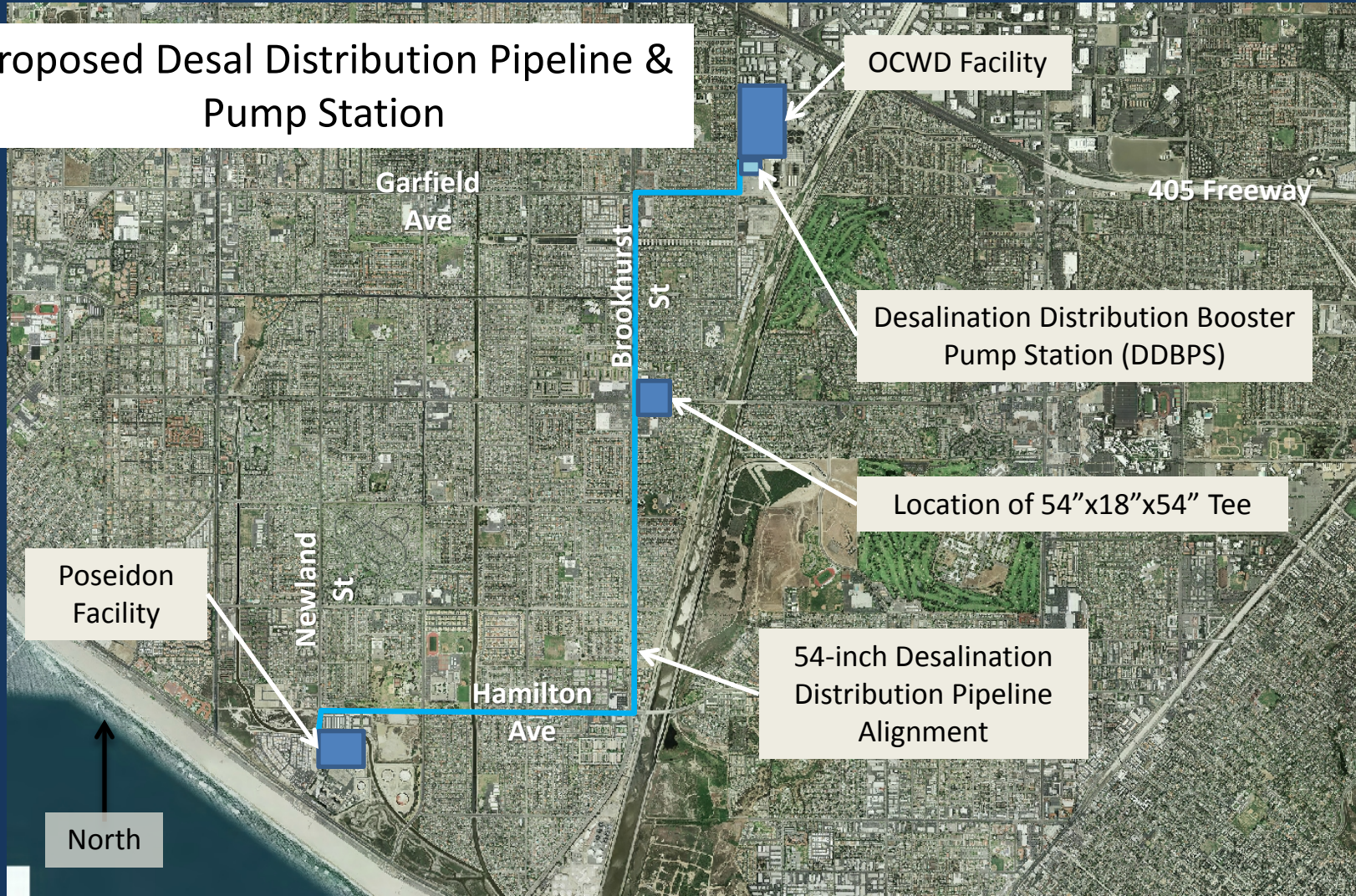
54-inch Desal Distribution Pipe

Facility	Flow (MGD)
Ball Road Basin Inj. Wells	4.5
ARTIC Inj. Well	2
Campesino Park Inj. Wells	4.5
Dyer Wellfield Inj. Wells	12
SAR Injection Wells	6
Talbert Seawater Barrier	15
Southeast Talbert Inj. Wells	<u>6</u>
TOTAL	50
Total Capital Cost	\$305 M

26 New Injection Wells



Proposed Desal Distribution Pipeline & Pump Station



OCWD Facility

405 Freeway

Garfield Ave

Brookhurst St

Desalination Distribution Booster Pump Station (DDBPS)

Location of 54"x18"x54" Tee

Poseidon Facility

Newland St

Hamilton Ave

54-inch Desalination Distribution Pipeline Alignment

North



Ward Street

Existing 42-in Barrier Pipeline

OCWD
GWRS
Facility

Ex. 54-in
Barrier

Connection Points
to Existing Barrier
& GWRS Pipelines

Existing 78-in GWRS
Pipeline
Santa Ana
River

Proposed
Desalination
Pump Station

Proposed 54-inch
Desalination
Distribution

North





Proposed Southeast Talbert Extension Injection Well Sites

Location of 54" x 18" x 54" Tee

Adams Ave

Brookhurst St

New 18-inch Pipeline

54-inch Desalination Distribution Pipeline Alignment

North



Proposed SAR Injection Wells



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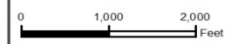
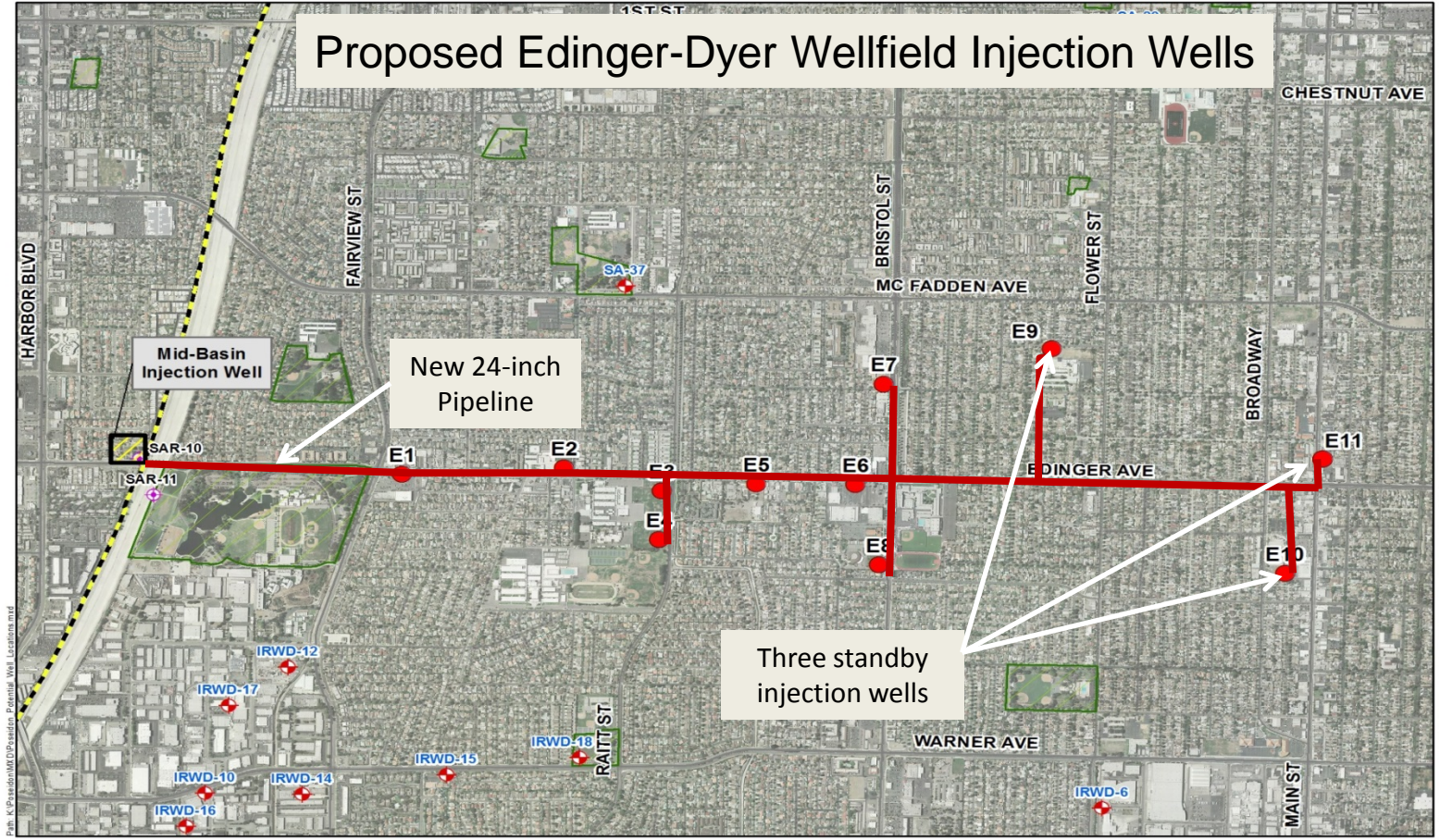


- Active Large-System Production Well
- Potential Injection Well Sites
- Groundwater Replenishment System Pipeline

Santa Ana River Injection Wells
Potential Injection Well Sites



Proposed Edinger-Dyer Wellfield Injection Wells



- Injection Well
- ◆ Active Large-System Production Well
- ◆ Monitoring Well
- Parks
- Groundwater Replenishment System

Dyer Wellfield Injection Wells

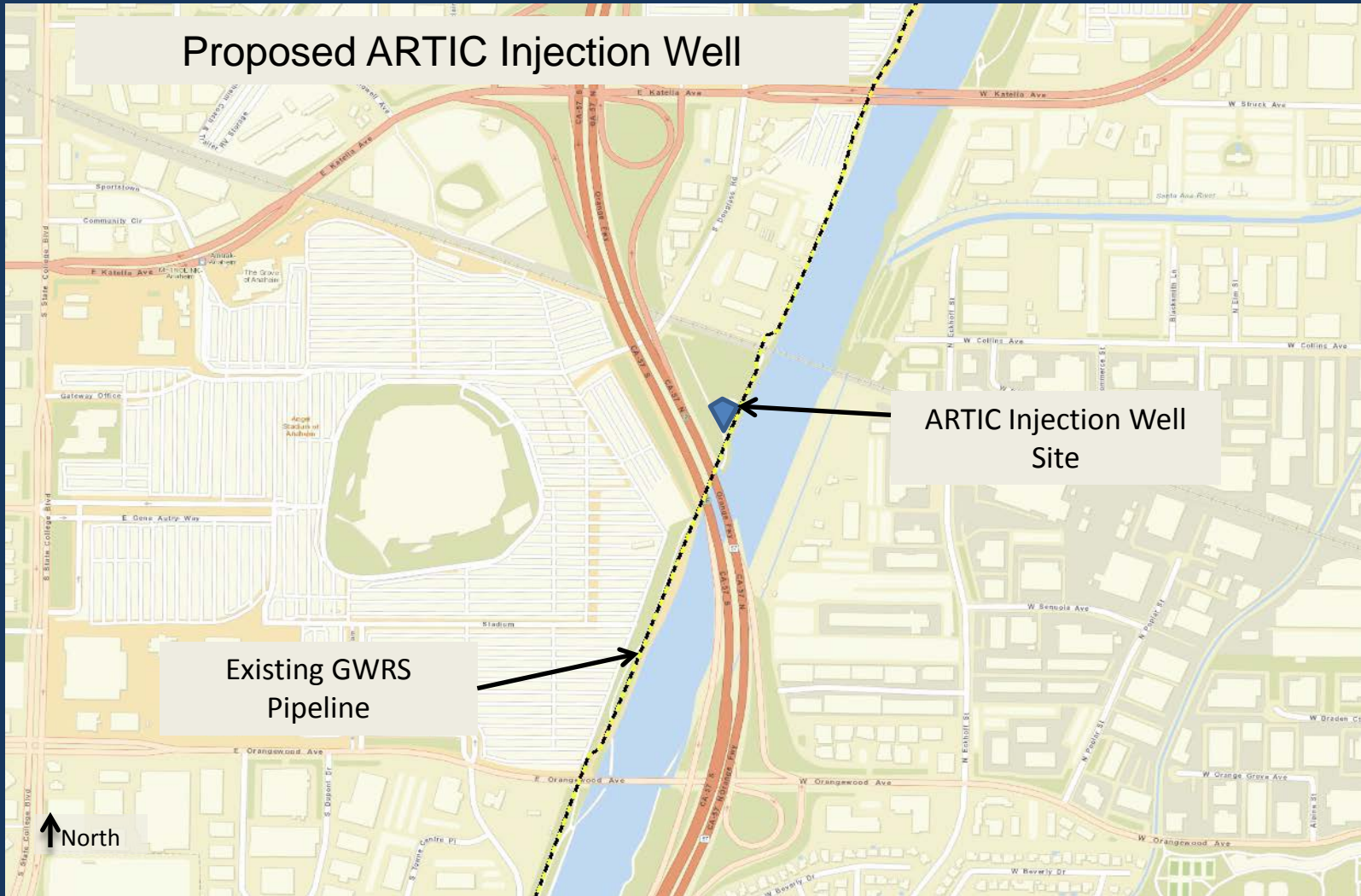


Proposed Campesino Injection Wells





Proposed ARTIC Injection Well



Existing GWRS Pipeline

ARTIC Injection Well Site

North



Proposed Ball Road Basin Injection Wells





Recharging Poseidon Water Into the Groundwater Basin

- Institutionally easier approach
- Less parties involved - OCWD is the only customer
- Will require more extensive CEQA/EIR
 - Moving forward with Programmatic EIR
- Acquiring ~ 26 injection well sites will be a large task
- Constructing new injection wells can be riskier (what will be injection rate) and will take longer
- Automatically adds approximately \$80/af to the project's unit cost – pumping extraction cost

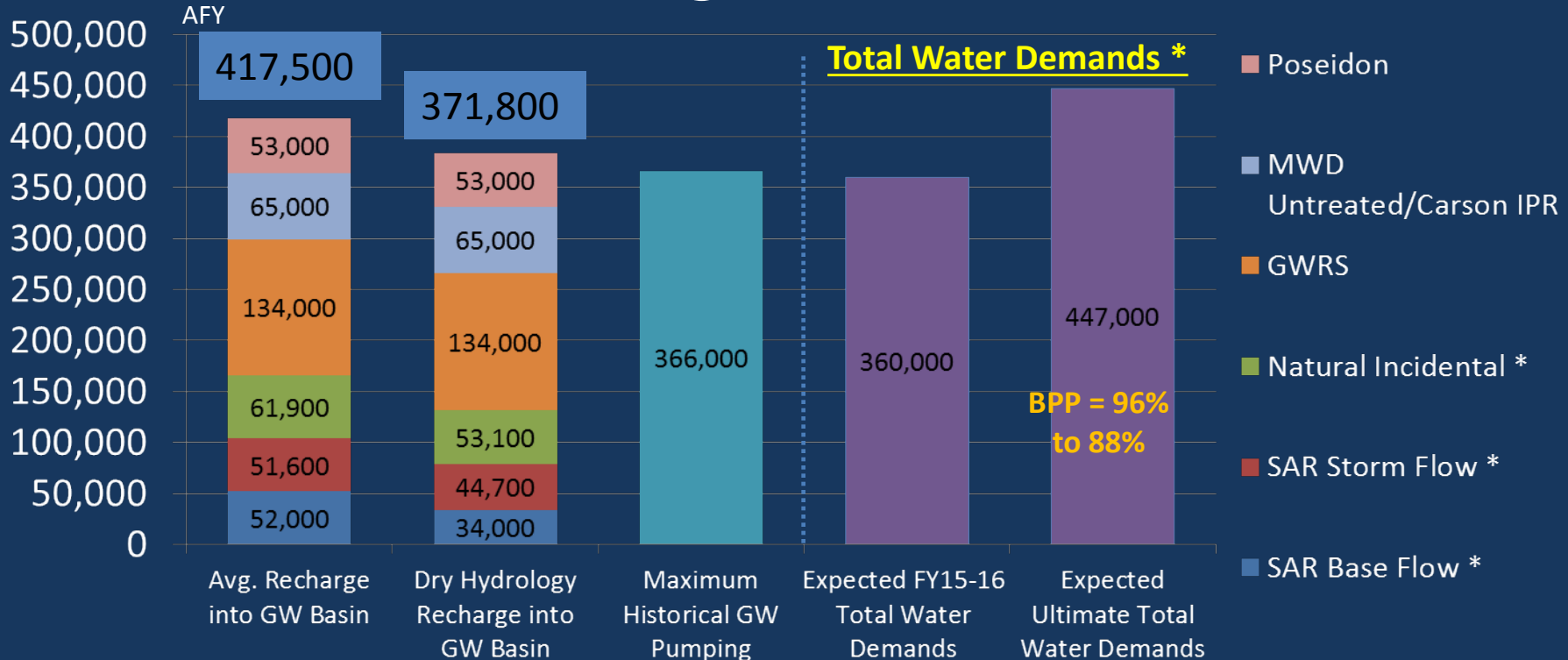


Recharging Poseidon Water

- This project alone increases the BPP by approximately 12%
- All Producers theoretically benefit
- Future BPP percentage could be ~88 to 96% (Many Producers can't currently pump this high)
- Need to model how basin will react
- Potential to have too much water for recharge in some years



Possible Future GW Basin Recharge Sources (afy)



* See charts #45 & 46 for how amounts were derived – 70% probability used for “Dry Hydrology” column for Natural Incidental and Storm Flows

Distribution

Preliminary Project Financial Estimates	Estimate - A	Estimate - B
Distribution Facilities Capital Cost	\$305 M (No grants received/30% project contingency)	\$251 M (\$30 M of Grants received/20% project contingency)
Annual O&M of Distribution Facilities	\$5 M	\$5 M
Unit Cost	\$469/af (5% debt financing)	\$345/af (\$100 M of 2% debt financing – remainder at 5%)
Cost of Poseidon Water in 2016 (net of MWD \$475/af LRP)	<u>\$1,226/af</u>	<u>\$1,226/af</u>
Total Cost of Water (net of MWD \$475/af LRP)	\$1,695/af	\$1,571/af
Total Cost of Water (without MWD subsidy)	\$2,170/af	\$2,046
Replenishment Assessment Increase (current RA is \$402/af)	\$248/af	\$213/af
Basin Production Percentage Increase	12%	12%
Producers Variable Water Supply Cost Increase (Current estimated cost is \$617/af per slide #41)	\$141/af	\$110/af
Monthly Residential Water Bill Increase	\$6.30	\$4.90

Total Project



Distribution Option #6



Distribution Option #6

- Combine Options #1A and 5
- Determine how much Poseidon water coastal Producers can take
- Recharge remaining water into the groundwater basin



Moving Forward

Refine Distribution Option #6

- Begin to locate injection wells
- Determine use of OCSD property
- Determine pipeline alignments in streets
- Meet with three coastal producers – how much water can they take?
- Model groundwater basin with higher recharge amounts
- Assess each Producers ability to pump up to higher BPP
- Update cost estimate



Additional Presentation Information



Regional Water Quality Control Board (RWQCB)

- The new State Water Resources Control Board Ocean Plan Amendment (OPA) will require the RWQCB to reevaluate and reapprove the Poseidon Project
- OCWD staff met with RWQCB staff on June 14th
- OPA requires reviewing need/sizing of the project, alternative intake structures, alternative project locations
- New process for RWQCB
- Expect to take the project to the RWQCB board in early 2017
- RWQCB decision potentially appealed to SWRCB



MWD Carson Indirect Potable Reuse (IPR) Project

- MWD to construct 150 mgd GWRS type treatment system with LA County at City of Carson wastewater plant
- Provide OCWD up to 65,000 afy of water delivered to Anaheim recharge basins via a new pipeline
- MWD staff to present project to OCWD Board on July 20th
- MWD Board to consider project feasibility report in December 2016



Recommendation

Direct staff to further investigate and refine
distribution option #6



End of Presentation



Additional Project Information



Producers Variable Water Supply Cost

Component	Amount
Replenishment Assessment	\$402/af
Well Pumping Cost	\$80/af
Treated Imported Water (Includes \$80/af for RTS and CC)	\$1022/af
Basin Production Percentage	75%
Water Supply Cost Total	\$617/af



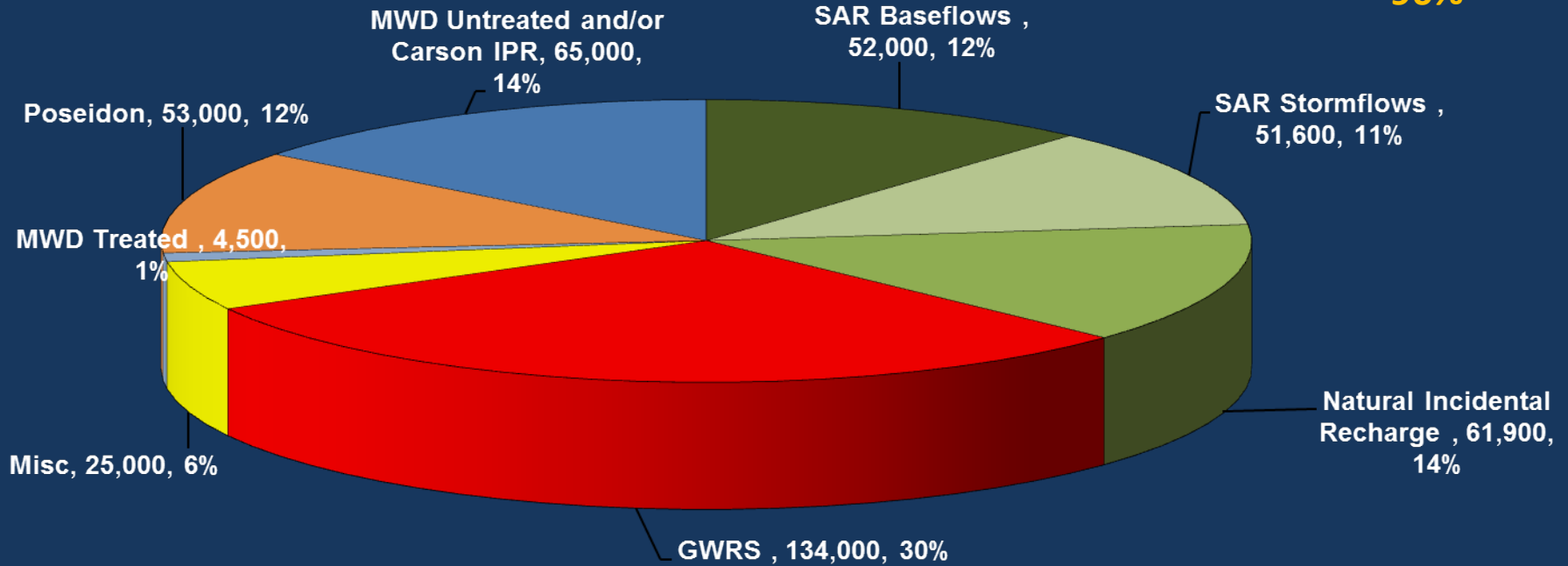
Project	Existing/No. of New Wells	Recharge Capacity (MGD)	CEQA
Talbert Seawater Barrier	Existing	15-30	Completed
Kraemer, Miller, Miraloma Recharge Basins	Existing	85	Completed
Demo MBI	Existing	1.5	Completed
Centennial Park MBI	Construction	6.5	Completed
City of Anaheim Turnout	Outside Agency	1	Outside Agency
Burriss Booster PS (BBPS)	NA	15	BBPS EIR
Burriss Booster PS Outlet	NA	21	BBPS EIR
Campesino Park	3	4.5	Desal EIR
ARTIC	1	2	Desal EIR
Southeast Talbert Extension	4	6	Desal EIR
Dyer Wellfield	11	12	Desal EIR
SAR Inj Wells	4	6	Desal EIR
Ball Road Basin	3	4.5	Desal EIR
TOTAL – Desal	26	180	Desal EIR



Possible Future OCWD Service Territory Water Supply Sources *

Total Future Water Demands of 447,000 afy

**Estimated
Future BPP =
96%**



* See charts #45 & 46 for how amounts were derived

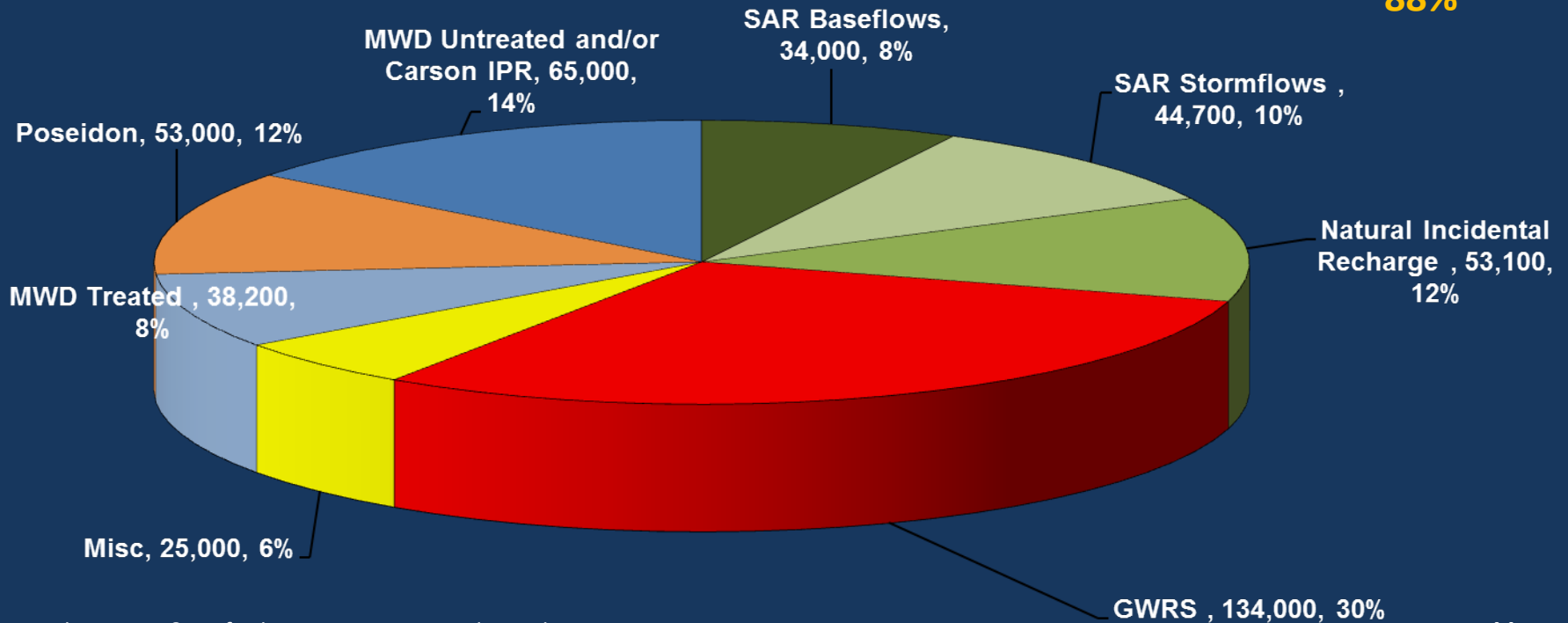


Possible Future OCWD Service Territory Water Supply Sources *

**Dryer
Hydrology**

Total Future Water Demands of 447,000 afy

**Estimated
Future BPP =
88%**



* See charts #45 & 46 for how amounts were derived

Charts #14, 30, 43 & 44 Assumptions & Calculations

Total future water demands of 447,000 acre-feet per year is an average of two numbers: (1) a summation of the 19 Groundwater Producers individually estimated future water demands provided in their 2015 Urban Water Management Plans which is 459,000 acre-feet per year; and (2) the MWDOC Orange County Water Supply Reliability study estimate of 435,000 acre-feet per year.

Santa Ana River Storm Flows and Natural Incidental Recharge amounts shown are from the report provided to the OCWD Water Issues Committee on March 9, 2016 – See slide #46. Dry Hydrology SAR Storm Flows and Natural Incidental Recharge have a 30% chance of occurring or a 70% chance of being greater based upon past hydrology

Santa Ana River Base Flows are assumed to decline from the current approximately 64,000 acre-feet per year to 52,000 acre-feet per year. This is the “Medium Base Flow Condition” as described with modeling work Wildermuth Environmental provided for the District in 2014. Base Flows cannot decline lower than 34,000 afy per the SAR Judgment.

GWRS is expanded from 103,000 to 134,000 acre-feet per year.

Miscellaneous supplies are the IRWD Michelson and OCWD GAP purple pipe reclamation projects. These two projects currently provide about 20,000 acre-feet per year of water supply.

MWD Untreated and/or Carson Indirect Potable Reuse (IPR) project. OCWD originally committed in 2015 to take a total of 650,000 acre-feet of MWD untreated full service water over a ten year period (65,000 acre-feet per year). This commitment ends in December 2024. MWD would want the District to contractually commitment to taking a similar amount of water from the Carson IPR project in-lieu of the original 65,000 acre-feet per year commitment to purchase untreated full service water.

MWD Treated water to Producers is calculated as the difference between total water demands of 447,000 acre-feet per year and the total of the other supply sources. Over the past 30 years the average amount of treated imported water provided by the MWD to the 19 OCWD Groundwater Producers is 136,000 acre-feet per year.

Proposed Poseidon Resources project would create 56,000 acre-feet per year of new local water supply . If all of this water is recharged into the groundwater basin, OCWD staff estimates the Basin Production Percentage would increase to approximately 96%.

96% future Basin Production Percentage Calculation – Numerator is equal to the sum of available supplies which is 417,500 afy minus an estimate of 12,000 afy for projects pumping above the BPP in the future. The Denominator is total water demands of 447,000 afy minus an estimate of 25,000 afy for purple pipe projects. $(417,500 - 12,000) / (447,000 - 25,000) = 96\%$



Incidental recharge and SAR storm flow recharge at various rainfall probabilities

Probability of Being Wetter	Rainfall (in)	FHQ Rainfall (in)	Incidental Recharge (AFY)	SAR Storm Flow Recharge (AFY)	Total (AFY)
90%	10	8.3	39,500	34,400	73,900
70%	13	11.4	53,100	44,700	97,800
50%	15	13.4	61,900	51,600	113,500
30%	18	16.5	75,500	61,900	137,400
10%	27	25.8	116,400	92,900	209,300

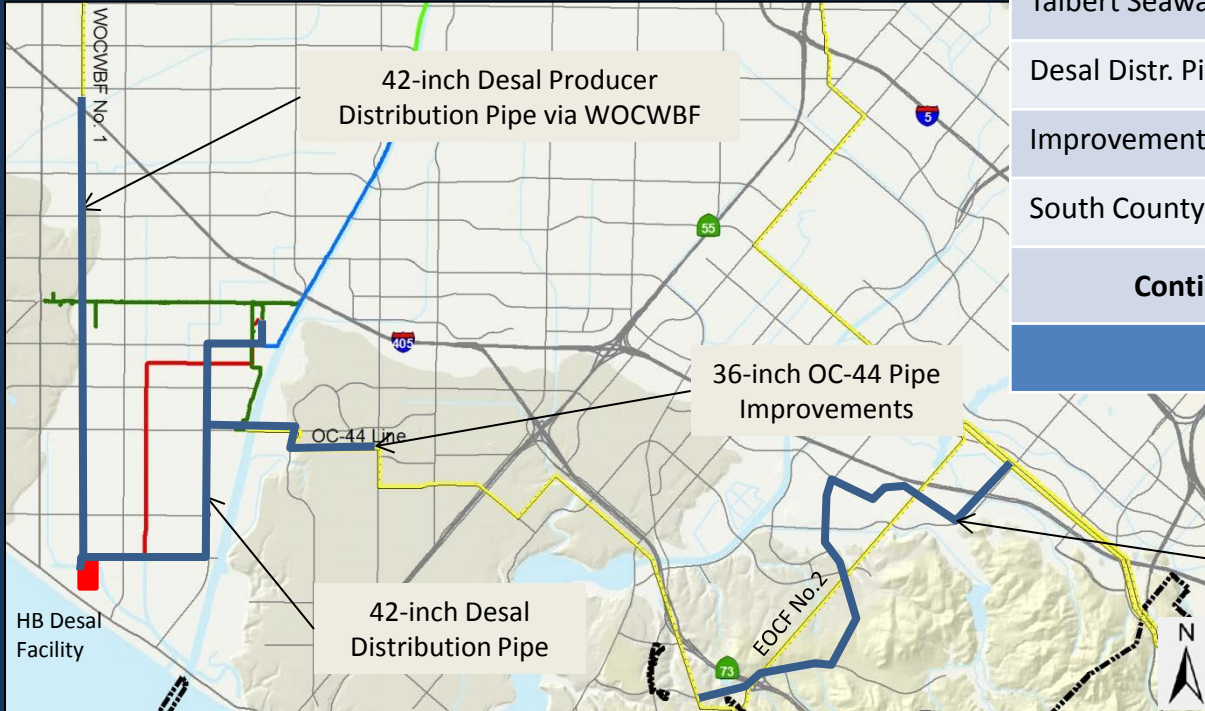


Option 1A Summary

- 54-inch Desal Distribution Pipeline (Adams Ave to GWRS pipe) – 8,900-linear feet
- Desal Distribution Pump Station – 29 MGD capacity with three 500-hp pumps
- Southeast Talbert Extension Injection Wells – 4 new wells and 18-inch supply pipe
- Talbert Replacement Injection Wells – 2 new wells and 18-inch supply pipe
- SAR Injection Wells – 3 new wells and three 12-inch connection tees
- Dyer Wellfield Injection Wells – 9 new wells and 24-inch supply pipe
- Ball Road Basin Injection Wells – 3 new wells and 16-inch supply pipe
- ARTIC Injection Well – 1 new well and 12-inch supply pipe
- Campesino Park Injection Wells – 4 new wells and 18-inch supply pipe

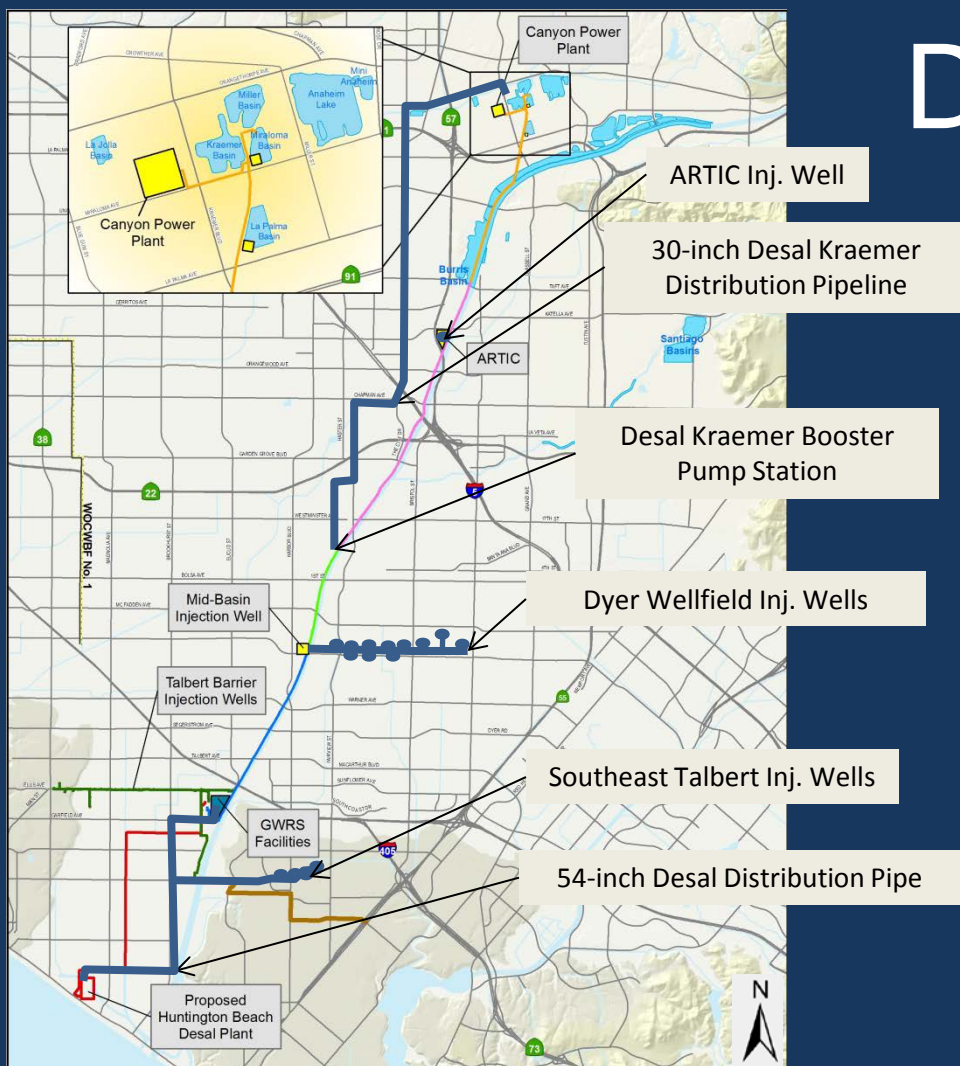


Desal Option 3



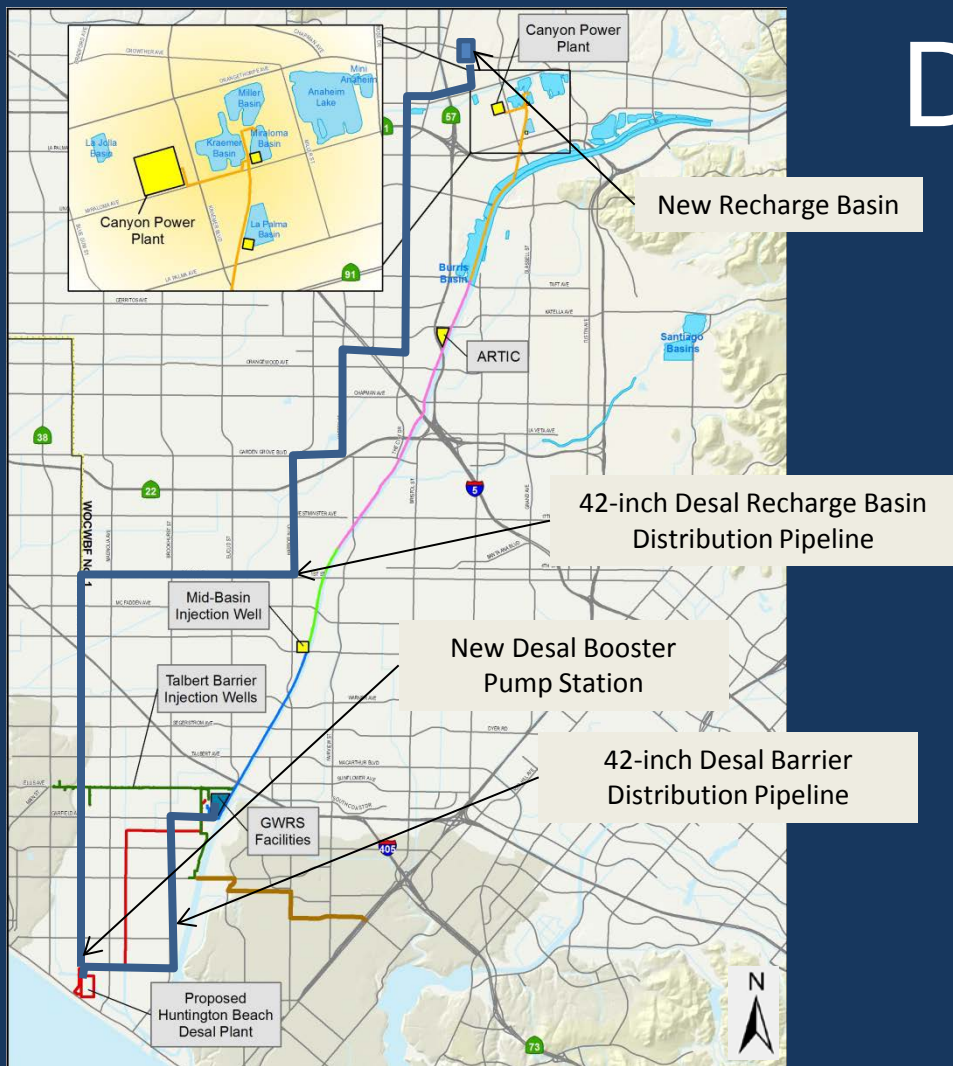
Facility	Flow (MGD)	Capital Cost (\$M)
Burriss Outlet	-	\$1
Desal Producer Dist. Pipeline and WOCWBF Turnouts	25	\$40
Talbert Seawater Barrier	15	-
Desal Distr. Pipeline	-	\$33
Improvements to OC-44	-	\$12
South County Desal Pipeline	10	\$39
Contingency (30%)	-	\$36
TOTAL	50	\$161

Desal Option 1B



Facility	Flow (MGD)	Capital Cost (\$M)
Kraemer Basin Recharge	15	-
Desal Kraemer Dist. Pipeline	-	\$68
Burriss Outlet	-	\$1
ARTIC Inj. Well	2	\$6
Desal Kraemer Booster PS	-	\$6
Dyer Wellfield Inj. Wells	12	\$79
Talbert Seawater Barrier	15	-
Southeast Talbert Inj. Wells	6	\$35
Desal Dist. Pipeline	-	\$41
Desal Dist. Booster PS	-	\$6
Property Acquisition	-	\$1
Contingency (30%)	-	\$73
TOTAL	50	\$316

Desal Option 1C



Facility	Flow (MGD)	Capital Cost (\$M)
New Recharge Basin	35	\$9
Burris Basin Outlet	-	\$1
Talbert Seawater Barrier	15	-
Desal Distr. Pipeline (Barrier)	-	\$33
New Desal Distr. Pipeline (Recharge Basin)	-	\$156
New Desal Booster PS	-	\$16
Property Acquisition	-	\$35
Contingency (30%)	-	\$75
TOTAL	50	\$325

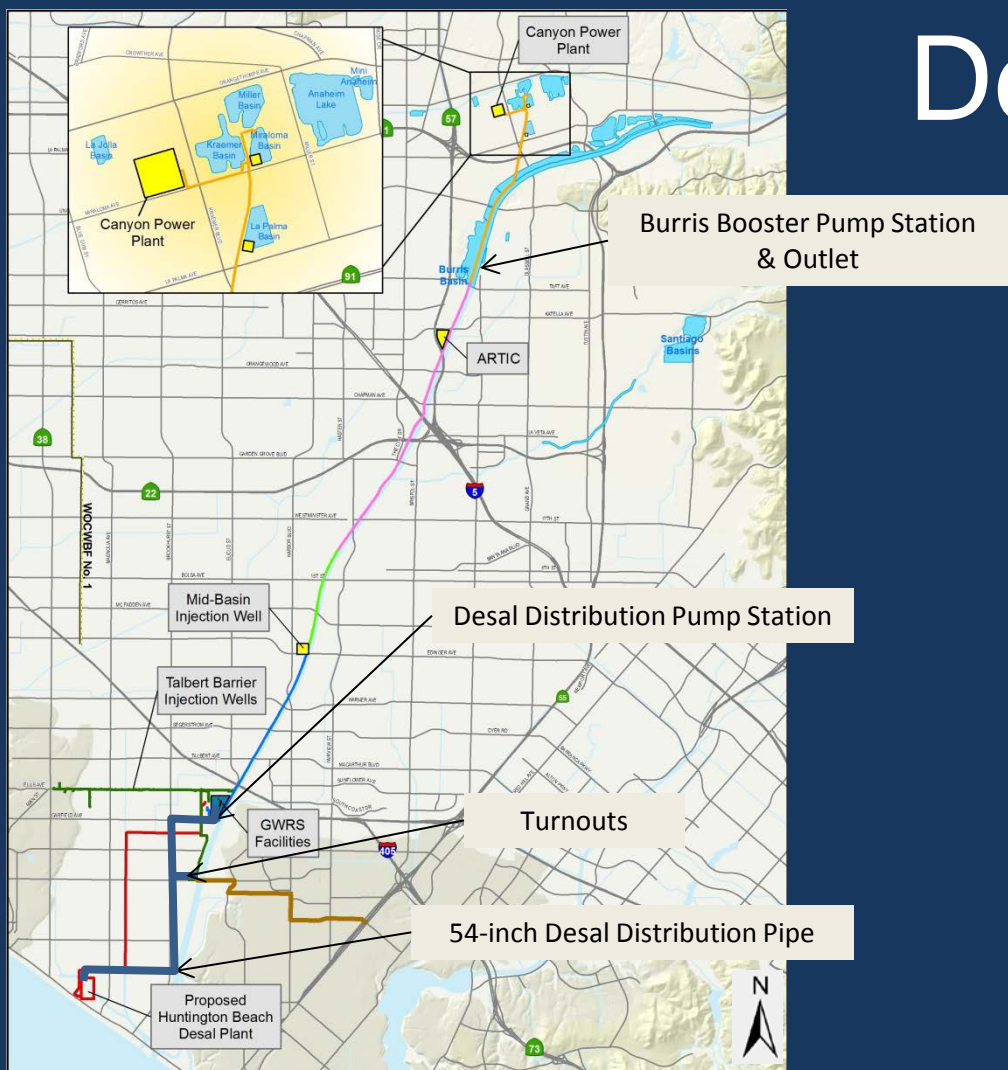
Desal Option 1D



Facility	Flow (MGD)	Capital Cost (\$M)
Burriss Booster Pump Station*	15	\$25
Burriss Basin Outlet*	12	\$1
Centennial Park Inj. Wells*	6.5	\$25
MBI Inj. Well*	1.5	-
Talbert Seawater Barrier	15	-
Desal Dist. Pipeline	-	\$41
Desal Dist. Booster PS	-	\$6
GWRS IE – SAR Inj Wells	-	\$24
GWRS IE – ARTIC Inj Well	-	\$6
Contingency (30%)	-	\$32
TOTAL	50	\$160

*Projects Planned for GWRS Final Expansion

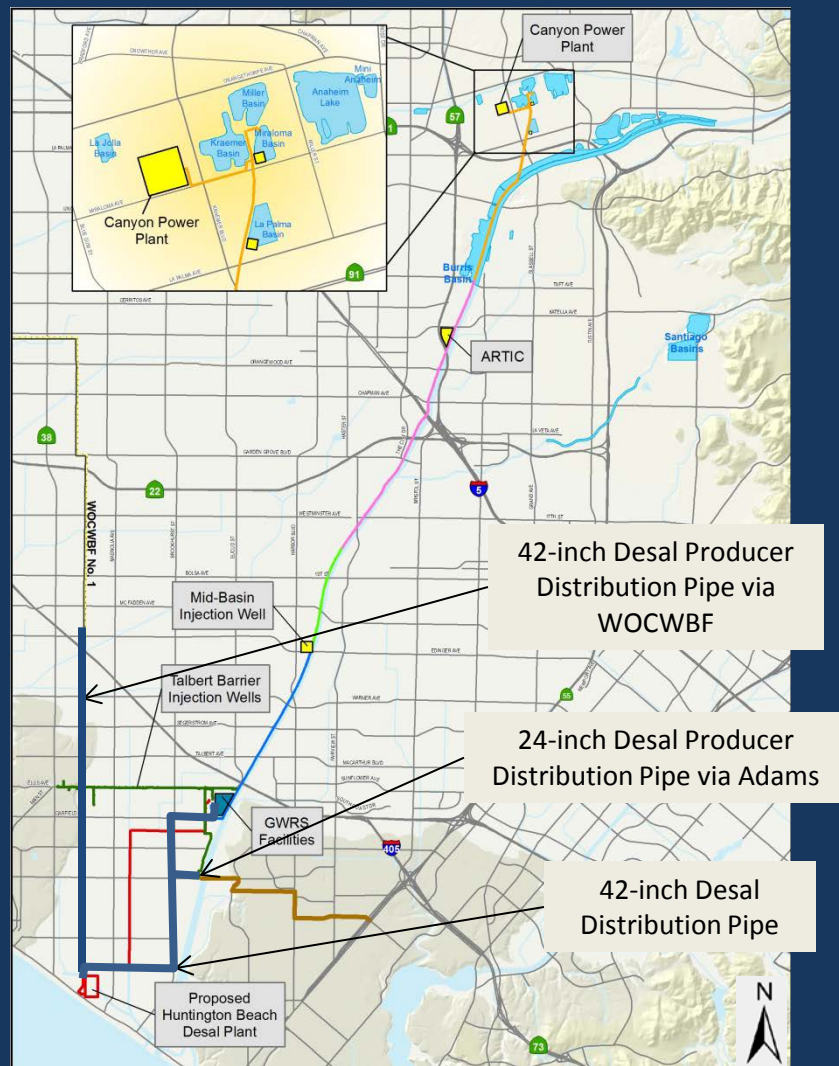
Desal Option 2A



Facility	Flow (MGD)	Capital Cost (\$M)
Burriss Booster Pump Station*	15	\$25
Burriss Basin Outlet*	12	\$1
Talbert Seawater Barrier	15	-
Desal Dist. Pipeline	-	\$41
Desal Dist. Booster PS	-	\$6
Turnouts & Pipeline for NB & HB	8	\$3
GWRS IE – Centennial Park Inj Wells	-	\$25
Contingency (30%)	-	\$30
TOTAL	50	\$131

*Projects Planned for GWRS Final Expansion

Desal Option 2B



Facility	Flow (MGD)	Capital Cost (\$M)
Burriss Outlet	-	\$1
Desal Producer Dist. Pipeline and WOCWBF Turnouts	27	\$40
Desal Distr. Pipeline and Adams Turnouts	8	\$2
Talbert Seawater Barrier	15	-
Desal Distr. Pipe	-	\$33
Contingency (30%)	-	\$21
TOTAL	50	\$97

Desal Option 4



48-inch Desal Producer Distribution Pipe via WOCWBF

36-inch OC-44 Pipe Improvements

42-inch Desal Distribution Pipe

Facility	Flow (MGD)	Capital Cost (\$M)
Desal Producer Dist. Pipeline and WOCWBF Turnouts	29	\$44
Desal Distr. Pipeline	-	\$27
Improvements to OC-44 w/Turnouts	21	\$12
Contingency (30%)	-	\$24
TOTAL	50	\$107



End



IRVINE RANCH WATER DISTRICT

15600 Sand Canyon Avenue • P.O. Box 57000 • Irvine, California 92619-7000 • (949) 453-5300 • www.irwd.com

July 6, 2016

Mr. Michael Markus, P.E.
General Manager
Orange County Water District
18700 Ward Street
Fountain Valley, CA 92708

Subject: Workshop #3 – Proposed Poseidon Resources Huntington Beach Seawater Desalination Project Distribution Options

Mike:

At tonight's meeting of the Orange County Water District (OCWD) Board of Directors, staff will be presenting progress on the three remaining options (2A, 2B, and 3) and two new options (5 and 6) to distribute 50 million gallons per day (MGD) of desalinated seawater produced by the proposed Poseidon Huntington Beach Seawater Desalination Project. As discussed previously in my February 3, 2016 and March 8, 2016 letters, Irvine Ranch Water District (IRWD) remains concerned about the significant impacts of:

- Recharging desalinated seawater that could have an impact on the quality of groundwater within the Orange County basin, on potable water delivered to IRWD customers, and on recycled water produced by IRWD;
- Increasing the Replenishment Assessment (RA) to subsidize the Orange County Water District's (OCWD) surface delivery of the project water that will likely violate Proposition 218 and Proposition 26;
- Requiring the involuntary participation by groundwater producer agencies in the seawater desalination project and subsidization of the cost of water by non-participating agencies which could violate Proposition 218's and Proposition 26's cost of service and proportionality requirements; and
- Optimizing the use of existing and future supplies available from Metropolitan Water District of Southern California (MWD) that would provide improvements in water supply reliability at the lowest cost and should be considered as a top-priority groundwater management practice by OCWD.

Since these aforementioned letters were submitted to OCWD, the further development of the Orange County Reliability Study by the Municipal Water District of Orange County has shown that the future water demands for Orange County are likely not as high as once thought, which calls into question the need for a 50 MGD base-loaded seawater desalination plant in North Orange County. Other options, such as the final expansion of the Groundwater Replenishment

Mr. Michael Markus, P.E.
General Manager
Orange County Water District
July 6, 2016
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System and the Carson Indirect Potable Reuse (IPR) Project proposed by MWD, should be prioritized as more viable and cost-effective alternatives.

Since OCWD is continuing its analysis of integrating a seawater desalination plant into the local water system, IRWD offers the following comments related to the two new distribution alternatives (Options 5 and 6) being presented for the Board's consideration tonight:

1) Option 5 that will allow three coastal producers (Huntington Beach, Newport Beach and Mesa Water) to receive Poseidon water in-lieu of groundwater pumping should be evaluated against the less expensive use of existing supplies.

- The option does not appear to be feasible because the inland groundwater producers do not have the production capacity to offset the decreased production by the coastal groundwater producer agencies.
- The benefits of implementing Option 5 would not be evenly distributed among the producer agencies because of differing groundwater production capabilities available to pump up to the resulting Basin Production Percentage (BPP). As a result, the option would violate Proposition 218's and Proposition 26's cost of service and proportionality requirements.
- Implementing a new Coastal Pumping Transfer Program that makes use of expensive water from the proposed seawater desalination project should be evaluated against the cost of implementing an in-lieu recharge program that would make use of water available from MWD at substantially reduced costs.
- Requiring producer agencies to subsidize the cost of water from the desalination project that could have been purchased from MWD at substantially reduced costs would violate best practices for water resource and financial management.
- Participation in the proposed seawater desalination project should be voluntary with no subsidization of the cost of water by non-participating agencies.

2) Option 6 that will inject desalinated ocean water to the ground water basin will degrade the quality of water within the Orange County Groundwater Basin affecting beneficial uses and will not result in an even distribution of benefits.

- Recharging desalinated ocean water into as many as 26 new injection wells (Option 6) would greatly increase the salt load within the Orange County basin, lower the quality of water within the basin and unreasonably affecting beneficial uses by increasing salt concentrations, a nuisance and pollutant, within the basin.
- Recharging desalinated water is expected to have a significant impact on the quality of groundwater within the Orange County basin, on potable water delivered to IRWD customers, and on IRWD's water recycling program. Groundwater modeling to quantify these impacts will be complete soon, and results will be provided to OCWD for its

Mr. Michael Markus, P.E.
General Manager
Orange County Water District
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consideration when preparing an Environmental Impact Report for the use of water from the seawater desalination plant for groundwater recharge.

- The benefits of implementing Option 6 would not be evenly distributed among the producer agencies because of differing groundwater production capabilities available to pump up to the resulting BPP. As a result, the option would violate Proposition 218's and Proposition 26's cost of service and proportionality requirements.

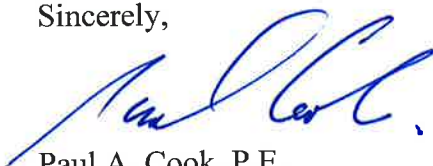
As IRWD has stated in previous communications, the Poseidon seawater desalination project should be funded exclusively by the retail water agencies that voluntarily choose to participate in a project depending on each agency's water supply reliability needs. Based on our analysis, a likely prerequisite for participation in the project by a retail agency is a determination that it does not consider supplies from MWD to be adequately reliable. Participation should be an agency-by-agency decision as follows:

- Retail agencies that elect to participate in a seawater desalination project should form an acceptable financial participation mechanism, such as a voluntary joint powers authority, to appropriately recover and allocate past and future costs associated with an ocean desalination project.
- Participation in the project via such a mechanism should eliminate the subsidization proposed in the remaining options. It would allow OCWD to avoid violating Proposition 218's and Proposition 26's cost of service and proportionality requirements through an increase in the RA, as proposed, to pay for the project.

Like the OCWD Board of Directors, IRWD believes that the development of a secure and reliable water supply for the residents of Orange County is important. As with any infrastructure investment, investments in water supply reliability must be cost-effective and should consider all of the factors discussed above related to environmental impacts, beneficiary pay principles, and alternatives. Additional investigation of long-term contracts with coastal producers, coastal groundwater levels and developing an equitable method of distributing project costs that do not violate Proposition 218 and Proposition 26 should be pursued now, ahead of further complicated and costly technical studies. OCWD's ability to secure long-term contracts with coastal producers should weigh heavily on selecting the production capacity of a seawater desalination plant in Huntington Beach.

Please provide a copy of this letter to each of your Board members so that they can consider IRWD's comments. I look forward to discussing these concerns in greater detail with you and your staff. Please contact me at (949) 453-5590 so that we can meet to discuss our comments.

Sincerely,



Paul A. Cook, P.E.
General Manager