

AGENDA
IRVINE RANCH WATER DISTRICT
WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE
THURSDAY, MAY 12, 2016

CALL TO ORDER 3:00 p.m. Committee Room, Second Floor, District Office
15600 Sand Canyon Avenue, Irvine, California

ATTENDANCE Committee Chair: Steve LaMar
Member: John Withers

<u>ALSO PRESENT</u>	Paul Cook	_____	Cheryl Clary	_____
	Beth Beeman	_____	Patrick Sheilds	_____
	Mark Tettemer	_____	Christine Compton	_____
	Fiona Sanchez	_____	Amy McNulty	_____
	Paul Weghorst	_____	Kellie Welch	_____
	Ray Bennett	_____	Jo Ann Corey	_____
	_____	_____	_____	_____
	_____	_____	_____	_____

COMMUNICATIONS

1. Notes: Weghorst
2. Public Comments
3. Determine the need to discuss and/or take action on item(s) introduced that came to the attention of the District subsequent to the agenda being posted.
4. Determine which items may be approved without discussion.

INFORMATION

5. OVERVIEW OF WATERSTAR BUSINESS RECOGNITION PROGRAM – STUVICK/MCNULTY/SANCHEZ/WEGHORST

Recommendation: Receive and file.

6. STATEWIDE DROUGHT REGULATION AND EXECUTIVE ORDER FOR PERMANENT CONSERVATION – SANCHEZ/WEGHORST

Recommendation: Receive and file.

ACTION

7. VERIFICATIONS OF SUFFICIENT WATER SUPPLY FOR THE WEST ALTON PARCEL AND EL TORO 100-ACRE PARCEL DEVELOPMENTS – WELCH/AKIYOSHI/SANCHEZ/WEGHORST

Recommendation: That the Board approve the Verification of Sufficient Water Supply for the West Alton Parcel Development and the Verification of Sufficient Water Supply for the El Toro 100-Acre Parcel Development.

8. 2016 LEGISLATIVE UPDATE – COMPTON/COOK

Recommendation: That the Board adopt a “SUPPORT IN CONCEPT” position on SB 970 (Leyva) and the development of a State program which would provide grants to wastewater agencies for the development or implementation of projects that would integrate food waste processing by the agencies at its wastewater treatment facilities, result in the diversion of organics from local landfills, and dedicate Cap-and-Trade revenues to the wastewater sector; and a “SUPPORT” position on the Santa Ana Mountains to Sea National Monument Proposal.

OTHER BUSINESS

9. A. Directors’ Comments

B. Adjourn

Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the above-named Committee in connection with a matter subject to discussion or consideration at an open meeting of the Committee are available for public inspection in the District’s office, 15600 Sand Canyon Avenue, Irvine, California (“District Office”). If such writings are distributed to members of the Committee less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Committee Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance of the meeting room at the District Office.

The Irvine Ranch Water District Committee Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in an alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

May 12, 2016

Prepared by: L. Stuvick / A. McNulty

Submitted by: F. Sanchez / P. Weghorst

Approved by: Paul Cook 

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

OVERVIEW OF WATERSTAR BUSINESS RECOGNITION PROGRAM

SUMMARY:

IRWD's new WaterStar Business Recognition Program is designed to recognize and promote the water conservation efforts of business customers. Businesses that meet the program's eligibility requirements will receive a certification based on application of best management practices that result in increased water-use efficiency. Recognized WaterStar businesses will be authorized to use the WaterStar logo in their publications and marketing materials. IRWD will also recognize WaterStar businesses in outreach materials, on the District's website and in social media. At the Committee meeting, staff will provide an overview of the program.

BACKGROUND:

IRWD's new WaterStar Business Recognition Program recognizes business customers who are water efficient and helps promote water conservation within the community. The program provides a way for businesses to communicate to the community that they value water conservation and have taken the necessary steps to implement measures that result in water savings. Businesses recognized by the WaterStar program will receive a certification based on the implementation of best management practices that result in increased water-use efficiency. Each certification will be valid for three years after which businesses will be prompted for recertification.

Program Benefits:

Certification will help businesses improve water-use efficiency, save on water bills, and obtain financial incentives for eligible efficiency improvements. Certified WaterStar businesses will earn the use of the WaterStar logos that are shown in Exhibit "A". The logos may be used for general display, web posting and advertising. IRWD may also feature certified WaterStar businesses in print media, on web pages and in water conservation literature. Certified WaterStar businesses will be recognized at an IRWD Board meeting and receive an award acknowledging their achievement.

Program Requirements:

WaterStar Program eligibility requirements include a full range of best management practices for water-use efficiency, including elements from the Model Water Efficient Landscape Ordinance and efficiency standards from the California Plumbing Code. The eligibility requirements are formatted as a comprehensive checklist that addresses indoor and outdoor water using devices, landscape maintenance schedules and cooling systems. The WaterStar eligibility checklist is provided as Exhibit "B". Program applicants must determine if they meet the eligibility requirements prior to applying online. Applicants are subject to a site evaluation to determine that all applicable eligibility criteria have been met.

Site Evaluations:

Business applicant facilities will be subject to a site evaluation that includes surveying the businesses' water-using fixtures, equipment and landscape irrigation systems. The applicants' water consumption history will be analyzed and staff will provide recommendations to improve water-use efficiency. Each applicant will be provided with a report summarizing its water use history and recommended water saving measures. The report will inventory water using devices, recommended water efficiency measures and any required retrofits. If a business site is determined to meet all the eligibility requirements criteria, then the business is awarded certification and staff will schedule an on-site event to educate employees.

Employee Education:

Business employee education events will provide information on water savings in the workplace. Employees will also be educated on rebates and other information on how to save water at home including how to identify and repair leaks. This element of the program is beneficial in that it motivates behavioral change and can produce additional water savings in both commercial and residential settings.

Business Assistance:

If a business applicant does not meet program eligibility requirements, staff will provide assistance and recommend appropriate devices and available financial incentives. An additional site visit may be scheduled to confirm implementation of recommended measures. Applicants must implement recommendations within three months of the initial site evaluation or their applications will be subject to cancelation. Applications will be accepted on a rolling basis and customers will be able to reapply if a previous application expires. This approach encourages business customers to take action to implement water efficiency measures and gain additional water savings.

FISCAL IMPACTS:

Funding for this program is included in the FY 2016-17 Operating Budget.

ENVIRONMENTAL COMPLIANCE:

This program is exempt from CEQA.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – WaterStar Logo
Exhibit "B" – WaterStar Eligibility Checklist

EXHIBIT "A"





EXHIBIT "B"



ELIGIBILITY CHECKLIST

This checklist is designed to comprehensively cover all water use/saving devices commonly found in most commercial facilities. Requirements for each applicant will vary depending on type and status of equipment currently installed. Once all applicable checklist requirements have been met, an online application may be submitted to the IRWD Water-use Efficiency Department for review, and upon verification, the Water Star certification issued.

INDOOR WATER USE



PLUMBING FIXTURES



RATING

High-Efficiency Toilets			Required, if applicable
Pressure Assisted	☐	≤ 1.25 gal/flush	
Dual Flush	☐	≤ 1.28 gal/flush	
Single Flush	☐	≤ 1.28 gal/flush	
Flushometer Bowl & Valve Toilets	☐	≤ 1.28 gal/flush	Retrofit required if < 2 year payback
Urinals			Required, if applicable
Wall-Mounted Urinals	☐	≤ 0.125 gal/flush	
Floor-Mounted Urinals	☐	≤ 0.5 gal/flush	
Zero-Water Urinals			
Lavatory Faucets (Restrooms & Locker Rooms)			Required, if applicable
Faucet Aerators	☐	= 0.5 gal/minute	
Flow Restrictors	☐	= 0.5 gal/minute	
Metered Faucets (Volumetric Measure)	☐	≤ 0.25 gal/cycle	Required, if applicable
Kitchen Faucets (Non-Food Service)		= 1.8 gal/minute	Required, if applicable
Faucet Aerators	☐		
Flow Restrictors	☐		
Shower Heads	☐	= 1.8 gal/minute	Required, if applicable



FOOD SERVICE EQUIPMENT



RATING

Food Prep/Dish Washing Faucets			Required, if applicable
Faucet Aerators	☐	≤ 0.22 gal/cycle	
Flow Restrictors	☐	≤ 0.25 gal/cycle	
Hand Wash Faucets			Required, if applicable
Faucet Aerators	☐	= 0.5 gal/minute	
Flow Restrictors	☐	= 1.0 gal/minute	
Pre-Rinse Spray Nozzles	☐	≤ 1.6 gal/minute	
Dishwashers (Criteria by machine type)			Retrofit required if < 2-year payback
Under Counter High Temp	☐	≤ 1.00 gal/rack	
Under Counter Low Temp	☐	≤ 1.70 gal/rack	
Stationary Single Tank Door High Temp	☐	≤ 0.70 gal/rack	
Stationary Single Tank Door Low Temp	☐	≤ 0.79 gal/rack	
Multiple Tank Conveyor High Temp	☐	≤ 0.54 gal/rack	
Multiple Tank Conveyor Low Temp	☐	≤ 0.54 gal/rack	
Air-Cooled Nugget or Flaked Ice Machine	☐	Meets criteria	
Closed-Loop Water-Cooled Nugget or Flaked Ice Machine	☐	Case-by-case basis	
Cubed Ice Machine (Criteria Below)			Retrofit required if < 2-year payback
Ice Making Head	☐	≤ 20 gal/100 lbs ice	
Remote Condensing Unit (with or without remote compressor)	☐	≤ 25 gal/100 lbs ice	
Self Contained Unit	☐	≤ 25 gal/100 lbs ice	
Steamers: Self-Contained, Boilerless (with no water supply connection)	☐		Retrofit required if < 2-year payback
Refrigeration Condenser Cooling: Air-cooled or closed-loop system only. No single pass cooling	☐		Retrofit required if < 2-year payback

ELIGIBILITY CHECKLIST – PAGE 2



WASH DOWN



Hose-End Use:

Automatic shutoff nozzles and/or high-pressure, low-volume nozzles



Required, if applicable

Equipment & Floor Cleaning:

High-pressure, and/or low-volume washing equipment



Retrofit required if < 2-year payback

Use of Water Brooms only Allowed for Health and Human Safety



COOLING



Cooling Towers & Evaporative Condensers

Potable Water: Minimum of 4 cycles of concentration



Required, if applicable

Recycled Water: No minimum cycles of concentration



Cooling Tower Conductivity & pH Controller



Required, if applicable

Cooling Tower Metering:

Metering of both make-up & blow-down lines



Required, if applicable

Swamp Cooler Maintenance Schedule & Automatic Timer



Required, if applicable



PROCESS WATER USE



RATING

Flow Reduction and Reuse



Case-by-case basis

Process Water Use Metering:

Metering of flow to individual equipment and processes within a facility and having estimated usage > 5,000 gallons per day



Case-by-case basis

Highly Recommended



LAUNDRY EQUIPMENT



RATING

Coin-Operated Commercial Clothes Washer



Case-by-case basis

Retrofit may be required if < 2-year payback

Industrial Clothes Washers



Case-by-case basis

OUTDOOR WATER USE



IRRIGATION HARDWARE AND DESIGN



RATING

Recycled Water:

For domestic water meters, irrigation systems must be designed to eventually use recycled water



Case-by-case basis

Highly Recommended

Smart Controllers/Weather-Based Irrigation Controllers:

Set up to meet IRWD efficiency standards



Case-by-case basis

Highly Recommended

Standard Controllers:

Rain Sensor



Case-by-case basis

Required, if applicable

Mixed-Use Commercial Submeters:

Applies to meters serving outdoor and indoor end uses for areas > 0.5 acre



Required, if applicable

Sprinklers & Spray Head Nozzles:

All spray heads serving an area must be of compatible type/brand and have the same precipitation flow rates



Required, if applicable

No Sprinklers or Spray Heads in Areas ≤ 8 feet wide:

Convert heads to drip or bubblers with low flow rates required where overspray and significant run-off are present



Required, if applicable

Turf Area Sprinklers Head-to-Head Spacing:

Installation of additional heads and/or relocation of heads required where measured distribution uniformity is < 60%



Case-by-case basis

Highly Recommended

Sprinkler & Spray Head Check Valves:

Prevents low-head drainage. Factory installed check valve specified if manufacturer's recommended pressure at the nozzle is exceeded



Required, if applicable

Sprinkler & Spray Head Pressure Regulation:

Factory installed pressure regulated devices specified if manufacturer's recommended pressure at the nozzle is exceeded



Required, if applicable

ELIGIBILITY CHECKLIST – PAGE 3



LANDSCAPE DESIGN AND MAINTENANCE



Turfgrass Areas:

Installation of warm season and/or drought-tolerant turf types



Highly Recommended

No Turfgrass in Medians & Parkway Strips:



Required, if applicable

Sloped Turfgrass Areas:

Must achieve budgeted irrigation efficiency



Required, if applicable

Maintenance Schedule:

Weekly Meter Log Sheets



Required, if applicable

Bi-Monthly Visual Walkthrough of Operating System



Hydrozoned Plantings:

Plants served by an irrigation valve have similar water requirements



Highly Recommended

Low-to-Moderate Water-Use-Plantings:

Conversion from high-water-use to low-water-use plantings may be required to achieve appropriate hydrozoning



Highly Recommended

Seasonal Irrigation Schedule:

Unless site is equipped with a Smart Controller adjust controller to meet the water needs of the plant material as the season changes



Required, if applicable

Irrigation Station Mapping:

Display diagram of irrigation lines by station, irrigation hardware (drip, subsurface drip), and plant type (Ex: lawn, shrub, annuals)



Required, if applicable



OTHER OUTDOOR USES



Vehicle Washing:

On-site reuse of wash water and wastewater pre-treatment or type (ex. Spray, rotor, off-site vehicle washing at facility with reuse and pretreatment systems. Wastewater must be directed toward the sewer)



Required, if applicable

Pool and Spas:

Pool covers



Highly Recommended

No leakage and efficient pool filter backwash



Weather-based or sensor-based controller for pool fill



Commercial Carwashes:

If available, reverse osmosis system must be actively operated and utilized for spot-free rinse. Wastewater must be disposed in accordance with local regulations



Required, if applicable

May 12, 2016

Prepared by: F. Sanchez

Submitted by: P. Weghorst

Approved by: Paul Cook



WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

STATEWIDE DROUGHT REGULATION AND EXECUTIVE ORDER FOR PERMANENT CONSERVATION

SUMMARY:

In response to a worsening statewide drought, the Governor issued Executive Order B-2-15 in April 2015 that mandated a 25 percent statewide reduction through February 2016 in urban potable water use from 2013 levels. Pursuant to the order, the State Water Resources Control Board assigned mandated conservation targets to each urban water supplier. In February 2016, the State Board modified the initial mandated conservation targets in response to improved conditions. The modifications incorporated adjustments and credits and extended the Emergency Regulation until October 2016. On May 9, 2016, the Governor issued Executive Order B-37-16 that directs the State Board to adjust the regulation based on water supply conditions and extend it through January 2017. The Executive Order also directs the State Board to develop new, permanent, and long-term conservation targets. On the same day that the Executive Order was issued, the State Board released a draft proposal to modify the existing regulation. At the Committee meeting, staff will provide an overview of the May 9, 2016 Executive Order and the proposed modifications to the regulation.

BACKGROUND:

The State of California has experienced several years of a severe statewide drought. In response to this multi-year drought, the Governor issued a series of executive orders. In April 2015, the Governor issued Executive Order B-2-15 that mandated a 25 percent statewide reduction in urban potable water use from 2013 levels. In May 2015, the State Board adopted a regulatory framework that allocated potable water use reductions to urban water suppliers to achieve the statewide mandate. The District's mandated reduction over the period of July 2015 to February 2016 was 16 percent.

In November 2015, the Governor issued an Executive Order directing the State Board to extend the Emergency Regulation until October 2016 based on continued drought conditions. In February 2016, the State Board modified the regulation, incorporating credits and adjustments for sustainable supplies, growth and climate, and extended it to October 2016. As a result of the adjustments, IRWD's conservation target was modified to 8 percent effective March 1, 2016.

May 2016 Executive Order:

Although conditions have significantly improved in many areas of the state over the past winter, on May 9, 2016, the Governor issued Executive Order B-37-16 titled "Making Water Conservation A California Way of Life". The Executive Order, attached as Exhibit "A", directs the State Board to:

- Adjust the regulation as soon as possible to reflect changed water conditions throughout the state;
- Work with the California Department of Water Resources and stakeholders to develop new water use targets as part of a permanent conservation framework for urban agencies by January 2017;
- Permanently prohibit practices that waste potable water;
- Require that Water Shortage Contingency Plans be updated to address shortages of at least five years; and
- Work with the Department of Food and Agriculture to update requirements for Agricultural Water Management Plans and require completion of those plans by water suppliers with over 10,000 irrigated acres.

May 2016 Modified Emergency Regulation:

At the same time that the May 2016 Executive Order was issued, the State Board issued a proposal, included as Exhibit “B”, which would modify the regulation and extend it to January 2017. The proposed modification is largely based on an approach proposed by a group of stakeholders that included IRWD, Western Municipal Water District, Metropolitan Water District of Southern California, Eastern Municipal Water District, Moulton Niguel Water District, and Inland Empire Utilities Agency. The State Board’s proposal incorporates the following elements:

- Requires each water supplier to provide a self-certified assessment of the availability of its supplies to meet projected demands for the next three years;
- Requires each wholesaler to provide to its retailers water supply projections for the three-year period;
- Requires that the three-year projections use the same hydrology as water years 2012-13, 2013-14 and 2014-15;
- Requires that demand projections be based on the average of 2013 and 2014 demands;
- Maintains existing prohibitions on water waste, including those applicable to homeowner associations;
- Requires that suppliers continue to submit monthly reporting to the State Board of total potable production and residential gallons per capita per day; and
- Requires that suppliers that do not self-certify the availability of supplies to retain their current conservation standard.

Staff will prepare written comments regarding the State Board’s proposal which are due by May 16. The State Board will consider the proposed modifications at its Board meeting on May 18. If adopted, the modification to the regulation would become effective on June 1, 2016. Staff will have draft comments in advance of the Committee meeting that will be distributed for discussion purposes.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not Applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Executive Order B-37-16

Exhibit "B" – Proposed Text of Emergency Regulation

EXHIBIT "A"

Executive Department

State of California

EXECUTIVE ORDER B-37-16 MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

WHEREAS California has suffered through a severe multi-year drought that has threatened the water supplies of communities and residents, devastated agricultural production in many areas, and harmed fish, animals and their environmental habitats; and

WHEREAS Californians responded to the drought by conserving water at unprecedented levels, reducing water use in communities by 23.9% between June 2015 and March 2016 and saving enough water during this period to provide 6.5 million Californians with water for one year; and

WHEREAS severe drought conditions persist in many areas of the state despite recent winter precipitation, with limited drinking water supplies in some communities, diminished water for agricultural production and environmental habitat, and severely-depleted groundwater basins; and

WHEREAS drought conditions may persist in some parts of the state into 2017 and beyond, as warmer winter temperatures driven by climate change reduce water supply held in mountain snowpack and result in drier soil conditions; and

WHEREAS these ongoing drought conditions and our changing climate require California to move beyond temporary emergency drought measures and adopt permanent changes to use water more wisely and to prepare for more frequent and persistent periods of limited water supply; and

WHEREAS increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change; and

WHEREAS these activities are prioritized in the California Water Action Plan, which calls for concrete, measurable actions that "Make Conservation a California Way of Life" and "Manage and Prepare for Dry Periods" in order to improve use of water in our state.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular California Government Code sections 8567 and 8571, do hereby issue this Executive Order, effective immediately.

IT IS HEREBY ORDERED THAT:

The orders and provisions contained in my January 17, 2014 Emergency Proclamation, my April 25, 2014 Emergency Proclamation, Executive Orders B-26-14, B-28-14, B-29-15, and B-36-15 remain in full force and in effect except as modified herein.

State agencies shall update temporary emergency water restrictions and transition to permanent, long-term improvements in water use by taking the following actions.

USE WATER MORE WISELY

1. The State Water Resources Control Board (Water Board) shall, as soon as practicable, adjust emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions across the state. To prepare for the possibility of another dry winter, the Water Board shall also develop, by January 2017, a proposal to achieve a mandatory reduction in potable urban water usage that builds off of the mandatory 25% reduction called for in Executive Order B-29-15 and lessons learned through 2016.
2. The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020. (Senate Bill No. 7 (7th Extraordinary Session, 2009-2010).) These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide water conservation than existing requirements, and shall be based on strengthened standards for:
 - a. Indoor residential per capita water use;
 - b. Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data;
 - c. Commercial, industrial, and institutional water use; and
 - d. Water lost through leaks.

The Department and Water Board shall consult with urban water suppliers, local governments, environmental groups, and other partners to develop these water use targets and shall publicly issue a proposed draft framework by January 10, 2017.

3. The Department and the Water Board shall permanently require urban water suppliers to issue a monthly report on their water usage, amount of conservation achieved, and any enforcement efforts.

ELIMINATE WATER WASTE

4. The Water Board shall permanently prohibit practices that waste potable water, such as:
 - Hosing off sidewalks, driveways and other hardscapes;
 - Washing automobiles with hoses not equipped with a shut-off nozzle;
 - Using non-recirculated water in a fountain or other decorative water feature;
 - Watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and
 - Irrigating ornamental turf on public street medians.
5. The Water Board and the Department shall direct actions to minimize water system leaks that waste large amounts of water. The Water Board, after funding projects to address health and safety, shall use loans from the Drinking Water State Revolving Fund to prioritize local projects that reduce leaks and other water system losses.
6. The Water Board and the Department shall direct urban and agricultural water suppliers to accelerate their data collection, improve water system management, and prioritize capital projects to reduce water waste. The California Public Utilities Commission shall order investor-owned water utilities to accelerate work to minimize leaks.
7. The California Energy Commission shall certify innovative water conservation and water loss detection and control technologies that also increase energy efficiency.

STRENGTHEN LOCAL DROUGHT RESILIENCE

8. The Department shall strengthen requirements for urban Water Shortage Contingency Plans, which urban water agencies are required to maintain. These updated requirements shall include adequate actions to respond to droughts lasting at least five years, as well as more frequent and severe periods of drought. While remaining customized according to local conditions, the updated requirements shall also create common statewide standards so that these plans can be quickly utilized during this and any future droughts.
9. The Department shall consult with urban water suppliers, local governments, environmental groups, and other partners to update requirements for Water Shortage Contingency Plans. The updated draft requirements shall be publicly released by January 10, 2017.

10. For areas not covered by a Water Shortage Contingency Plan, the Department shall work with counties to facilitate improved drought planning for small water suppliers and rural communities.

IMPROVE AGRICULTURAL WATER USE EFFICIENCY AND DROUGHT PLANNING

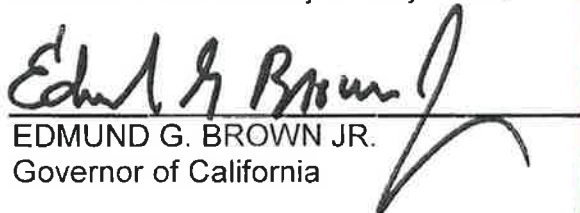
11. The Department shall work with the California Department of Food and Agriculture to update existing requirements for Agricultural Water Management Plans to ensure that these plans identify and quantify measures to increase water efficiency in their service area and to adequately plan for periods of limited water supply.
12. The Department shall permanently require the completion of Agricultural Water Management Plans by water suppliers with over 10,000 irrigated acres of land.
13. The Department, together with the California Department of Food and Agriculture, shall consult with agricultural water suppliers, local governments, agricultural producers, environmental groups, and other partners to update requirements for Agricultural Water Management Plans. The updated draft requirements shall be publicly released by January 10, 2017.

The Department, Water Board and California Public Utilities Commission shall develop methods to ensure compliance with the provisions of this Executive Order, including technical and financial assistance, agency oversight, and, if necessary, enforcement action by the Water Board to address non-compliant water suppliers.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

I FURTHER DIRECT that as soon as hereafter possible, this order be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this order.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 9th day of May 2016.


EDMUND G. BROWN JR.
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

EXHIBIT "B"

PROPOSED TEXT OF EMERGENCY REGULATION

Article 22.5. Drought Emergency Water Conservation.

Sec. 863. Findings of Drought Emergency.

(a) The State Water Resources Control Board finds as follows:

(1) On January 17, 2014, the Governor issued a proclamation of a state of emergency under the California Emergency Services Act based on drought conditions;

(2) On April 25, 2014, the Governor issued a proclamation of a continued state of emergency under the California Emergency Services Act based on continued drought conditions;

(3) On April 1, 2015, the Governor issued an Executive Order that, in part, directs the State Board to impose restrictions on water suppliers to achieve a statewide 25 percent reduction in potable urban usage through February, 2016; require commercial, industrial, and institutional users to implement water efficiency measures; prohibit irrigation with potable water of ornamental turf in public street medians; and prohibit irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems;

(4) On November 13, 2015, the Governor issued an Executive Order that directs the State Board to, if drought conditions persist through January 2016, extend until October 31, 2016 restrictions to achieve a statewide reduction in potable usage;

(5) On May 9, 2016, the Governor issued an Executive Order that directs the State Board to adjust and extend its emergency water conservation regulations through the end of January 2017 in recognition of the differing water supply conditions for many communities;

(56) The drought conditions that formed the basis of the Governor's emergency proclamations continue to exist; and

(67) The drought conditions will likely continue for the foreseeable future and additional action by both the State Water Resources Control Board and local water suppliers will likely be necessary to prevent waste and unreasonable use of water and to further promote conservation.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 102, 104, 105, and 275, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 864. End-User Requirements in Promotion of Water Conservation.

(a) To prevent the waste and unreasonable use of water and to promote water conservation, each of the following actions is prohibited, except where necessary to address an immediate health and safety need or to comply with a term or condition in a permit issued by a state or federal agency:

(1) The application of potable water to outdoor landscapes in a manner that causes runoff such that water flows onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures;

(2) The use of a hose that dispenses potable water to wash a motor vehicle, except where the hose is fitted with a shut-off nozzle or device attached to it that causes it to cease dispensing water immediately when not in use;

(3) The application of potable water to driveways and sidewalks;

(4) The use of potable water in a fountain or other decorative water feature, except where the water is part of a recirculating system;

(5) The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall;

~~(6) The serving of drinking water other than upon request in eating or drinking establishments, including but not limited to restaurants, hotels, cafes, cafeterias, bars, or other public places where food or drink are served and/or purchased;~~

(7) The irrigation with potable water of ornamental turf on public street medians; and

(8) The irrigation with potable water of landscapes outside of newly constructed homes and buildings in a manner inconsistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

~~(b) To promote water conservation, operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood language.~~

~~(e) Immediately upon this subdivision taking effect, all commercial, industrial and institutional properties that use a water supply, any portion of which is from a source other than a water supplier subject to section 864.5 or 865 of this article, shall target water use reductions commensurate with those required of the nearest urban water supplier under section 864.5 or, if applicable, section 865. shall either:~~

~~—— (1) Limit outdoor irrigation of ornamental landscapes or turf with potable water to no more than two days per week; or~~

~~—— (2) Reduce potable water usage supplied by sources other than a water supplier by 25 percent for the months of June 2015 through October 2016 as compared to the amount used from those sources for the same months in 2013.~~

~~(d) The taking of any action prohibited in subdivision (a) or (e), or the failure to take any action required in subdivision (b) or (c), is an infraction punishable by a fine of up to five hundred dollars (\$500) for each day in which the violation occurs. The fine for the infraction is in addition to, and does not supersede or limit, any other remedies, civil or criminal.~~

~~(1) To prevent the waste and unreasonable use of water and to promote water conservation, any homeowners' association or community service organization or similar entity is prohibited from:~~

~~(A) Taking or threatening to take any action to enforce any provision of the governing documents or architectural or landscaping guidelines or policies of a common interest development where that provision is void or unenforceable under section 4735, subdivision (a) of the Civil Code; or~~

(B) Imposing or threatening to impose a fine, assessment, or other monetary penalty against any owner of a separate interest for reducing or eliminating the watering of vegetation or lawns during a declared drought emergency, as described in section 4735, subdivision (c) of the Civil Code.

(2) As used in this subdivision:

(A) "Architectural or landscaping guidelines or policies" includes any formal or informal rules other than the governing documents of a common interest development.

(B) "Homeowners' association" means an "association" as defined in section 4080 of the Civil Code.

(C) "Common interest development" has the same meaning as in section 4100 of the Civil Code.

(D) "Community service organization or similar entity" has the same meaning as in section 4110 of the Civil Code.

(E) "Governing documents" has the same meaning as in section 4150 of the Civil Code.

(F) "Separate interest" has the same meaning as in section 4185 of the Civil Code.

(3) If a disciplinary proceeding or other proceeding to enforce a rule in violation of subdivision (ed)(1) is initiated, each day the proceeding remains pending shall constitute a separate violation of this regulation.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 4080, 4100, 4110, 4150, 4185, and 4735, Civil Code; Sections 102, 104, 105, 275, 350, and 10617, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 864.5. Self-Certification of Supply Reliability for Three Additional Years of Drought.

(a) To prevent the waste and unreasonable use of water and to meet the requirements of the Governor's May 9, 2016 Executive Order, each urban water supplier shall:

(1) Identify and report on a form provided by the Board, no later than June 15, 2016, the conservation standard that the supplier will be required to meet under this section;

(2) Identify and report on a form provided by the Board, no later than June 15, 2016, the data relied upon by the supplier to determine the conservation standard reported pursuant to this subdivision including, but not limited to identification of each source of supply the supplier intends to rely on and the quantity of water available under that source of supply given the assumptions of this section;

(3) Certify, no later than June 15, 2016, that the conservation standard reported pursuant to this subdivision is based on the information and assumptions identified in this section; and

(4) Beginning June 1, 2016, reduce its total potable water production by the percentage identified as its conservation standard in this section each month, compared to the amount used in the same month in 2013.

(b) Each urban water supplier's conservation standard pursuant to this section shall be the percentage by which the supplier's total potable water supply is insufficient to meet the total potable water demand in the third year after this section takes effect under the following assumptions:

(1) The next three years' precipitation is the same as it was in water years 2013-2015;

(2) The supplier's total potable water demand for each of the next three years will be the supplier's average annual total potable water production for the years 2013 and 2014;

(3) The supplier's total potable water supply shall include only water sources of supply available to the supplier that could be used for potable drinking water purposes;

(4) Each urban water supplier's conservation standard shall be calculated as a percentage and rounded to the nearest whole percentage point.

(c) Beginning June 1, 2016, each urban water supplier shall comply with the conservation standard it identifies and reports pursuant to subdivision (a).

(d) Compliance with the conservation standard reported pursuant to subdivision (a) shall be measured monthly and assessed on a cumulative basis through January 2017.

(e) Each urban water wholesaler shall calculate, to the best of its ability, and no later than June 8, 2016, the volume of water that it expects it would deliver to each urban water supplier in each of the next three years under the assumptions identified in subdivision (b), and post that calculation, and the underlying analysis, to a publicly-accessible webpage.

(f) Submitting any information pursuant to this subdivision that the person who submits the information knows or should have known is materially false is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(g) Any urban water supplier that does not comply with this section shall comply with the applicable conservation standard identified in section 865.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 102, 104, 105, 275, 350, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 865. Mandatory Actions by Water Suppliers.

(a) As used in this ~~section~~ article:

(1) "Distributor of a public water supply" has the same meaning as under section 350 of the Water Code, except it does not refer to such distributors when they are functioning solely in a wholesale capacity, but does apply to distributors when they are functioning in a retail capacity.

(2) "R-GPCD" means residential gallons per capita per day.

(3) "Total potable water production" means all potable water that enters into a water supplier's distribution system, excluding water placed into storage and not withdrawn for use during the reporting period, or water exported outside the supplier's service area.

(4) "Urban water supplier" means a supplier that meets the definition set forth in Water Code section 10617, except it does not refer to suppliers when they are functioning solely in a wholesale capacity, but does apply to suppliers when they are functioning in a retail capacity.

(5) "Urban water wholesaler" means a wholesaler of water to more than one urban water supplier.

(6) "Water year" means the period from October 1 through the following September 30. Where a water year is designated by year number, the designation is by the calendar year number in which the water year ends.

(b) In furtherance of the promotion of water conservation each urban water supplier shall:

(1) Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-user's exclusive control.

(2) Prepare and submit to the State Water Resources Control Board by the 15th of each month a monitoring report on forms provided by the Board. The monitoring report shall include the amount of potable water the urban water supplier produced, including water provided by a wholesaler, in the preceding calendar month and shall compare that amount to the amount produced in the same calendar month in 2013. The monitoring report shall specify the population served by the urban water supplier, the percentage of water produced that is used for the residential sector, descriptive statistics on water conservation compliance and enforcement efforts, the number of days that outdoor irrigation is allowed, and monthly commercial, industrial and institutional sector use. The monitoring report shall also estimate the gallons of water per person per day used by the residential customers it serves.

(c)(1) To prevent the waste and unreasonable use of water and to meet the requirements of the Governor's ~~November 13, 2015~~ May 9, 2016 Executive Order, each urban water supplier that does not submit a self-certification in compliance with section 864.5 shall reduce its total potable water production by the percentage identified as its conservation standard in this ~~subdivision~~ section. Each urban water supplier's conservation standard considers its service area's relative per capita water usage.

~~(2) Each urban water supplier whose source of supply does not include groundwater or water imported from outside the hydrologic region in which the water supplier is located, and that has a minimum of four years' reserved supply available, may submit to the Executive Director for approval a request that, in lieu of the reduction that would otherwise be required under paragraphs (3) through (10), the urban water supplier shall reduce its total potable water production by 4 percent for each month as compared to the amount used in the same month in 2013. Any such request shall be accompanied by information showing that the supplier's sources of supply do not include groundwater or water imported from outside the hydrologic region and that the supplier has a minimum of four years' reserved supply available.~~

(32) Each urban water supplier whose average July-September 2014 R-GPCD was less than 65 shall reduce its total potable water production by 8 percent for each month as compared to the amount used in the same month in 2013.

(43) Each urban water supplier whose average July-September 2014 R-GPCD was 65 or more but less than 80 shall reduce its total potable water production by 12 percent for each month as compared to the amount used in the same month in 2013.

(54) Each urban water supplier whose average July-September 2014 R-GPCD was 80 or more but less than 95 shall reduce its total potable water production by 16 percent for each month as compared to the amount used in the same month in 2013.

(65) Each urban water supplier whose average July-September 2014 R-GPCD was 95 or more but less than 110 shall reduce its total potable water production by 20 percent for each month as compared to the amount used in the same month in 2013.

(76) Each urban water supplier whose average July-September 2014 R-GPCD was 110 or more but less than 130 shall reduce its total potable water production by 24 percent for each month as compared to the amount used in the same month in 2013.

(87) Each urban water supplier whose average July-September 2014 R-GPCD was 130 or more but less than 170 shall reduce its total potable water production by 28 percent for each month as compared to the amount used in the same month in 2013.

(98) Each urban water supplier whose average July-September 2014 R-GPCD was 170 or more but less than 215 shall reduce its total potable water production by 32 percent for each month as compared to the amount used in the same month in 2013.

(109) Each urban water supplier whose average July-September 2014 R-GPCD was 215 or more shall reduce its total potable water production by 36 percent for each month as compared to the amount used in the same month in 2013.

(d)(1) Beginning June 1, 2015, each urban water supplier that does not submit a self-certification in compliance with section 864.5 shall comply with the conservation standard specified in subdivision (c), with any modifications to the conservation standard pursuant to subdivision (f) applying beginning March 1, 2016.

(2) Compliance with the requirements of this subdivision shall be measured monthly and assessed on a cumulative basis through ~~October 2016~~ January 2017.

(e)(1) Each urban water supplier that provides potable water for commercial agricultural use meeting the definition of Government Code section 51201, subdivision (b), may subtract the amount of water provided for commercial agricultural use from its potable water production total, provided that any urban water supplier that subtracts any water provided for commercial agricultural use from its total potable water production shall:

(A) Impose reductions determined locally appropriate by the urban water supplier, after considering the applicable urban water supplier conservation standard specified in subdivision (c), for commercial agricultural users meeting the definition of Government Code section 51201, subdivision (b) served by the supplier;

(B) Report its total potable water production pursuant to subdivision (b)(2) of this section, the total amount of water supplied for commercial agricultural use, and shall identify the reduction imposed on its commercial agricultural users and each recipient of potable water for commercial agricultural use;

(C) Certify that the agricultural uses it serves meet the definition of Government Code section 51201, subdivision (b); and

(D) Comply with the Agricultural Water Management Plan requirement of paragraph 12 of the April 1, 2015 Executive Order for all commercial agricultural water served by the supplier that is subtracted from its total potable water production.

(2) Submitting any information pursuant to subdivision (e)(1)(B) or (C) of this section that is found to be materially false by the Board is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(f) In consideration of the differences in climate affecting different parts of the state, growth experienced by urban areas and significant investments that have been made by some suppliers towards creating new, local, drought-resilient sources of potable water supply, an urban water supplier's conservation standard identified in subdivision (c) shall be reduced by an amount, not to exceed eight (8) percentage points total, as follows:

(1) For an urban water supplier whose service area evapotranspiration (ETo) for the months of July through September exceeds the statewide average evapotranspiration, as determined by the Board, for the same months by five (5) percent or more, the supplier's conservation standard identified in subdivision (c) shall be reduced:

(A) By two (2) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by five (5) percent or more but less than ten (10) percent;

(B) By three (3) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by ten (10) percent or more but less than twenty (20) percent;

(C) By four (4) percentage points if the supplier's service area evapotranspiration exceeds the statewide average by twenty (20) percent or more.

(D) Statewide average evapotranspiration is calculated as the arithmetic mean of all urban water suppliers' service area default evapotranspiration values for the months of July through September. Default service area evapotranspiration will be based on the California Irrigation Management System (CIMIS) ETo Zones Map zone for which the supplier's service area has the greatest area of overlap. In lieu of applying its default service area evapotranspiration, a supplier may use specific data from CIMIS stations within its service area that have at least a five-year period of record, or a three year continuous period of record, to identify a more specifically-applicable evapotranspiration for its service area. If no CIMIS station exists within the supplier's service area, a weather station of comparable accuracy, meeting the preceding period of record requirements, may be used. To qualify for the in-lieu climate adjustment, the supplier shall submit the following data to the Board by March 15, 2016 for each station: station ID; station location; and monthly average evapotranspiration, in inches per month, for July, August, and September for either the five-year period of record or the three-year continuous period of record.

(2) To account for water efficient growth experienced in the state since 2013, urban water suppliers' conservation standards shall be reduced by the product of the percentage change in potable water production since 2013 and the percentage reduction in potable water use required pursuant to subdivision (c), rounded to the nearest whole percentage point. Change in potable water production since 2013 shall be calculated as the sum of the following:

(A) The number of additional permanent residents served since January 1, 2013, multiplied by the average residential water use per person for that supplier's service area during the months of February through October, 2015, in gallons; and

(B) The number of new commercial, industrial and institutional connections since January 1, 2013, multiplied by the average commercial, industrial and institutional water use per connection for that supplier's service area during the months of February through October, 2015, in gallons.

(C) To qualify for the growth credit the supplier shall submit to the Board the following data by March 15, 2016: the number of additional permanent residents served since January 1, 2013 and the number of new commercial, industrial and institutional connections since January 1, 2013.

(3) For an urban water supplier that supplies, contracts for, or otherwise financially invests in, water from a new local, drought-resilient source of supply, the use of which does not reduce the water available to another legal user of water or the environment, the conservation standard identified in subdivision (c) shall be reduced:

(A) By one (1) percentage point if the supplier's qualifying source of supply is one (1) percent or more but less than two (2) percent of the supplier's total potable water production;

(B) By two (2) percentage points if the supplier's qualifying source of supply is two (2) percent or more but less than three (3) percent of the supplier's total potable water production;

(C) By three (3) percentage points if the supplier's qualifying source of supply is three (3) percent or more but less than four (4) percent of the supplier's total potable water production;

(D) By four (4) percentage points if the supplier's qualifying source of supply is four (4) percent or more but less than five (5) percent of the supplier's total potable water production;

(E) By five (5) percentage points if the supplier's qualifying source of supply is five (5) percent or more but less than six (6) percent of the supplier's total potable water production;

(F) By six (6) percentage points if the supplier's qualifying source of supply is six (6) percent or more but less than seven (7) percent of the supplier's total potable water production;

(G) By seven (7) percentage points if the supplier's qualifying source of supply is seven (7) percent or more but less than eight (8) percent of the supplier's total potable water production;

(H) By eight (8) percentage points if the supplier's qualifying source of supply is eight (8) percent or more of the supplier's total potable water production.

(I) To qualify for this reduction the supplier must certify, and provide documentation to the Board upon request demonstrating, the percent of its total potable water production that comes from a local, drought-resilient source of supply developed after 2013, the supplier's investment in that local, drought-resilient source of supply, and that the use of that supply does not reduce the water available to another legal user of water or the environment. To qualify for this reduction an urban water supplier shall submit the required certification to the Board by March 15, 2016.

(J) Certifications that do not meet the requirements of subdivision (f)(3)(I), including certifications for which documentation does not support that the source of supply is a local, drought-resilient source of supply, the use of which does not reduce the water available to another legal user of water or the environment, will be rejected. Submitting a certification or supporting documentation pursuant to subdivision (f)(3)(I) that is found to be materially false by the Board is a violation of this regulation, punishable by civil liability of up to five hundred dollars (\$500) for each day in which the violation occurs. Every day that the error goes uncorrected constitutes a separate violation. Civil liability for the violation is in addition to, and does not supersede or limit, any other remedies, civil or criminal.

(4) No urban water supplier's conservation standard pursuant to this section shall drop below eight (8) percent as a consequence of the reductions identified in this subdivision. ~~No reduction pursuant to this subdivision shall be applied to any urban water supplier whose conservation standard is four (4) percent based on subdivision (e)(2).~~

~~(g)(1)~~ To prevent waste and unreasonable use of water and to promote water conservation, each distributor of a public water supply that is not an urban water supplier shall ~~take one or more of the following actions:~~

(1) Provide prompt notice to a customer whenever the supplier obtains information that indicates that a leak may exist within the end-user's exclusive control; and

~~— (A) Limit outdoor irrigation of ornamental landscapes or turf with potable water by the persons it serves to no more than two days per week; or~~

~~— (B) Reduce by 25 percent its total potable water production relative to the amount produced in 2013.~~

~~(2) Each distributor of a public water supply that is not an urban water supplier shall submit~~ Submit a report by ~~September~~ December 15, 2016, on a form provided by the Board, that ~~either confirms compliance with subdivision (g)(1)(A) or identifies total~~ potable water production, by month, from December, 2015 through ~~August~~ November, 2016, ~~and total potable water production, by month, for the same months in 2013, and~~ any actions taken by the supplier to encourage or require its customers to conserve water.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 102, 104, 105, 275, 350, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

Sec. 866. Additional Conservation Tools.

(a)(1) To prevent the waste and unreasonable use of water and to promote conservation, when a water supplier does not meet its conservation standard required by section 864.5 or section 865 the Executive Director, or the Executive Director's designee, may issue conservation orders requiring additional actions by the supplier to come into compliance with its conservation standard.

(2) A decision or order issued under this article by the Board or an officer or employee of the Board is subject to reconsideration under article 2 (commencing with section 1122) of chapter 4 of part 1 of division 2 of the Water Code.

(b) The Executive Director, or his designee, may issue an informational order requiring water suppliers, or commercial, industrial or institutional properties that receive any portion of their supply from a source other than a water supplier subject to section 864.5 or 865, to submit additional information relating to water production, water use or water conservation. The failure to provide the information requested within 30 days or any additional time extension granted is a violation subject to civil liability of up to \$500 per day for each day the violation continues pursuant to Water Code section 1846.

(c) Orders issued under previous versions of this ~~subdivision~~section shall remain in effect and shall be enforceable as if adopted under this version. Changes in the requirements of this article do not operate to void or excuse compliance with orders issued before those requirements were changed.

Authority: Section 1058.5, Water Code.

References: Article X, Section 2, California Constitution; Sections 100, 102, 104, 105, 174, 186, 187, 275, 350, 1051, 1122, 1123, 1825, 1846, 10617 and 10632, Water Code; *Light v. State Water Resources Control Board* (2014) 226 Cal.App.4th 1463.

May 12, 2016

Prepared by: K. Welch/E. Akiyoshi

Submitted by: F. Sanchez/P. Weghorst *FW*

Approved by: Paul Cook *PC*

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

VERIFICATIONS OF SUFFICIENT WATER SUPPLY FOR THE WEST ALTON PARCEL AND EL TORO 100-ACRE PARCEL DEVELOPMENTS

SUMMARY:

In February 2016, staff received two requests from the County of Orange to complete Verifications of Sufficient Water Supply (WSV) for the West Alton Parcel and the El Toro 100-Acre Parcel developments located within the former Marine Corps Air Station (MCAS) El Toro Base. Staff has completed the WSVs for each of the projects and recommends Board approval of the documents.

BACKGROUND:

The County of Orange's proposed West Alton Parcel Development (West Alton) and the El Toro 100-Acre Parcel Development (El Toro) projects are both located within the City of Irvine's Planning Area 51 on the former MCAS El Toro Base just outside of the City's Orange County Great Park (Great Park) boundary. In February 2016, staff received requests to prepare WSVs for each of the projects. A location map of the West Alton and El Toro projects is attached as Exhibit "A".

On April 15, 2015, the Board approved separate Water Supply Assessments (WSA) for each of the proposed projects. The West Alton project WSA included 970 dwelling units which the County has reduced by 168 to 802 proposed dwelling units. The El Toro project includes 2,103 dwelling units and 2.1 million square feet of retail and office space and one hotel which is consistent with the approved WSA.

As required under SB 221, and as part of the tract map approval process for projects including 500 or more dwelling units, the County has requested a WSV be prepared for its West Alton and El Toro projects. Separate WSVs have been completed for the West Alton and El Toro proposed projects and are provided as Exhibit "B" and Exhibit "C" respectively. The WSVs for these projects are based upon the approved WSAs containing IRWD's determination that a sufficient water supply is available. SB 221 also requires several elements be included in the WSV that are not covered or required in the WSA. These elements are primarily covered in Sections 1(b)(ii), 1(b)(iii) and 1(b)(iv) of the "Detailed Verification" section in each of the attached WSVs. This information, together with the respective WSAs approved by IRWD in 2015, reflects IRWD's confirmation that the project water demands, together with demands from any other developments that have previously received WSVs or will-serves, or other projects that have come to IRWD's attention either through developers or through the respective land use agency approval process, are, in the aggregate, within the demands identified by that WSA. In

accordance with this procedure, the attached WSVs are based on the respective WSAs and information contained in the WSVs.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This study is exempt from the California Environmental Quality Act as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262 which provides exemption for planning studies.

RECOMMENDATION:

That the Board approve the Verification of Sufficient Water Supply for the West Alton Parcel Development and the Verification of Sufficient Water Supply for the El Toro 100-Acre Parcel Development.

LIST OF EXHIBITS:

Exhibit "A" – Location Map

Exhibit "B" – Verification of Sufficient Water Supply for West Alton Parcel Development

Exhibit "C" – Verification of Sufficient Water Supply for the El Toro 100-Acre Parcel Development



el toro and west alton | local context



Prepared by:

 August 2014

EXHIBIT "B"

IRVINE RANCH WATER DISTRICT VERIFICATION OF SUFFICIENT WATER SUPPLY Government Code §66473.7

To: (Lead Agency)
County of Orange
333 W. Santa Ana Blvd., Third Floor
Santa Ana, CA 92701-4062

(Applicant)
County of Orange
333 W. Santa Ana Blvd., Third Floor
Santa Ana, CA 92701-4062

Project Information

Project Title: West Alton Parcel Development (see Exhibit A)
☐ Tentative Map Application No. _____ ☐ Verification requested prior to tentative map application

Number of residential units in Project: 803
Non-residential uses in Project (type, no. of employees, sq. ft. of floor space, acreage): (see Exhibit B)
Acreage to be devoted to landscape (excluding individual residence yards): (see Exhibit B)

☐ The projected water demand for the Project was included in IRWD's most recently adopted urban water management plan.

☒ A water supply assessment that included the Project was adopted by IRWD on April 15, 2015. A copy is attached hereto and incorporated herein by this reference (see Exhibit C).

Verification of Availability of Sufficient Water Supply

On _____, 2016 the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within Verification and made the following determination regarding the above-described Project:

- ☐ A sufficient water supply is available for the Project.
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.
- ☐ A sufficient water supply is not available for the Project.

The foregoing determination is based on the following Water Supply Verification Information and supporting information in the records of IRWD.

Signature _____ Date _____ Title _____

WATER SUPPLY VERIFICATION INFORMATION

Purpose of Verification

Irvine Ranch Water District ("IRWD") is the public water system that will supply water service (both potable and nonpotable) to the project identified on the cover page of this verification (the "Project"). As a public water system, IRWD is required by Section 66473.7 of the Government Code (the "Verification Law") to provide the County with a verification of the availability of a sufficient water supply for non-exempt subdivisions of more than 500 residential units in conjunction with (or prior to) the County's approval of a tentative map. The County has found the Project to include a subdivision that is subject to verification and not exempt under the Verification Law.

The Verification Law provides that a verification shall be supported by substantial evidence, which may include, but is not limited to, any of the following (i) IRWD's most recently adopted urban water management plan; (ii) a water supply assessment previously adopted for the project under Water Code 10910, *et seq.*; or (iii) other analytical information substantially similar to the assessment of service reliability required by Water Code Section 10635 to be included in the urban water management plan. The Verification Law also specifies the elements to be contained in a verification with respect to (i) supplies relied upon that are not currently available; (ii) reasonably foreseeable impacts of the subdivision on the availability of water resources for agricultural and industrial uses within IRWD's service area that are not currently receiving water; and (iii) rights to extract additional groundwater needed to supply the subdivision.

A verification does not entitle the Project to service or to any right, priority or allocation in any supply, capacity or facility, or affect IRWD's obligation to provide service to its existing customers or any potential future customers. In order to receive service, the Project applicant is required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

Methodology of Verification for Project With Prior Water Supply Assessment

As referenced on the cover page of this verification (the "Verification"), the Project was included within an assessment of water supply approved by IRWD. The Assessment contained IRWD's determination that a sufficient water supply is available for the Project. As described in the Assessment, IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area. However, upon approval of each assessment containing a determination of a sufficient supply, IRWD attributes the demands identified by that assessment to IRWD's existing and committed demand. Thereafter, each verification approved by IRWD for a subdivision covered by that assessment is based on the assessment, and reflects IRWD's confirmation that the water demands of the subdivision, together with any other subdivisions or developments that have previously received verifications, will-serves or other approval by IRWD under the same assessment, are, in the aggregate, within the demand identified by that assessment. In accordance with that procedure, this Verification is based on the Assessment. The Assessment's determination of sufficiency extends through 2035. In addition, this Verification includes the elements required by the Verification Law that are not included within the required contents of assessments.

Supporting Documentation

As noted above, the principal supporting document for this Verification is the Assessment. Other documentation supports the Assessment and this Verification: IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent update was adopted in June 2011 and the next update for 2015 is anticipated in July 2016. The project water demand for the Project will be included in IRWD's 2015 UWMP update.

In addition to the Assessment, the most recent WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 5 of this Verification. This includes the Metropolitan Water District of Southern California's Regional Urban Water Management Plan detailing an evaluation by Metropolitan Water District of Southern California (MWD), the wholesaler of IRWD's imported water supplies, of the reliability of MWD's supplies. (MWD 2015 UWMP dated March 2016 (MWD UWMP)).

The Verification Law requires written proof of entitlement for "not currently available" (referred to herein as "under development") supplies. The Assessment includes such information for both currently available and under development supplies. Due to the number of contracts, statutes and other documents comprising IRWD's written proof of entitlement to its water supplies, in lieu of attachment of such items, they are identified by title and summarized in Section 2 of the Assessment. Copies of the summarized items have been provided to the County.

Sufficiency Calculation Methodology

The methodology for IRWD's comparison of its demands and supplies is set forth in the Assessment, in the section entitled "Assessment Methodology" and subsections thereof entitled "water use factors; dry-year increases;" "planning horizon;" "assessment of demands;" "assessment of supplies;" and "comparison of demand and supply."

Detailed Verification

1. Determination of sufficiency of water supply

(a) Supply and demand comparison

See the Assessment, Section 1, incorporated herein by reference.

(b) Factors considered in determining the sufficiency of the water supply:

(i) The availability of water supplies over a historical record of at least 20 years.

Quantities received in prior years from existing sources identified in (a)(1):

Source	1985	1990	1995	2000	2005	2010	2015
Potable - imported	43,320	44,401	28,397	36,777	19,306	15,227	12,790
Potable - groundwater	38	10,215	20,020	20,919	37,160	42,089	46,770
Nonpotable - recycled	12,399	11,589	10,518	14,630	15,296	20,847	22,866
Nonpotable - groundwater	36	816	1,834	2,890	2,285	3,761	4,063
Nonpotable - native	3,587	2,778	5,980	4,949	7,251	814	2,826
Total	71,639	94,699	69,082	96,508	86,602	82,738	89,315

See also the Assessment, Section 1, incorporated herein by reference.

(ii) The applicability of a water shortage contingency analysis prepared pursuant to Water Code Section 10632 that includes actions to be undertaken by IRWD in response to water supply shortages.

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect the implementation of water shortage emergency measures. In February 2009, IRWD updated Section 15 of its Rules and Regulations – Water Conservation and Water Supply Shortage Program and also updated its Water Shortage Contingency Plan, which is a supporting document for Section 15. The Water Shortage Contingency Plan was further revised on October 13, 2014, and is currently being updated as part of IRWD's UWMP 2015 update (expected to be adopted in June 2016). Section 15 of the Rules and Regulations serves as IRWD's "conservation ordinance". As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are assumed to be in use to the maximum extent possible during declared shortage levels. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment to account for any water savings that could be achieved by these measures.

(iii) Reduction by IRWD in water supply allocated to a specific water use sector, pursuant to a resolution, ordinance or contract uses.

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect any allocated reductions by IRWD. As noted under the preceding item (ii), IRWD's water shortage contingency plan and Rules and Regulations provide for voluntary and mandatory water conservation measures that could be invoked in declared water shortage emergencies. These include reductions to certain water uses. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment to account for water savings that could be achieved by any allocated reductions.

With respect to items (ii) and (iii) above, it is noted that MWD has in effect a management plan for dealing with periodic surplus and shortage conditions, known as Metropolitan Report No. 1150, *Water Surplus and Drought Management Plan*, and as also described in the MWD UWMP. MWD's demand projections account for the effects of long-term conservation best management practices.

Recent Actions Related to Drought Conditions. In response to the historically dry conditions throughout the state of California, on April 1, 2015, Governor Brown issued an Executive Order directing the State Water Resources Control Board (SWRCB) to impose restrictions to achieve an aggregate statewide 25 percent reduction in potable water use through February 2016. The Governor's Order also includes mandatory actions aimed at reducing water demands, with a particular focus on outdoor water use. On May 5, 2015, the SWRCB adopted regulations which required that IRWD achieve a 16% reduction in potable water use from the 2013 levels. On November 13, 2015, Governor Brown issued an Executive Order directing the SWRCB to extend the 2015 Emergency Regulation through October 31, 2016 if drought conditions continued. On February 2, 2016, the SWRCB adopted an extended and modified Emergency Regulation. As a result of the modification, IRWD's mandated reduction was changed from 16% to 9% effective March 1, 2016. On April 14, 2015, MWD approved actions to implement the Water Supply Allocation Plan at a level 3 Regional Shortage Level and a 15% reduction in regional deliveries effective July 1, 2015, through June 30, 2016. IRWD has and will continue to implement actions to reduce potable water demands during the drought; however, this does not affect IRWD's long-term supply capability to meet the demands.

As discussed under Assessment "IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD", IRWD has effectively analyzed an imported water supply reduction as shown in Assessment Figures 1a, 2a, 3a. These Figures do not reflect a reduction in demands thus representing a more conservative view of IRWD's supply capability. In particular, the reduction in demand mandated by Senate Bill 7 in 2010, requiring urban retail water suppliers to establish water use targets to achieve a 20% reduction in daily per capita water use by 2020, has not been factored into the demands in this analysis. Similarly, notwithstanding the Governor's order, IRWD's conservative supply-sufficiency analysis in Assessment Figures 1a, 2a and 3a does not include the ordered reduction in potable demands.

(iv) The amount of water that IRWD can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer, including programs identified under federal, state and local water initiatives such as CALFED and Colorado River tentative agreements, based on the inclusion of information with respect to such supplies in Section 2, below.

Local. IRWD directly relies (for a portion of its full build-out annual demand in single and multiple dry-year projections) on the following under development supplies (see 1(a), above): the Irvine Wells (see the Assessment, Section 2(b)(1)(vi) – “POTABLE SUPPLY – GROUNDWATER”). In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan (“LTFP”) which provides updated information and was received by the OCWD Board in July 2009 and updated in 2014. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft which provides sufficient storage space to accommodate increased supplies from one wet year while also provides enough water in storage to offset decreased supplies during a two- to three year drought. (Source: “Evaluation of Orange County Groundwater Basin Storage and Operational Strategy”, as referenced in *2014-2015 Engineer’s Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*).

With the implementation of OCWD’s preferred projects, the Basin yield in the year 2030 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage (“BPP”) that OCWD sets based on these factors.

IRWD’s own recycled water expansion program is also shown as an under development supply. IRWD also has a currently available recycled water supply from its own existing recycling program. The recycled water supplies are discussed in Section 2 below (see the Assessment, Section 1 – Figures 5, 6, 7 and 8 (supplies denominated “MWRP” and “LAWRP”), Section 2(a), and Section 2(b)(1) - “NONPOTABLE SUPPLY – RECLAIMED”), IRWD has completed construction of the Michelson Water Recycling Plant Phase 2 Capacity Expansion Project to tertiary capacity of 28 million gallons per day (MDG). With this expansion, IRWD increased its tertiary treatment capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand in the year 2035. Additional recycling capacity will augment local nonpotable supplies and improve reliability.

As noted in the Assessment, IRWD’s demand projections reflect the effect of IRWD’s water conservation pricing and other conservation practices; in particular, IRWD’s water use factors used to derive its demand projections are based on average water use and incorporate the effect of IRWD’s tiered-rate conservation pricing and its other long-term water conservation programs. System losses at a rate of approximately 5% are built into the water use factors. As discussed above, IRWD’s supply and demand projections do not take into account water savings that could be achieved by water shortage emergency measures.

Imported. MWD, the supplier of IRWD’s imported supplies, relies upon several of the listed projects and programs. MWD supports and provides financial incentives to water recycling, groundwater recovery, water conservation, ocean desalination and other local resource development programs. MWD calculates its demand forecast by first estimating total retail demand for the region and then factoring in impacts of conservation. Next, it derives

projections of local supplies using data on current and expected local supply programs and Integrated Resource Planning (IRP) Local Resource Program Target. The difference between the resulting local demands is the expected regional demand on MWD. These estimates of demands on MWD were developed for a single dry year, multiple dry years and average years. (MWD UWMP, see Tables pages 2-14 through 2-16). In the MWD UWMP, MWD states it has supply capability that would be sufficient to meet expected demands from 2020 to 2040 under single dry year, multiple dry year and normal year conditions.

Also, In January 2016, MWD adopted its 2015 IRP Update. In the 2015 IRP Update, MWD continued its adaptive management strategy and integrated future supply actions to improve the viability of potential contingency resources as needed, and to position the region to effectively implement these resources in a timely manner. The 2015 IRP finds additional action is needed in investments in conservation, local supplies, the California WaterFix, and stabilizing Colorado River supplies. Among the supply actions, MWD will continue to work collaboratively with state and federal agencies on the WaterFix, maximize its storage and transfer approach, and continue to develop and protect local supplies and conservation.

MWD also relies upon the implementation of the CALFED Bay-Delta Program, as an under development supply, to attain an increase in its existing Bay-Delta deliveries. Other under water development programs relied upon by MWD include: additional transfers and storage agreements such as IID/MWD Conservation Project, ICS Program, Agreements with CVWD, Additional Palo Verde Irrigation District Transfers, SNWA Interstate Agreement, Desert Water/CVWD Transfer, Kern County storage programs, AVEK Exchange Program, Mojave Storage Program, North of Delta/In-Delta Transfers, Yuba Accord Purchase, San Bernardino Valley Water Storage Program, Central Valley Transfer Programs, (MWD UWMP, Sections 3.1, 3.2, and 3.3) See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to MWD's current and under development supplies.

In addition, as noted in the Assessment, IRWD has developed water banking projects in Kern County, California which be called upon for delivery of supplemental banked water to IRWD, if needed, in response to shortage conditions or potential water supply interruptions.

2. Required information concerning *under-development* supplies

(a) Written contracts or other proof of valid rights to the identified supplies

See the Assessment, Section 2(b)(1), incorporated herein by reference. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to written contracts and other proof related to MWD's supplies.

(b) Adopted capital outlay program to finance delivery of the supplies

See the Assessment, Section 2(b)(2), incorporated herein by reference. With respect to future groundwater wells (PR Nos. 1100, 7140, 1402) and Baker Water Treatment Plant (PR No. 5027), IRWD adopted its fiscal year 2016-17 capital budget on April 25, 2016 (Resolution No. 2016-7), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) IRWD has approximately \$615.2 million (water) and \$784.8 million (wastewater) of unissued, voter-approved bond authorization. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's

supplies.

(c) Federal, state and local permits to construct of delivery infrastructure

See the Assessment, Section 2(b)(3), incorporated herein by reference. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to permits related to MWD's supplies.

(d) Regulatory approvals for conveyance or delivery of the supplies

See the Assessment, Section 2(b)(4), incorporated herein by reference. In addition, future recycling plant expansion will require approval of amendments to IRWD's permits issued by the Regional Water Quality Control Board. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

3. Foreseeable impacts of the Project on the availability of water for agricultural and industrial uses in IRWD's service area not currently receiving water

Based on city planning and other information known to IRWD, there are no agricultural or industrial uses in IRWD's service area that are not within either existing and committed demand or future demand, both of which are included within the supply and demand comparison and determination of sufficiency (see 1(a)).

4. Information concerning the right to extract additional groundwater included in the supply identified for the Project:

Where the water supply for the Project includes groundwater, the verification is required to include an evaluation of the extent to which IRWD or the landowner has the right to extract the additional groundwater needed to supply the Project. See the Assessment, Section 2(b)(1), "POTABLE SUPPLY – GROUNDWATER" and "NONPOTABLE SUPPLY – GROUNDWATER," and Section 4, incorporated herein by reference.

5. References

Water Resources Master Plan, Irvine Ranch Water District, Updated 2007

Section 15 of the Rules and Regulations – Water Conservation and Water Supply Shortage Program, Irvine Ranch Water District, February 2009

Water Shortage Contingency Plan, Irvine Ranch Water District, February 2009

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

Southern California's Integrated Water Resources Plan, Metropolitan Water District of Southern California, March 1996

Proposed Framework for Metropolitan Water District's Delta Action Plan, Metropolitan Water District of Southern California, May 8, 2007

2007 IRP Implementation Report, Metropolitan Water District of Southern California, October 7, 2007

Board Letter, Action plan for updating the Integrated Resources Plan, Metropolitan Water District of Southern California, December 11, 2007

2010 Integrated Resources Plan Update, Metropolitan Water District of Southern California, October 2010

2015 Integrated Resources Plan Update, Metropolitan Water District of Southern California, January 2016

2015 Urban Water Management Plan, Metropolitan Water District of Southern California, March 2016

Master Plan Report, Orange County Water District, April, 1999

Groundwater Management Plan, Orange County Water District, March, 2004

Final Draft Long-Term Facilities Plan, Orange County Water District, January 2006

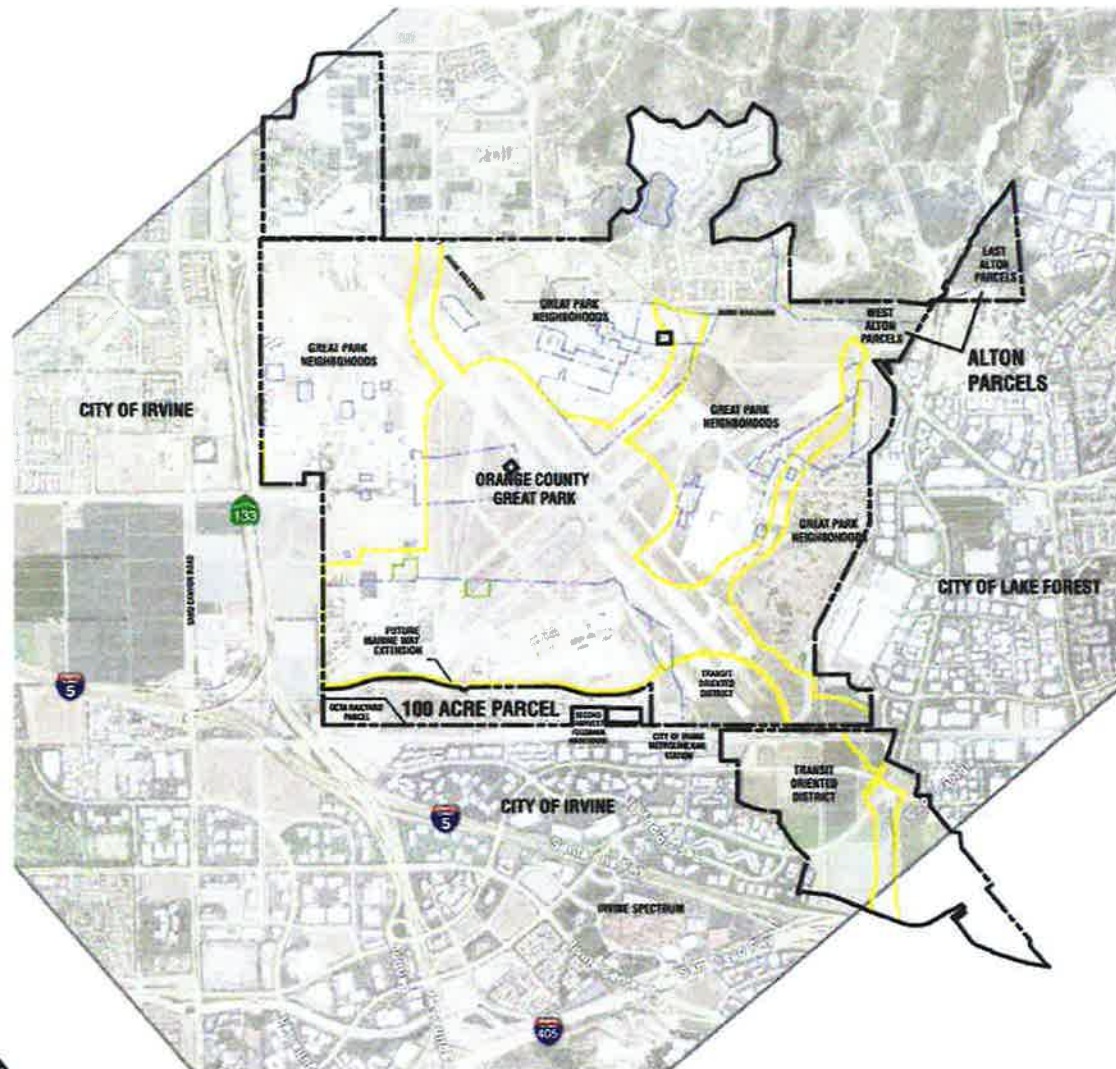
Long-Term Facilities Plan 2014 Update, Orange County Water District, November 2014

2014-2015 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2016

Progress on Incorporating Climate Change into Management of California's Water Resources, California Department of Water Resources, July 2006

Exhibit A

Depiction of Project Area



- Orange County Great Park Boundary
- Former USMC El Toro Base
- Existing Dept. of Navy Lease in Furtherance of Conveyance (LIFOC) Areas



JOSE BLANCO
PLANNING
CONSULTANTS

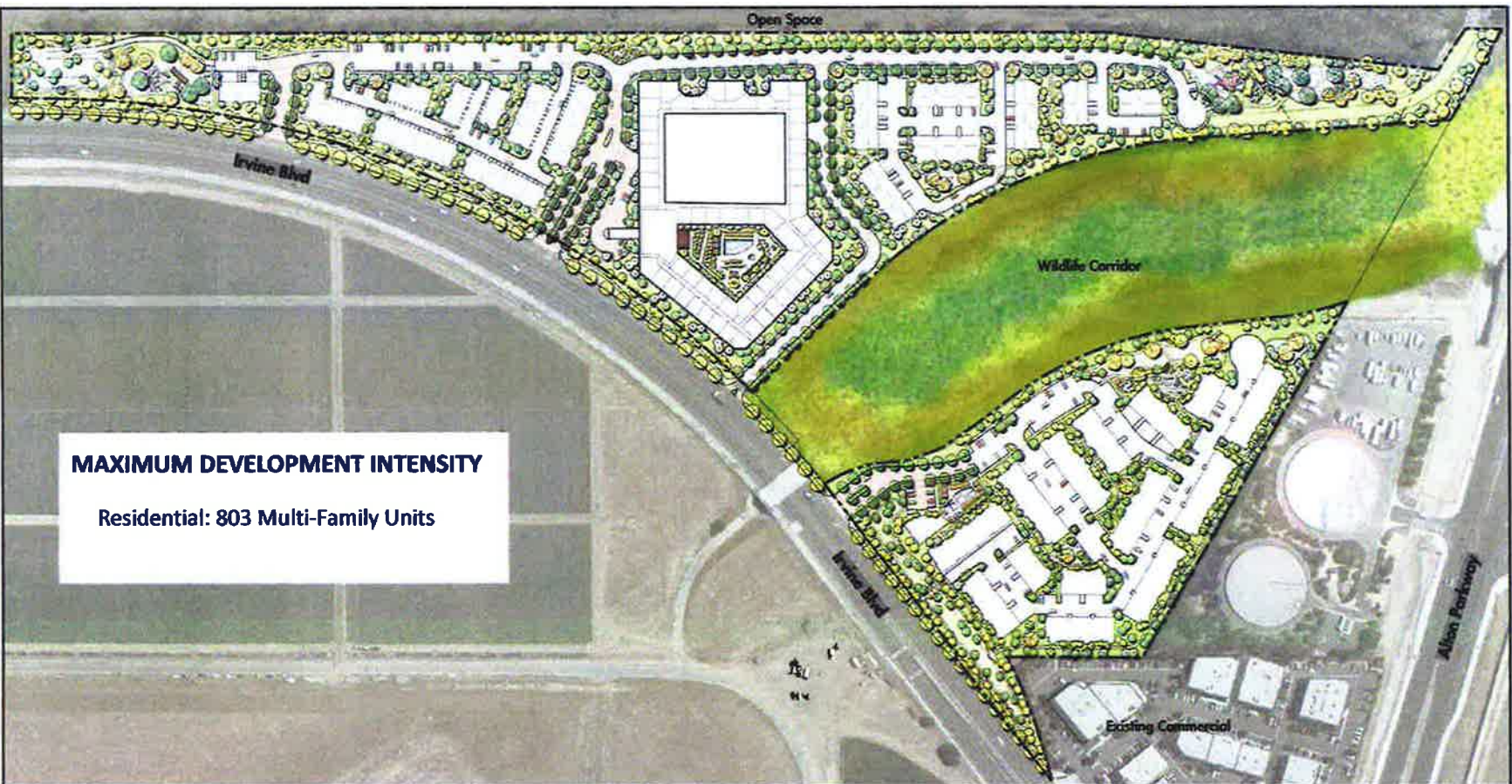
TAIT
ARCHITECTS
PLANNERS
12.1.2011

VICINITY MAP

ORANGE COUNTY PUBLIC WORKS | USMC EL TORO PARCELS

JANUARY 21, 2011 | FIGURE 1

Exhibit 3.2, Conceptual Site Plan



MAXIMUM DEVELOPMENT INTENSITY
Residential: 803 Multi-Family Units



Exhibit B

Non-residential Uses Included in Project



County of Orange

County Executive Office

February 16, 2016

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA
92619-7000

RE: Request for Verification of Sufficient Water Supplies (Government Code
§66473.7(b)(1))

West Alton Parcel

The County of Orange hereby requests verification of the availability of a sufficient water supply for the below-described project. Under Government Code §66473.7(b)(1), written verification of the availability of a sufficient water supply is required in conjunction with or prior to the approval of any tentative map that includes a residential subdivision of more than 500 dwelling units, subject to certain exemptions.

The County has determined that the subject project (1) includes a subdivision meeting the criteria requiring verification of availability of sufficient water supply and (2) does not fall within one of the statutory exemptions for previously developed urban sites, sites surrounded by urban use, or low-income housing sites.

Proposed Project Information

Project Title: West Alton Parcel Development

Location of project: In the City of Irvine, north east of Irvine Blvd and north of Alton Parkway

Planning Area(s): PA51

(Enclose a project map and exhibits)

Was the project included as part of a previously completed Water Supply Assessment (Water Code §10910)? ☒ yes ☐ no

If yes, date and project title of Water Supply Assessment _____

If no, state reason: ☐ CEQA documentation not requiring a Water Supply Assessment was completed prior to January 1, 2002 ☐ other: _____

Was a Water Supply Verification previously completed for the project? ☐ yes ☒ no

If yes, indicate reason for reverification: ☐ tract map expiration ☐ new Water Supply
Assessment required due to project revisions, changed circumstances or new information

☐ Tentative Map Application No. * Not Applicable ☐ Tentative Tract No. * Not Applicable

☒ Verification is being requested prior to tentative map application (Government Code
§66473.7(1) (Indicate next project approval sought: CEQA Environmental Clearance

(*A copy of the tentative map application including the proposed subdivision was sent to IRWD
on: _____, (Government Code §66455.3))

Type of development included in the project:

- ☒ *Residential*: No. of dwelling units: 803
- ☐ *Shopping center or business*: No. of employees _____ Sq. ft. of floor space _____
- ☐ *Commercial office*: No. of employees _____ Sq. ft. of floor space _____
- ☐ *Hotel or motel*: No. of rooms _____
- ☐ *Industrial, manufacturing, processing or industrial park*: No. of employees _____
No. of acres _____ Sq. ft. of floor space _____
- ☐ *Mixed use* (check and complete all above that apply)
- ☐ *Other*: _____

Total acreage of project: 32.3

Acreage devoted to landscape:

Greenbelt 1.5 golf course _____ parks 2.5

Agriculture _____ other landscaped areas 2.1 (Storm Water
Basins)

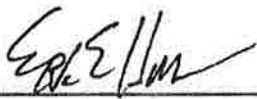
Other factors or uses that would affect the quantity of water needed, such as peak flow
requirements:

Is the project included in the existing General Plan? No If no, describe the
existing General Plan Designation Agricultural

The County acknowledges that IRWD's verification will be based on the information hereby provided to IRWD concerning the project. If it is necessary for corrected or additional information to be submitted to enable IRWD to complete the verification, the request will be considered incomplete until IRWD's receipt of the corrected or additional information. If the project changes or the tentative map approval expires after the issuance of a Water Supply Verification, the County will request a new Water Supply Verification if required. In the event of changes in the project, circumstances or conditions of the availability of new information, it will be necessary for the County to request a new Water Supply Assessment prior to completion of the new Water Supply Verification.

The County acknowledges that the Water Supply Verification shall not constitute a "will-serve" or in any way entitle the project applicant to service or to any right, priority or allocation in any supply, capacity or facility, and that the issuance of the Water Supply Verification shall not affect IRWD's obligation to provide service to its existing customers or any potential future customers including the project applicant. In order to receive service, the project applicant shall be required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

COUNTY OF ORANGE

By: 

REQUEST RECEIVED:

Date: February 17, 2016

By: 

Irvine Ranch Water District

REQUEST COMPLETE:

Date: February 22, 2016

By: 

Exhibit C
Water Supply Assessment

**IRVINE RANCH WATER DISTRICT
ASSESSMENT OF WATER SUPPLY
Water Code §10910 et seq.**

To: (Lead Agency)

~~City of Irvine~~ County of Orange
~~P.O. Box 19575~~ 333 W. Santa Ana Blvd., Third Fl.
~~Irvine, CA 92620-9575~~ Santa Ana, CA 92701-4062

(Applicant)
County of Orange
333 W. Santa Ana Blvd., Third Floor
Santa Ana, CA 92701-4062

Project Information

Project Title: West Alton Development Plan (Exhibit A)

- ☐ Residential: No. of dwelling units: _____
- ☐ Shopping center or business: No. of employees _____ Sq. ft. of floor space _____
- ☐ Commercial office: No. of employees _____ Sq. ft. of floor space _____
- ☐ Hotel or motel: No. of rooms _____
- ☐ Industrial, manufacturing or processing: No. of employees _____ No. of acres _____
- Sq. ft. of floor space _____
- ☒ Mixed use (check and complete all above that apply) (see Exhibit B) _____
- ☐ Other: _____

Assessment of Availability of Water Supply

On April 13, 2015 the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within assessment and made the following determination regarding the above-described Project:

- ☐ The projected water demand for the Project ☐ was ☐ was not included in IRWD's most recently adopted urban water management plan.
- ☒ A sufficient water supply is available for the Project.
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.
- ☐ A sufficient water supply is not available for the Project. [Plan for acquiring and developing sufficient supply attached. Water Code § 10911(a)]

The foregoing determination is based on the following Water Supply Assessment Information and supporting information in the records of IRWD.

Leslee Bonkowski 4/15/15 District Secretary
Signature Date Title

Water Supply Assessment Information

Purpose of Assessment

Irvine Ranch Water District ("IRWD") has been identified by the County as a public water system that will supply water service (both potable and nonpotable) to the project identified on the cover page of this assessment (the "Project"). As the public water system, IRWD is required by Section 10910 *et seq.* of the Water Code to provide the County with an assessment of water supply availability ("assessment") for defined types of projects. The Project has been found by the County to be a project requiring an assessment. The County is required to include this assessment in the environmental document for the Project, and, based on the record, make a determination whether projected water supplies are sufficient for the Project and existing and planned uses.

Water Code Section 10910 (the "Assessment Law") contains the requirements for the information to be set forth in the assessment.

Prior Water Supply Assessments

IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area. Because of IRWD's aggregation of demands and supplies, each assessment completed by IRWD is expected to be generally similar to the most recent assessment, with changes as needed to take into account changes, if any, in demands and supplies, and any updated and corrected information obtained by IRWD. Previously assessed projects' water demands will be included in the baseline. A newly assessed project's water demand will have been included in previous water supply assessments for other projects (as part of IRWD's "full build-out" demand) to the extent of any land use planning or other water demand information for the project that was available to IRWD.

The Project's water demand was included (as part of IRWD's "full build-out" demand) in previous water supply assessments performed by IRWD, based on land use planning information then available to IRWD. In this water supply assessment, the Project demand will be revised in accordance with updated information provided by the applicant and included in the "with project" demand.

Supporting Documentation

IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. Therefore, IRWD primarily relies on its most recent WRMP. The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent update of that document was adopted June 13, 2011.

In addition to the WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 6 of this assessment.

Due to the number of contracts, statutes and other documents comprising IRWD's written proof of entitlement to its water supplies, in lieu of attachment of such items, they are identified by title and summarized in Section 2(b) of this assessment (written contracts/proof of entitlement). Copies of the summarized items can be obtained from IRWD.

Assessment Methodology

Water use factors; dry-year increases. IRWD employs water use factors to enable it to assign water demands to the various land use types and aggregate the demands. The water use factors are based on average water use and incorporate the effect of IRWD's tiered-rate conservation pricing and its other water conservation programs. The factors are derived from historical usage (billing data) and a detailed review of water use factors within the IRWD service areas conducted as a part of the WRMP. System losses at a rate of approximately 5% are built into the water use factors. Water demands also reflect normal hydrologic conditions (precipitation). Lower levels of precipitation and higher temperatures will result in higher water demands, due primarily to the need for additional water for irrigation. To reflect this, base (normal) WRMP water demands have been increased 7% in the assessment during both "single-dry" and "multiple-dry" years. This is consistent with IRWD's 2010 UWMP and historical regional demand variation as documented in the Metropolitan Water District of Southern California's ("MWD's") Integrated Resources Plan (1996) (Volume 1, page 2-10).

Planning horizon. For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2035, which is considered to represent build-out or "ultimate development".

Assessment of demands. Water demands are reviewed in this assessment for three development projections (to 2035):

- Existing and committed demand (without the Project) ("baseline"). This provides a baseline condition as of the date of this assessment, consisting of demand from existing development, plus demand from development that has both approved zoning and (if required by the Assessment Law) an adopted water supply assessment.
- Existing and committed demand, plus the Project ("with-project"). This projection adds the Project water demands to the baseline demands.
- Full WRMP build-out ("full build-out"). In addition to the Project, this projection adds potential demands for all presently undeveloped areas of IRWD based on current general plan information, modified by more specific information available to IRWD, as more fully described in Chapter 2 of the WRMP.

Assessment of supplies. For comparison with demands, water supplies are classified as *currently available* or *under development*:

- *Currently available* supplies include those that are presently operational, and those that will be operational within the next several years. Supplies expected to be operational in the next several years are those having completed or substantially completed the environmental and regulatory review process, as well as having necessary contracts (if any) in place to move forward. These supplies are in various stages of planning, design, or construction.

- In general, supplies *under development* may necessitate the preparation and completion of environmental documents, regulatory approvals, and/or contracts prior to full construction and implementation.

IRWD is also evaluating the development of additional supplies that are not included in either *currently available* or *under-development* supplies for purposes of this assessment. As outlined in the WRMP, prudent water supply and financial planning dictates that development of supplies be phased over time consistent with the growth in demand.

Water supplies available to IRWD include several sources: groundwater pumped from the Orange County groundwater basin (including the Irvine Subbasin); captured local (native) surface water; reclaimed wastewater, and supplemental imported water supplied by MWD through the Municipal Water District of Orange County ("MWD OC"). The supply-demand comparisons in this assessment are broken down among the various sources, and are further separated into potable and nonpotable water sources.

Comparison of demand and supply. The three demand projections noted above (baseline, with-project and full build-out) are compared with supplies in the following ways:

- On a total *annual* quantity basis (stated in acre-feet per year (AFY)).
- On a *peak-flow* (maximum day) basis (stated in cubic feet per second (cfs)).
- Under three climate conditions: base (normal) conditions and single-dry and multiple-dry year conditions. (Note: These conditions are compared for *annual* demands and not for *peak-flow* demands. *Peak-flow* is a measure of a water delivery system's ability to meet the highest day's demand of the fluctuating demands that will be experienced in a year's time. Peak demands occur during the hot, dry season and as a result are not appreciably changed by dry-year conditions; dry-year conditions do affect *annual* demand by increasing the quantity of water needed to supplement normal wet-season precipitation.)

Summary of Results of Demand-Supply Comparisons

Listed below are Figures provided in this assessment, comparing projected potable and nonpotable water supplies and demands under the three development projections:

- Figure 1: Normal Year Supply and Demand – Potable Water
- Figure 2: Single Dry-Year Supply and Demand – Potable Water
- Figure 3: Multiple Dry-Year Supply and Demand – Potable Water
- Figure 4: Maximum-Day Supply and Demand – Potable Water
- Figure 5: Normal Year Supply and Demand – Nonpotable Water
- Figure 6: Single Dry-Year Supply and Demand – Nonpotable Water
- Figure 7: Multiple Dry-Year Supply and Demand – Nonpotable Water
- Figure 8: Maximum-Day Supply and Demand – Nonpotable Water

It can be observed in the Figures that IRWD's *supplies* remain essentially constant between normal, single-dry and multiple-dry years. This result is due to the fact that groundwater and MWD imported water account for all of IRWD's potable supply, and reclaimed water, groundwater and imported water comprise most of IRWD's nonpotable supply. Groundwater production typically remains constant or increases in cycles of dry years, even if

overdraft of the basin temporarily increases, as groundwater producers reduce their demand on imported supplies to secure reliability. (See Section 4 herein.) As to imported water, MWD's 2010 Regional Urban Water Management Plan (RUWMP) shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods through 2035, including a repeat of the 1990-1992 multiple dry-year hydrology and the 1977 single dry-year hydrology. (See Section 2(b) (1) "IMPORTED SUPPLY - ADDITIONAL INFORMATION," below, for a summary of information provided by MWD.) Reclaimed water production also remains constant, and is considered "drought-proof" as a result of the fact that sewage flows remain virtually unaffected by dry years. Only a small portion of IRWD's nonpotable supply, native water captured in Irvine Lake, is reduced in single-dry and multiple-dry years. The foregoing factors also serve to explain why there is no difference in IRWD's supplies between single-dry and multiple-dry years.

A review of the Figures indicates the following:

- *Currently available* supplies of potable water are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under the normal and both dry-year conditions through the year 2025. (Figures 1, 2 and 3.)
- Meeting both single- and multiple-dry-year annual demands for *full build-out* will require the completion of *under-development* supplies. (Figures 2 and 3.)
- Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2035. (Figure 4.)
- With respect to nonpotable water, *currently available* supplies are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under both dry-year conditions through the year 2035. (Figures 5, 6, 7 and 8). IRWD is proceeding with the implementation of *under-development* nonpotable supplies, as shown in the Figures, to improve local reliability during dry-year conditions.

The foregoing Figures provide an overview of IRWD potable and nonpotable water supply capabilities. More detailed information on the anticipated development and use of supplies, which incorporates source costs and reliability issues, is provided in the WRMP.

Margins of safety. The Figures and other information described in this assessment show that IRWD's assessment of supply availability contains several margins of safety or buffers:

- "Reserve" water supplies (excess of supplies over demands) will be available to serve as a buffer against inaccuracies in demand projections, future changes in land use, or alterations in supply availability.
- Conservative estimates of annual potable and nonpotable *imported* supplies have been made based on connected delivery capacity (by application of peaking factors as described below in Section 2, footnote 1); additional supplies are expected to be available from these sources, based on legal entitlements, historical uses and information provided by MWD. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Information provided by MWD, as the imported water supplier, concerning the adequacy of its regional supplies, summarized herein, demonstrates MWD's inclusion of reserves in its regional supply assessments. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Although groundwater supply amounts shown in this assessment assume production levels within applicable basin production percentages described herein, production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or emergencies.

Recent Actions on Delta Pumping. The Sacramento/San Joaquin Delta (Delta) is a vulnerable component in both the State and Federal systems to convey water from northern portions of California to areas south of the Delta. Issues associated with the Delta have generally been known for years; however, most recently, the continuing decline in the number of endangered Delta smelt resulted in the filing of litigation challenging permits for the operation of the Delta pumping facilities. On August 31, 2007, a Federal court ordered interim protective measures for the endangered Delta smelt, including operational limits on Delta pumping, which will have an effect on State Water Project (SWP) operations and supplies in 2008 and subsequent years. On June 4, 2009, a federal biological opinion imposed rules that will further restrict water diversions from the Delta to protect endangered salmon and other endangered fish species. At present, several proceedings concerning Delta operations are ongoing to evaluate options to address Delta smelt impacts and other environmental concerns. In addition to the regulatory and judicial proceedings to address immediate environmental concerns, the Delta Vision process and Bay-Delta Conservation Plan process are defining long-term solutions for the Delta (MWD 2010 IRP Update). Prior to the 2007 court decision, MWD's Board approved a Delta Action Plan in May 2007 that described short, mid and long-term conditions and the actions to mitigate potential supply shortages and to develop and implement long-term solutions. To comprehensively address the impacts of the SWP cut back on MWD's water supply development targets, MWD brought to its Board a strategy and work plan to update the long-term Integrated Resources Plan (IRP) in December 2007. As part of the IRP Update, MWD developed a region-wide collaborative process that included a broad-based stakeholder involvement. MWD held several stakeholder forums in 2008 and 2009 and the MWD Board adopted the 2010 IRP Update on October 12, 2010. In the 2010 IRP Update, MWD identified changes to the long-term plan and established direction to address the range of potential changes in water supply planning. The IRP also discusses dealing with uncertainties related to impacts of climate change (see additional discussion of this below) as well as actions to protect endangered fisheries. Based on MWD's Findings and Conclusions as stated in the MWD 2010 IRP Update, MWD's reliability goal that full-service demands at the retail level will be satisfied for all foreseeable hydrologic conditions remains unchanged in the 2010 IRP Update, and MWD will accomplish this through its core resources strategies. The 2010 IRP Update emphasizes an evolving approach and suite of actions to address the water supply challenges that are posed by uncertain weather patterns, regulatory and environmental restrictions, water quality impacts and changes in the state and the region. MWD's Adaptive Resource Management Strategy includes three components: Core Resources Strategy, Supply Buffer Implementation and Foundational Actions which together provides the basis for the 2010 IRP Update. The 2010 IRP Update expands the concept of developing a planning buffer from the 2004 IRP Update by implementing a supply buffer equal to 10 percent of the total retail demand. MWD will collaborate with the member agencies to implement this buffer through complying with Senate Bill 7 which calls for the state to reduce per capita water use 20 percent by the year 2020.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: MWD states it is sufficiently reliable to meet full-service demands at the retail level for all foreseeable hydrologic conditions. For purposes of ensuring a conservative analysis, IRWD has compiled information from the prior "MWD IRP Implementation Report" (October 2010) and MWD's RUWMP (November 2010), to provide information in this assessment relative to how reduced SWP supplies could potentially affect IRWD's supplies from MWD.

Based on IRWD's evaluation of MWD's SWP supplies, IRWD estimates that the 22% used by MWD's October 2007 IRP Implementation Report as a potential reduction of MWD's SWP supplies conservatively translates to approximately 16% reduction in all of MWD's imported supplies over the years 2015 through 2035.¹ For this purpose it is assumed that MWD's total supplies consist only of imported SWP and Colorado deliveries. As shown in MWD's RUWMP (Tables A.3-7), SWP deliveries on average over the 20-year period are 1,682,000 acre-feet and Colorado base average supplies are 656,000 acre-feet. A 22% reduction of SWP supplies equates to 370,000 acre-feet which is approximately 16% of MWD's total imported supplies. Based on this estimate, this assessment projects a 16% reduction in MWD supplies available to IRWD for the years 2010 through 2035, using IRWD's connected capacity without any water supply allocation imposed by MWD. This reduction in MWD supplies is reflected in Figures 1, 2, 3, 5, 6, and 7.

As an alternative means of analyzing the 22% stated reduction, Figures 1a, 2a, and 3a show IRWD estimated supplies in all of the 5-year increments (average and single and multiple dry years) under a short-term MWD allocation scenario whereby MWD declares Shortage Stage 2 and a 10% cutback is applied to IRWD's actual usage rather than its connected capacity. In February 2009, MWD adopted a Water Supply Allocation Plan based on its declared level of shortage. In response to potential water shortages and a request by MWD to have water service providers within its service area adopt a water conservation ordinance, in February 2009, IRWD updated Section 15 of its Rules and Regulations – Water Conservation and Water Supply Shortage Program and also updated its Water Shortage Contingency Plan which is a supporting document for Section 15. Section 15 of the Rules and Regulations serves as IRWD's "conservation ordinance". As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are assumed to be in use to the maximum extent possible during declared shortage levels.

¹ MWD's 2010 RUWMP cites to DWR's Water Allocation Analysis dated March 22, 2010, which incorporated the Delta smelt biological opinion's effect on SWP operations, export restrictions could reduce deliveries to MWD by 150 to 200 thousand acre-feet for 2010. DWR estimated that approximately 520,000 AF had been lost to the SWP for 2010 of which nearly 240,000 AF would have been available to MWD. This amount is equivalent to about 16% reduction in SWP supplies, a smaller percentage reduction than MWD's 2007 figure of 22% that was used by IRWD for purposes of this analysis.

Under shortage scenarios, IRWD may need to supplement supplies with production of groundwater, which can exceed the applicable basin production percentage on a short-term basis, providing additional reliability during dry years or emergencies.² In addition, IRWD has developed water banking projects in Kern County, California which may be called upon for delivery of supplemental banked water to IRWD under a short-term MWD allocation.³ In addition, if needed resultant net shortage levels can be addressed by demand reduction programs as described in IRWD's Water Shortage Contingency Plan.

Listed below are Figures provided comparing projected potable water supplies and demands in all of the five year increments, under a temporary MWD allocation scenario:

Figure 1a: Normal Year Supply and Demand (MWD Allocated) – Potable Water
 Figure 2a: Single Dry-Year Supply and Demand (MWD Allocated) – Potable Water
 Figure 3a: Multiple Dry-Year Supply and Demand (MWD Allocated) – Potable Water

It can be noted that IRWD's above approach is conservative, in that IRWD evaluates the effect of the 16% reduction through 2035 and shows the effect of current allocation scenarios in all of the five-year increments but MWD reports that it has made significant progress in other water resource categories such as transfers, groundwater storage and developing other local resources, and supplies will be available from these resources over the long-term.

Climate Change. The California Department of Water Resources ("DWR") released a report "Progress on Incorporating Climate Change into Management of California's Water Resources" (July 2006), considering the impacts of climate change on the State's water supply. DWR emphasizes that "the report represents an example of an impacts assessment based on four scenarios defining an expected range of potential climate change impacts." DWR's major goal is to extend the analysis for long-term water resource planning from "assessing impacts" to "assessing risk." The report presents directions for further work in incorporating climate change into the management of California's water resources. Emphasis is placed on associating probability estimates with potential climate change scenarios in order to provide policymakers with both ranges of impacts and the likelihoods associated with those impacts. DWR's report acknowledges "that all results presented in this report are preliminary, incorporate several assumptions, reflect a limited number of climate change scenarios, and do not address the likelihood of each scenario. Therefore, these results are not sufficient by themselves to make policy decisions."

² In these scenarios, it is anticipated that other water suppliers who produce water from the Orange County Basin will also experience cutbacks of imported supplies and will increase groundwater production and that Orange County Water District (OCWD) imported replenishment water may also be cutback. The OCWD's "2010-2011 Engineer's Report on the groundwater conditions, water supply and basin utilization" references a report (OCWD Report on Evaluation of Orange County Groundwater Basin Storage and Operational Strategy) which recommends a basin management strategy that provides general guidelines for annual basin refill or storage decrease based on the level of accumulated overdraft. It states, "Although it is considered to be generally acceptable to allow the basin to decline to 500,000 AF overdraft for brief periods due to severe drought conditions and lack of supplemental water...an accumulated overdraft of 100,000 AF best represents an optimal basin management target. This optimal target level provides sufficient storage space to accommodate anticipated recharge from a single wet year while also providing water in storage for at least 2 or 3 consecutive years of drought." MWD replenishment water is a supplemental source of recharge water and OCWD estimates other main supply sources for recharge are available.

³ IRWD has developed water banking projects (Water Bank) in Kern County, California and has entered into a 30-year water banking partnership with Rosedale-Rio Bravo Water Storage District (RRB) to operate IRWD's Strand Ranch portion of the Water Bank. The Water Bank can improve IRWD's water supply reliability by capturing lower cost water available during wet hydrologic periods for use during dry periods. The Water Bank can enhance IRWD's ability to respond to drought conditions and potential water supply interruptions.

In MWD's 2010 IRP Update, MWD recognizes there is a significant uncertainty in the impact of climate change on water supply and changes in weather patterns could significantly affect water supply reliability. MWD plans to hedge against supply and environmental uncertainties by implementing a supply buffer equivalent to 10 percent of total retail demand. This buffer will be implemented through meeting the SB7 water use efficiency goals, implementing aggressive adaptive actions, development of local supplies and transfers.

Per MWD's RUWMP, MWD continues to incorporate current climate change science into its planning efforts. As stated in MWD's RUWMP, the 2010 IRP Update supports the MWD Board adopted principles on climate change by: 1) Supporting reasonable, economically viable, and technologically feasible management strategies for reducing impacts on water supply, 2) Supporting flexible "no regret" solutions that provide water supply and quality benefits while increasing the ability to manage future climate change impacts, and 3) Evaluating staff recommendations regarding climate change and water resources against the California Environmental Quality Act to avoid adverse effects on the environment. Potential climate change impacts on state, regional and local water supplies and relevant information for the Orange County hydrologic basin and Santa Ana Watershed have not been sufficiently developed at this time to permit IRWD to assess and quantify the effect of any such impact on its conclusions in the Assessment.

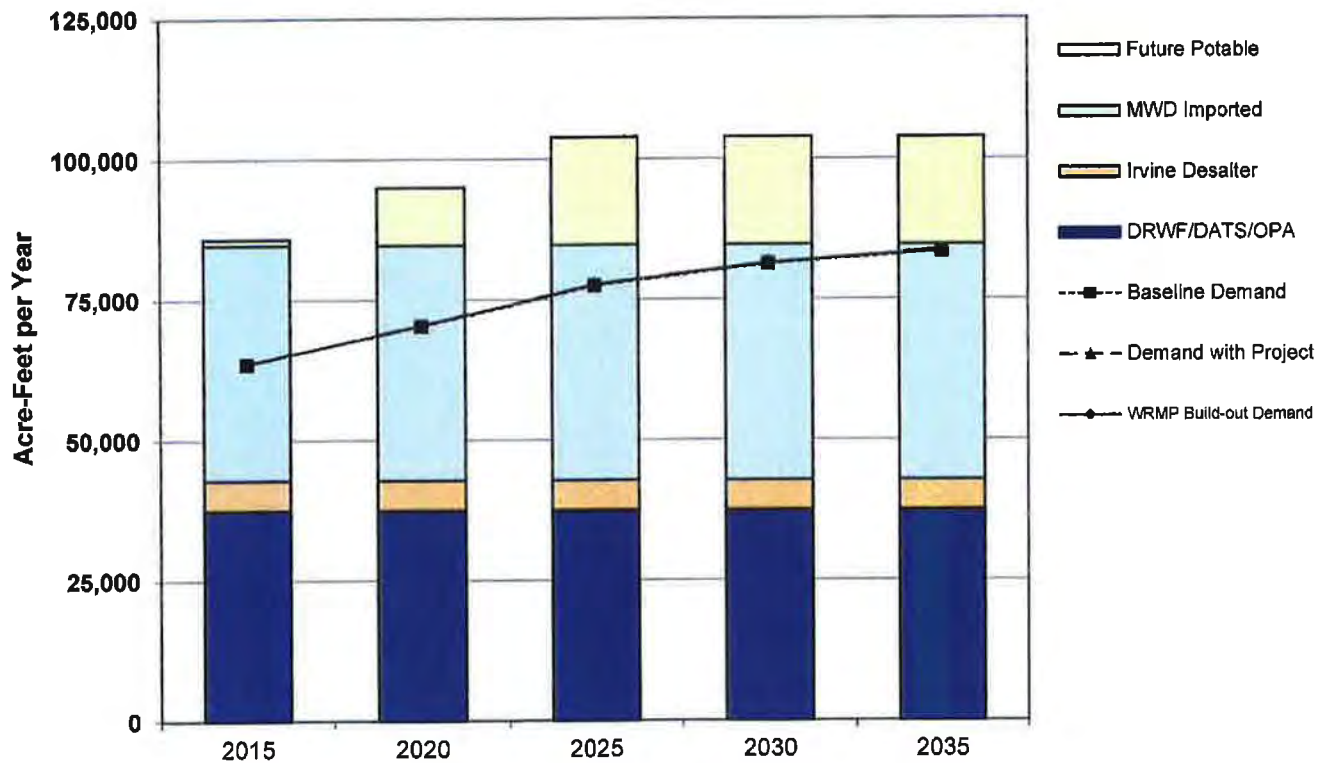
Catastrophic Supply Interruption Planning. MWD has developed Emergency Storage Requirements (2010 RUWMP) to safeguard the region from catastrophic loss of water supply. MWD has made substantial investments in emergency storage and has based its planning on a 100% reduction in its supplies for a period of six months. The emergency plan outlines that under such a catastrophe, non-firm service deliveries would be suspended, and firm supplies would be restricted by a mandatory cutback of 25 percent from normal year demand deliveries. In addition, MWD discusses the long term Delta plan in its 2010 RUWMP (pages 3-18 to 3-21). IRWD has also addressed supply interruption planning in its WRMP and UWMP.

Detailed Assessment

1. Supply and demand comparison

Comparisons of IRWD's average annual and peak (maximum day) demands and supplies, under *baseline* (existing and committed demand, without the Project), *with-project* (baseline plus Project), and *full build-out* development projections, are shown in the following Figures 1-4 (potable water), Figures 5-8 (nonpotable water) and Figures 1a, 2a, and 3a (short term MWD allocation potable water). See also the "Recent Actions on Delta Pumping" above.

Figure 1
IRWD Normal-Year Supply & Demand - Potable Water

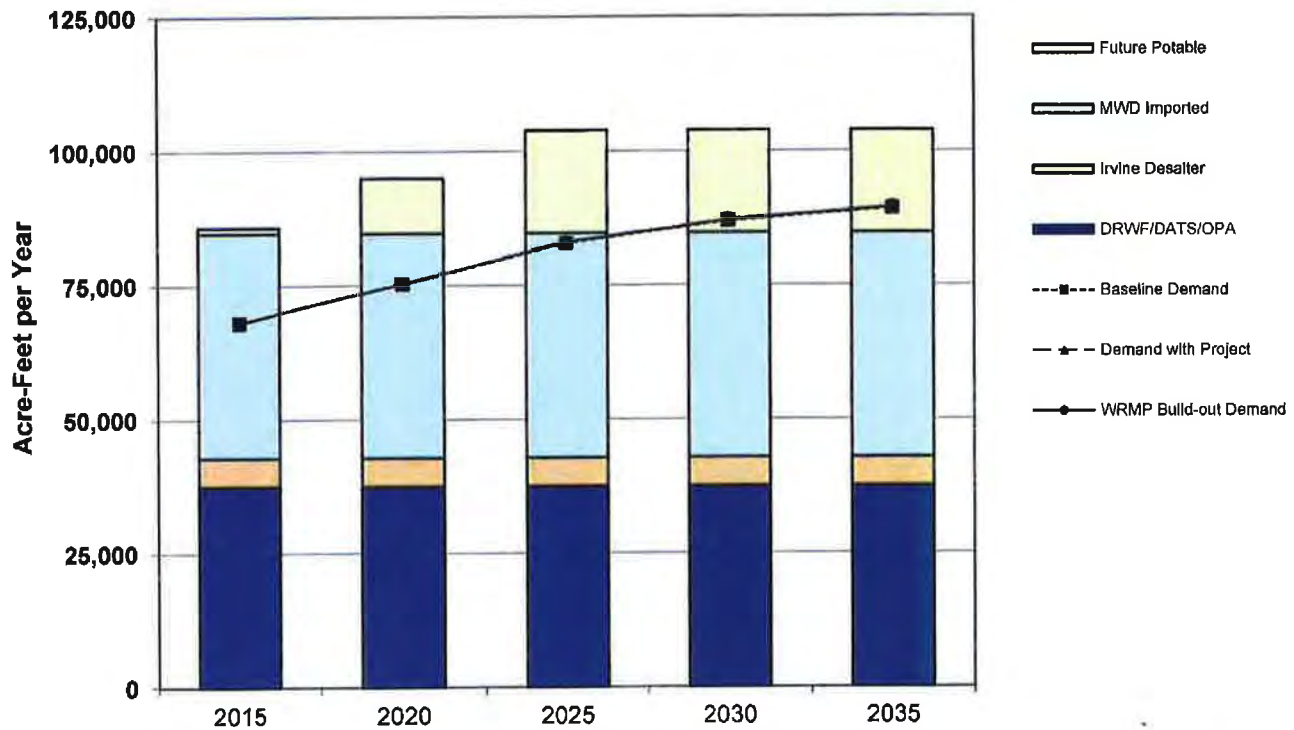


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	63,693	70,384	77,528	81,331	83,510
Demand with Project	63,693	70,446	77,683	81,486	83,665
WRMP Build-out Demand	63,693	70,446	77,683	81,486	83,665
Reserve Supply with Project	28,525	30,981	32,628	28,825	26,645

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 2
IRWD Single Dry-Year Supply & Demand - Potable Water

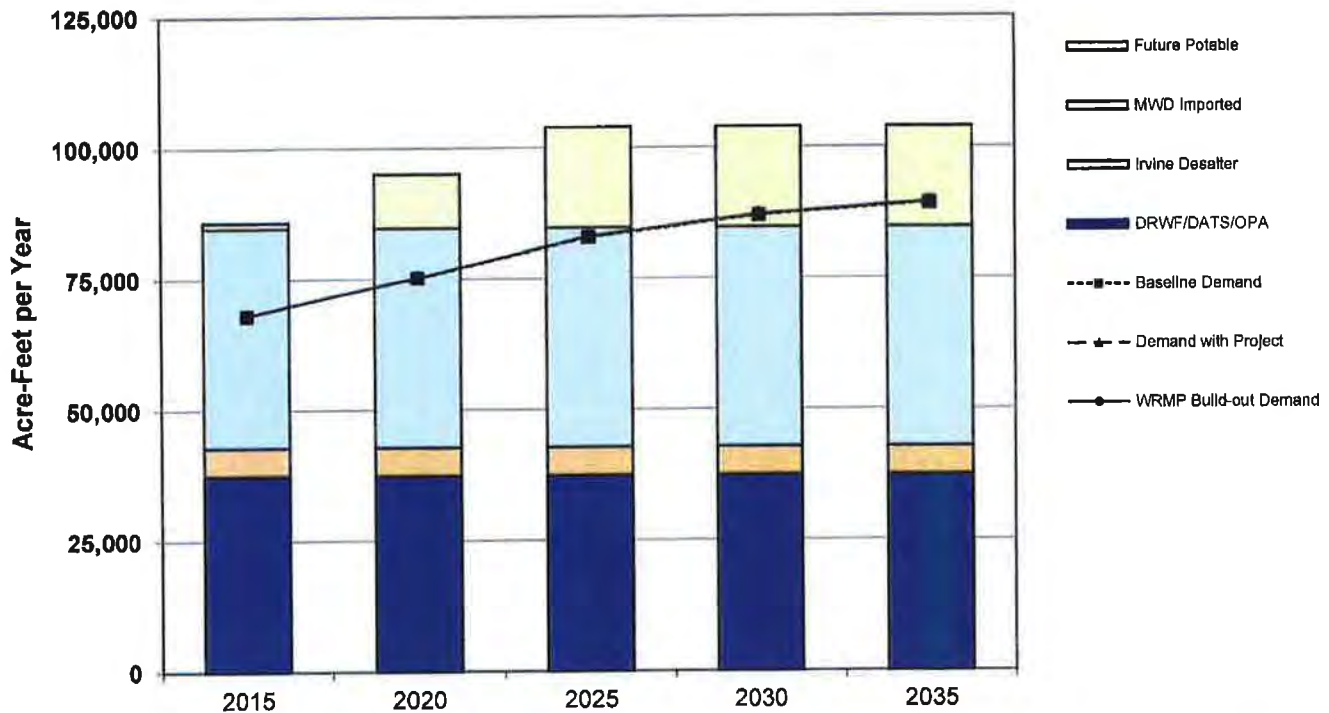


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	24,066	26,050	27,190	23,121	20,789

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 3
IRWD Multiple Dry-Year Supply & Demand - Potable Water

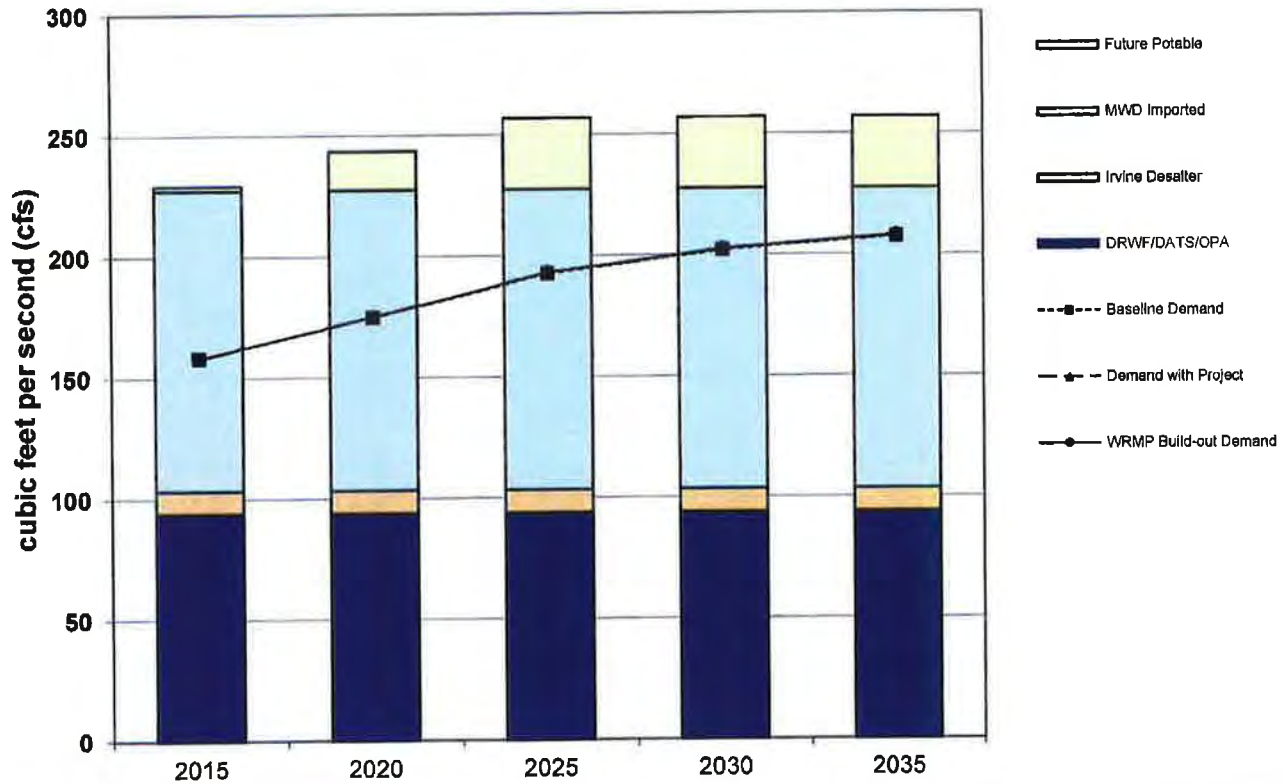


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	24,066	26,050	27,190	23,121	20,789

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

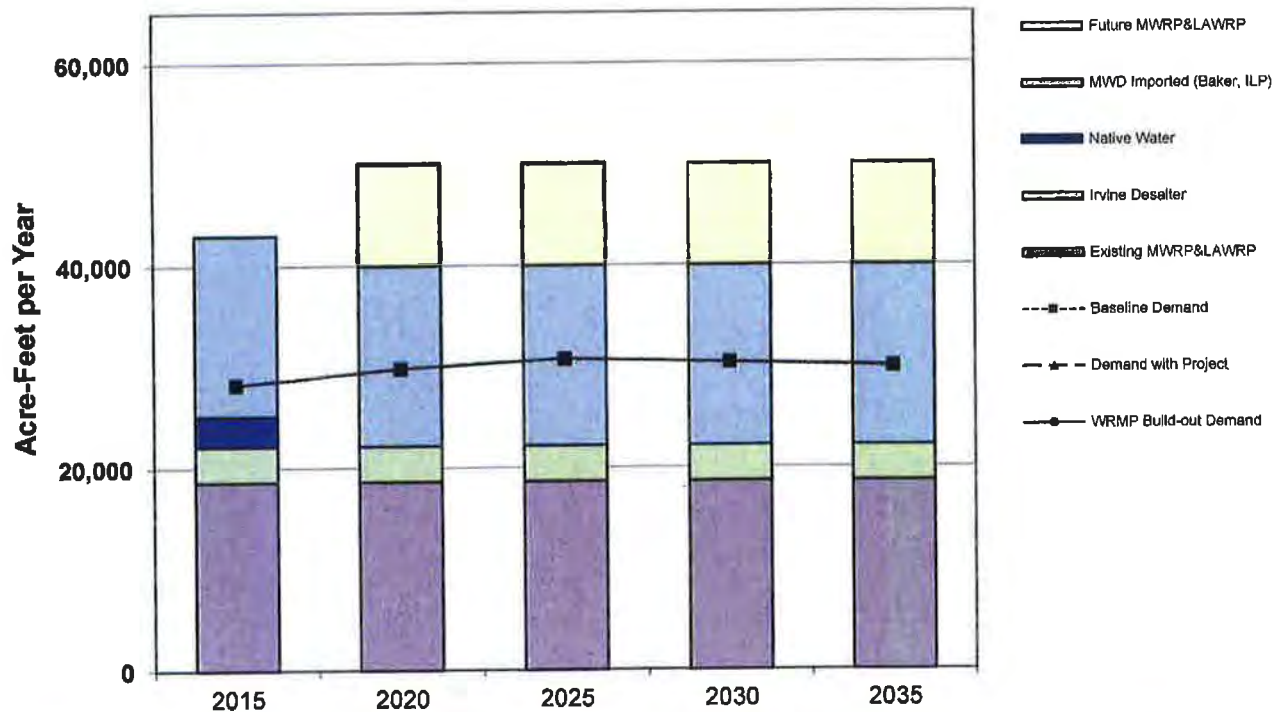
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 4
IRWD Maximum-Day Supply & Demand - Potable Water



(in cfs)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	124.1	124.1	124.1	124.1	124.1
DRWF/DATS/OPA	93.9	93.9	93.9	93.9	93.9
Irvine Desalter	9.5	9.5	9.5	9.5	9.5
Wells 21 & 22	10.9	10.9	10.9	10.9	10.9
Supplies Under Development					
Future Potable	2.0	16.1	29.7	29.7	29.7
Maximum Supply Capability	240.4	254.5	268.1	268.1	268.1
Baseline Demand	158.4	175.0	192.7	202.2	207.6
Demand with Project	158.4	175.1	193.1	202.6	208.0
WRMP Build-out Demand	158.4	175.1	193.1	202.6	208.0
Reserve Supply with Project	82.0	79.4	75.0	65.5	60.1

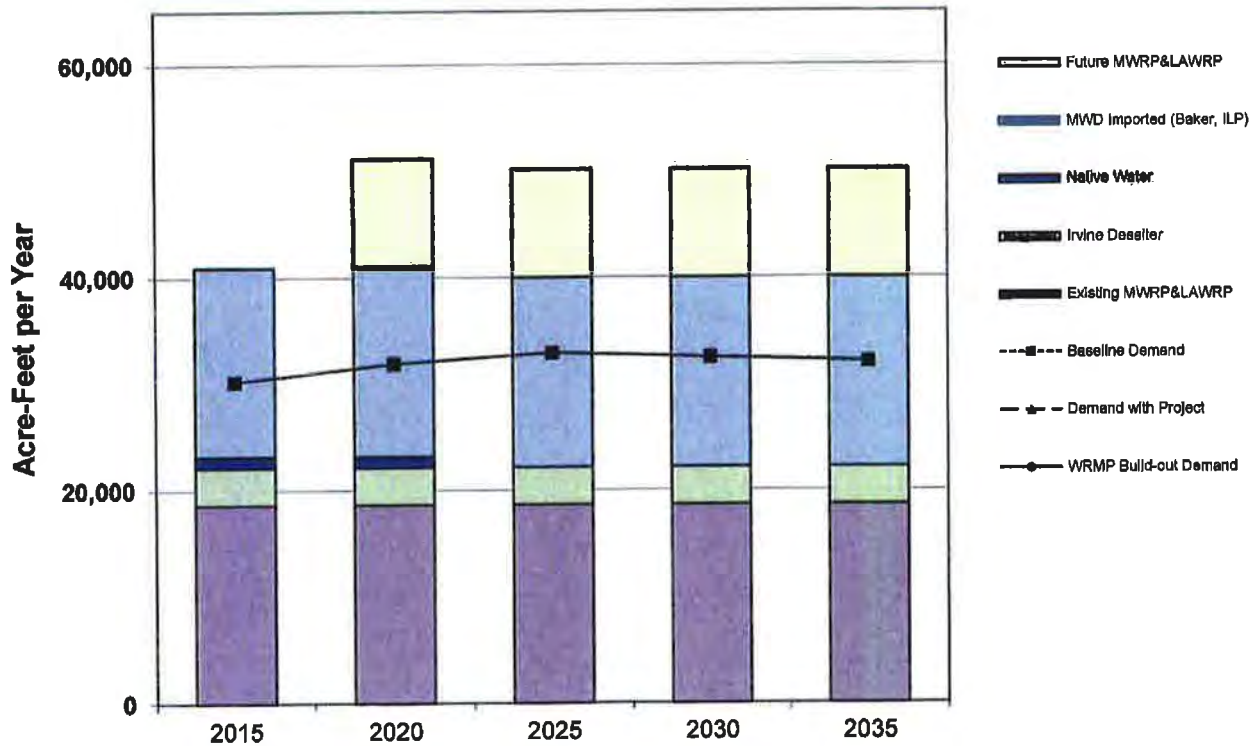
Figure 5
IRWD Normal-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2015	2020	2025	2030	2035
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	3,000	-	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	42,997	50,097	50,097	50,097	50,097
Baseline Demand	28,265	29,829	30,744	30,353	29,959
Demand with Project	28,265	29,842	30,778	30,387	29,993
WRMP Build-out Demand	28,265	29,842	30,778	30,353	29,993
Reserve Supply with Project	14,731	20,255	19,319	19,744	20,104

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

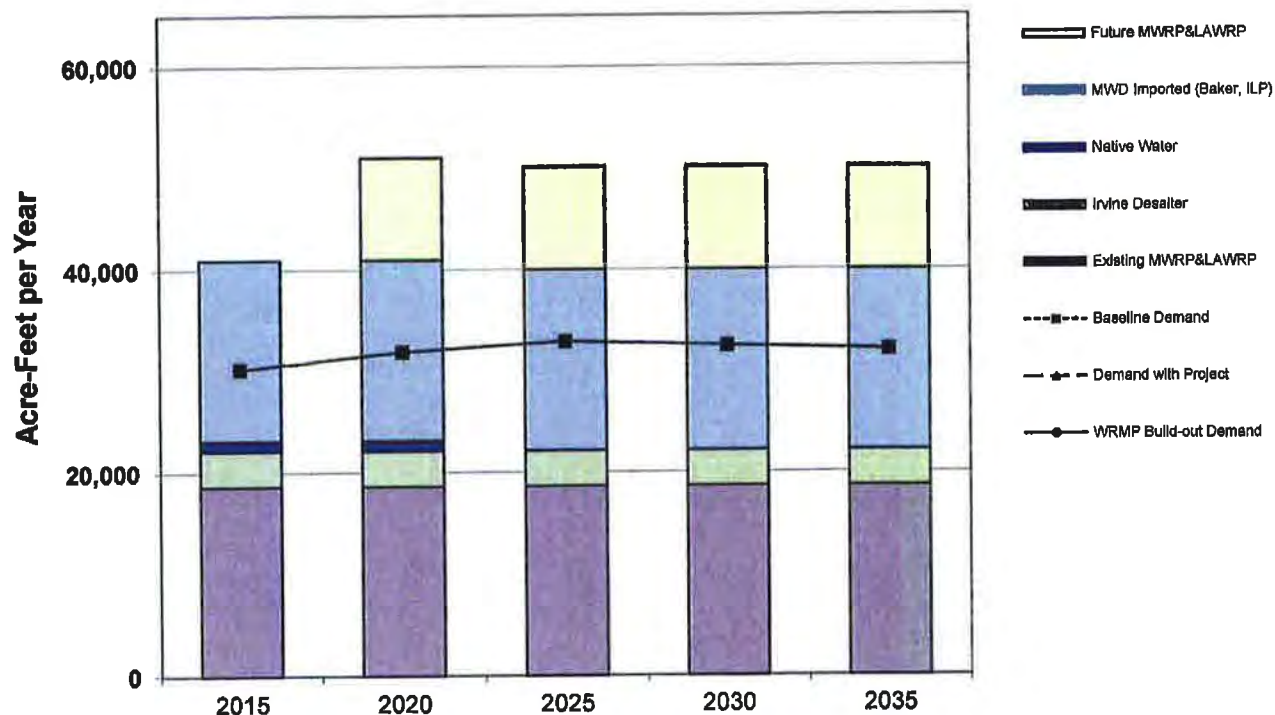
Figure 6
IRWD Single Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2015	2020	2025	2030	2035
<u>Current Nonpotable Supplies</u>					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	1,000	-	-	-
<u>Supplies Under Development</u>					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	30,244	31,917	32,897	32,478	32,056
Demand with Project	30,244	31,931	32,933	32,514	32,092
WRMP Build-out Demand	30,244	31,931	32,933	32,478	32,092
Reserve Supply with Project	10,753	19,166	17,164	17,583	18,004

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

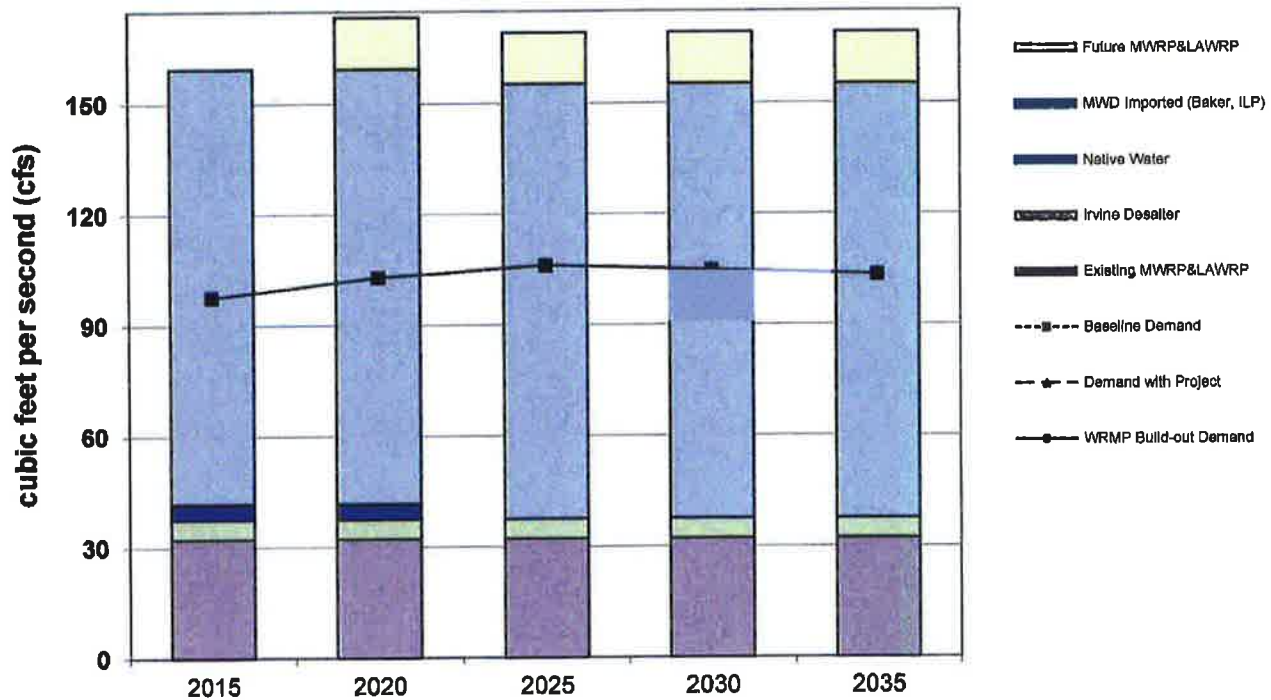
Figure 7
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2015	2020	2025	2030	2035
Current Nonpotable Supplies					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	1,000	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	30,244	31,917	32,897	32,478	32,056
Demand with Project	30,244	31,931	32,933	32,514	32,092
WRMP Build-out Demand	30,244	31,931	32,933	32,478	32,092
Reserve Supply with Project	10,753	19,166	17,164	17,583	18,004

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

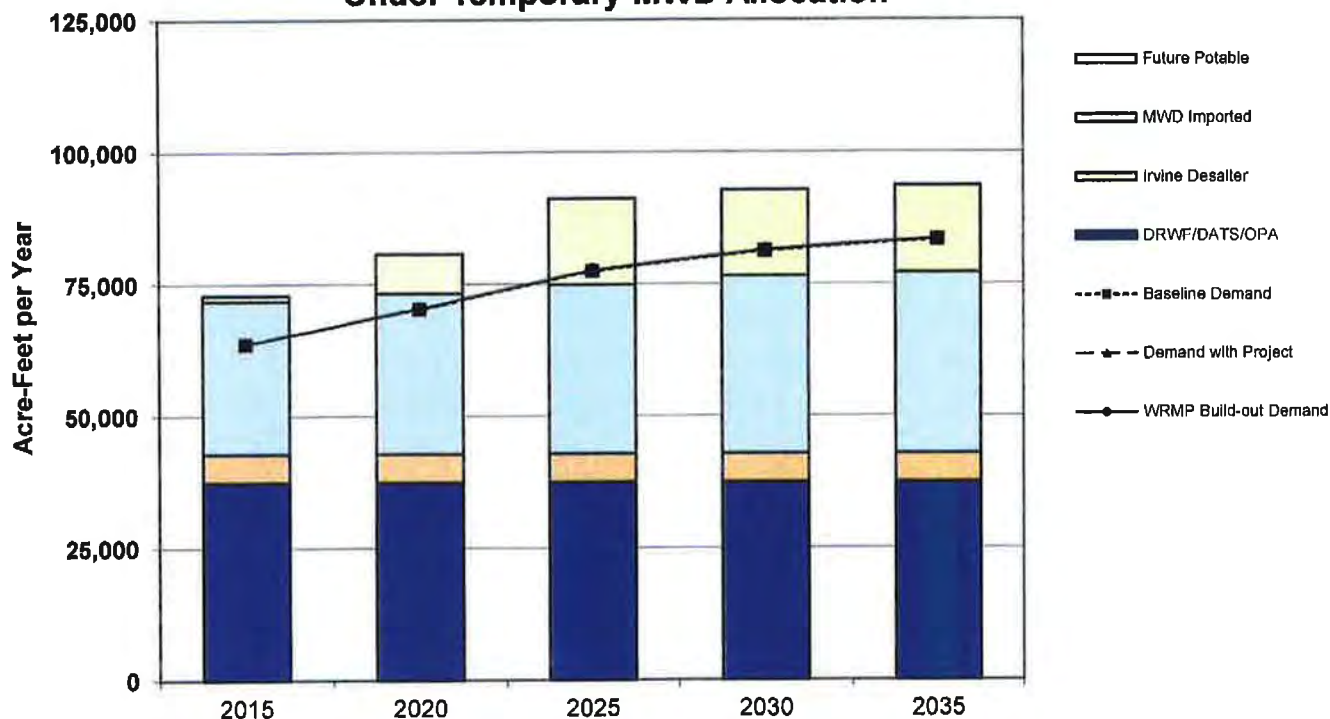
Figure 8
IRWD Maximum-Dry Supply & Demand - Nonpotable Water



(in cfs)	2015	2020	2025	2030	2035
Current Nonpotable Supplies					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
MWD Imported (Baker, ILP)	117.7	117.7	117.7	117.7	117.7
Irvine Desalter	5.4	5.4	5.4	5.4	5.4
Native Water	4.2	4.2	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	14.0	14.0	14.0	14.0
Maximum Supply Capability	159.5	173.4	169.2	169.2	169.2
Baseline Demand	97.6	103.0	106.2	104.8	103.4
Demand with Project	97.6	103.0	106.3	104.9	103.6
WRMP Build-out Demand	97.6	103.0	106.3	104.8	103.6
Reserve Supply with Project	61.9	70.4	63.0	64.4	65.7

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.

Figure 1a
IRWD Normal-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*



(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	30,479	32,034	33,668	34,345
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	7,469	16,352	16,352	16,352
Maximum Supply Capability	79,288	87,119	97,557	99,191	99,868
Baseline Demand	63,693	70,384	77,528	81,331	83,510
Demand with Project	63,693	70,446	77,683	81,486	83,665
WRMP Build-out Demand	63,693	70,446	77,683	81,486	83,665
Reserve Supply with Project	15,595	16,672	19,874	17,705	16,202

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the UWMP. Under a MWD allocation, the Baker WTP supplies (under "Future Potable") will be limited to available native water only.

Figure 2a
IRWD Single Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*

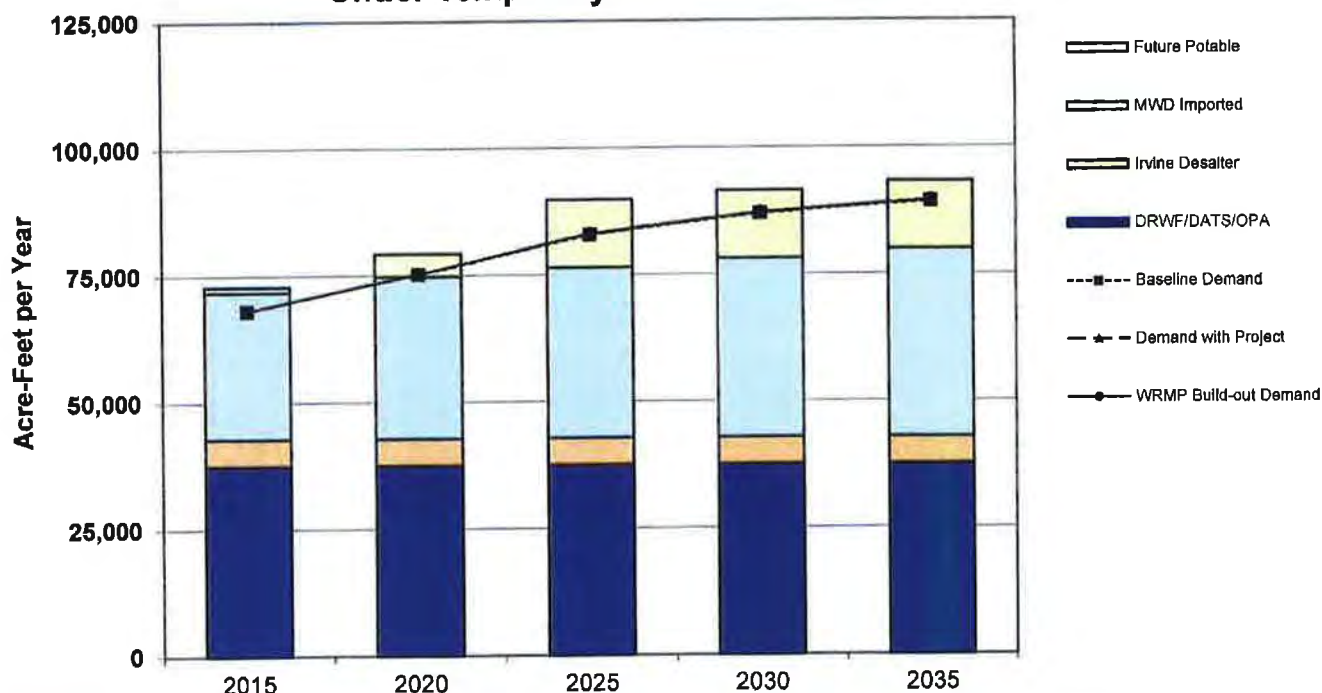


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	11,137	10,265	13,006	10,616	10,049

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the UWMP. Under a MWD allocation, the Baker WTP supplies (under "Future Potable") will be limited to available native water only.

Figure 3a
IRWD Multiple Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*



(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
Baseline Demand	68,151	75,311	82,955	87,024	89,356
Demand with Project	68,151	75,378	83,121	87,190	89,522
WRMP Build-out Demand	68,151	75,378	83,121	87,190	89,522
Reserve Supply with Project	11,137	10,265	13,006	10,616	10,049

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the UWMP. Under a MWD allocation, the Baker WTP supplies (under "Future Potable") will be limited to available native water only.

2. Information concerning supplies

(a)(1) Existing sources of identified water supply for the proposed project: IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area, as updated in the following table:

	Max Day (cfs)	Avg. Annual (AFY)	Annual by Category (AFY)
Current Supplies			
Potable - Imported			
East Orange County Feeder No. 2	41.4	16,652	49,916
Allen-McColloch Pipeline*	64.7	26,024	
Orange County Feeder	18.0	7,240	
Potable - Groundwater			
Dyer Road Wellfield	80.0	28,000	49,170
OPA Well	1.4	914	
Deep Aquifer Treatment System-DATS	12.5	8,618	
Wells 21 & 22	10.9	6,329	
Irvine Desalter	9.5	5,309	
Total Potable Current Supplies	238.4		99,086
Nonpotable - Reclaimed Water			
MWRP (18 mgd)	23.9	17,340	23,315
LAWRP (5.5 mgd)	8.3	5,975	
Nonpotable - Imported			
Baker Aqueduct	52.7	12,221	21,221
Irvine Lake Pipeline	65.0	9,000	
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	5.4	3,514	3,514
Nonpotable Native			
Irvine Lake	4.2	3,048	3,048
Total Nonpotable Current Supplies	159.5		51,098
Total Combined Current Supplies	397.9		150,185
Supplies Under Development			
Potable Supplies			
Well 106	2.0	1,118	19,211
Well 53	5.6	3,658	
Future OPA Wells	8.0	5,225	
Baker Water Treatment Plant	10.5	6,858	
Wells 51 & 52	3.6	2,351	
Total Potable Under Development Supplies	29.7	19,211	
Nonpotable Supplies: MWRP&LAWRP Reclaimed			
	20.0	14,450	14,450
Total Under Development	49.7		33,661
Total Supplies			
Potable Supplies	268.1		118,297
Nonpotable Supplies	179.4		65,548
Total Supplies (Current and Under Development)	447.5		183,846

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.8 (see Footnote 4, page 22).

2 Contract amount - See Potable Supply-Groundwater(ii).

3 Contract amount - See Potable Supply-Groundwater (iv) and (v). Maximum day well capacity is compatible with contract amount.

4 MWRP 18.0 mgd treatment capacity (17,400 AFY RW production) and LAWRP 5.5 mgd tertiary treatment capacity (5,975 AFY)

5 By 2020, Baker capacity will be allocated to Baker Water Treatment Plant (WTP) participants and IRWD will own 46.50 cfs in Baker Aqueduct after Baker WTP, of which 10.5 cfs will be for potable treatment. IRWD will have 35 cfs remaining capacity for non-potable uses. The nonpotable average use is based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 2.5 (see Footnote 8, page 25).

6 Based on IRWD's proportion of Irvine Lake imported water storage; Actual ILP capacity would allow the use of additional imported water from MWD through the Santiago Lateral.

7 Contract amount - See Nonpotable Supply-Groundwater (i) and (ii). Maximum day well capacity (cfs) is compatible with contract amount.

8 Based on 70+ years historical average of Santiago Creek Inflow into Irvine Lake. By 2020, native water will be treated through Baker WTP.

9 Future estimated MWRP & LAWRP reclaimed water production.

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 23 (b)(1)(iii))

(b) Required information concerning currently available and under-development water supply entitlements, water rights and water service contracts:

(1) Written contracts or other proof of entitlement.^{4 5}

•POTABLE SUPPLY - IMPORTED⁶

Potable imported water service connections (currently available).

(i) Potable imported water is delivered to IRWD at various service connections to the imported water delivery system of The Metropolitan Water District of Southern California ("MWD"): service connections CM-01A and OC-7 (Orange County Feeder); CM-10, CM-12, OC-38, OC-39, OC-57, OC-58, OC-63 (East Orange County Feeder No. 2); and OC-68, OC-71, OC-72, OC-73/73A, OC-74, OC-75, OC-83, OC-84, OC-87 (Allen-McColloch Pipeline). IRWD's entitlements regarding service from the MWD delivery system facilities are described in the following paragraphs and summarized in the above Table ((2)(a)(1)). IRWD receives imported water service through Municipal Water District of Orange County ("MWDOC"), a member agency of MWD.

Allen-McColloch Pipeline ("AMP") (currently available).

(ii) Agreement For Sale and Purchase of Allen-McColloch Pipeline, dated as of July 1, 1994 (Metropolitan Water District Agreement No. 4623) ("AMP Sale Agreement"). Under the AMP Sale Agreement, MWD purchased the Allen-McColloch Pipeline (formerly known as the "Diemer Intertie") from MWDOC, the MWDOC Water Facilities Corporation and certain agencies, including IRWD and Los Alisos Water District ("LAWD"),⁷ identified as "Participants" therein. Section 5.02 of the AMP Sale Agreement obligates MWD to meet IRWD's and the other Participants' requests for deliveries and specified minimum hydraulic grade lines at each connection serving a Participant, subject to availability of water. MWD

⁴ In some instances, the contractual and other legal entitlements referred to in the following descriptions are stated in terms of flow capacities, in cubic feet per second ("cfs"). In such instances, the cfs flows are converted to volumes of AFY for purposes of analyzing supply sufficiency in this assessment, by dividing the capacity by a peaking factor of 1.8 (potable) or 2.5 (nonpotable), consistent with maximum day peaking factors used in the WRMP. The resulting reduction in assumed available annual AFY volumes through the application of these factors recognizes that connected capacity is provided to meet peak demands and that seasonal variation in demand and limitations in local storage prevent these capacities from being utilized at peak capacity on a year-round basis. However, the application of these factors produces a conservatively low estimate of annual AFY volumes from these connections; additional volumes of water are expected to be available from these sources.

⁵ In the following discussion, contractual and other legal entitlements are characterized as either potable or nonpotable, according to the characterization of the source of supply. Some of the nonpotable supplies surplus to nonpotable demand could potentially be rendered potable by the addition of treatment facilities; however, except where otherwise noted, IRWD has no current plans to do so.

⁶ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

⁷ IRWD has succeeded to LAWD's interests in the AMP and other LAWD water supply facilities and rights mentioned in this assessment, by virtue of the consolidation of IRWD and LAWD on December 31, 2000.

agrees to operate the AMP as any other MWD pipeline. MWD has the right to operate the AMP on a "utility basis," meaning that MWD need not observe capacity allocations of the Participants but may use available capacity to meet demand at any service connection.

The AMP Sale Agreement obligates MWD to monitor and project AMP demands and to construct specified pump facilities or make other provision for augmenting MWD's capacity along the AMP, at MWD's expense, should that be necessary to meet demands of all of the Participants (Section 5.08).

(iii) Agreement For Allocation of Proceeds of Sale of Allen-McColloch Pipeline, dated as of July 1, 1994 ("AMP Allocation Agreement"). This agreement, entered into concurrently with the AMP Sale Agreement, provided each Participant, including IRWD, with a capacity allocation in the AMP, for the purpose of allocating the sale proceeds among the Participants in accordance with their prior contractual capacities adjusted to conform to their respective future demands. IRWD's capacity under the AMP Allocation Agreement (including its capacity as legal successor agency to LAWD) is 64.69 cfs at IRWD's first four AMP connections, 49.69 cfs at IRWD's next five downstream AMP connections and 35.01 and 10.00 cfs, respectively at IRWD's remaining two downstream connections. The AMP Allocation Agreement further provides that if a Participant's peak flow exceeds its capacity, the Participant shall "purchase" additional capacity from the other Participants who are using less than their capacity, until such time as MWD augments the capacity of the AMP. The foregoing notwithstanding, as mentioned in the preceding paragraph, the allocated capacities do not alter MWD's obligation under the AMP Sale Agreement to meet all Participants' demands along the AMP, and to augment the capacity of the AMP if necessary. Accordingly, under these agreements, IRWD can legally increase its use of the AMP beyond the above-stated capacities, but would be required to reimburse other Participants from a portion of the proceeds IRWD received from the sale of the AMP.

(iv) Improvement Subleases (or "FAP" Subleases) [MWDOC and LAWD; MWDOC and IRWD], dated August 1, 1989; 1996 Amended and Restated Allen-McColloch Pipeline Subleases [MWDOC and LAWD; MWDOC and IRWD], dated March 1, 1996. IRWD subleases its AMP capacity, including the capacity it acquired as successor to LAWD. To facilitate bond financing for the construction of the AMP, it was provided that the MWDOC Water Facilities Corporation, and subsequently MWDOC, would have ownership of the pipeline, and the Participants would be sublessees. As is the case with the AMP Sale Agreement, the subleases similarly provide that water is subject to availability.

East Orange County Feeder No. 2 ("EOCF#2") (currently available).

(v) Agreement For Joint Exercise of Powers For Construction, Operation and Maintenance of East Orange County Feeder No. 2, dated July 11, 1961, as amended on July 25, 1962 and April 26, 1965; Agreement Re Capacity Rights In Proposed Water Line, dated September 11, 1961 ("IRWD MWDOC Assignment Agreement"); Agreement Regarding Capacity Rights In the East Orange County Feeder No. 2, dated August 28, 2000 ("IRWD Coastal Assignment Agreement"). East Orange County Feeder No. 2 ("EOCF#2"), a feeder linking Orange County

with MWD's feeder system, was constructed pursuant to a joint powers agreement among MWDOC (then called Orange County Municipal Water District), MWD, Coastal Municipal Water District ("Coastal"), Anaheim and Santa Ana. A portion of IRWD's territory is within MWDOC and the remainder is within the former Coastal (which was consolidated with MWDOC in 2001). Under the IRWD MWDOC Assignment Agreement, MWDOC assigned 41 cfs of capacity to IRWD in the reaches of EOCF#2 upstream of the point known as Coastal Junction (reaches 1 through 3), and 27 cfs in reach 4, downstream of Coastal Junction. Similarly, under the IRWD Coastal Assignment Agreement, prior to Coastal's consolidation with MWDOC, Coastal assigned to IRWD 0.4 cfs of capacity in reaches 1 through 3 and 0.6 cfs in reach 4 of EOCF#2. Delivery of water through EOCF#2 is subject to the rules and regulations of MWD and MWDOC, and is further subject to application and agreement of IRWD respecting turnouts.

Orange County Feeder (currently available)

(vi) Agreement, dated March 13, 1956. This 1956 Agreement between MWDOC's predecessor district and the Santa Ana Heights Water Company ("SAHWC") provides for delivery of MWD imported supply to the former SAHWC service area. SAHWC's interests were acquired on behalf of IRWD through a stock purchase and IRWD annexation of the SAHWC service area in 1997. The supply is delivered through a connection to MWD's Orange County Feeder designated as OC-7.

(vii) Agreement For Transfer of Interest In Pacific Coast Highway Water Transmission and Storage Facilities From The Irvine Company To the Irvine Ranch Water District, dated April 23, 1984; Joint Powers Agreement For the Construction, Operation and Maintenance of Sections 1a, 1b and 2 of the Coast Supply Line, dated June 9, 1989; Agreement, dated January 13, 1955 ("1955 Agreement"). The jointly constructed facility known as the Coast Supply Line ("CSL"), extending southward from a connection with MWD's Orange County Feeder at Fernleaf Street in Newport Beach, was originally constructed pursuant to a 1952 agreement among Laguna Beach County Water District ("LBCWD"), The Irvine Company (TIC) and South Coast County Water District. Portions were later reconstructed. Under the above-referenced transfer agreement in 1984, IRWD succeeded to TIC's interests in the CSL. The CSL is presently operated under the above-referenced 1989 joint powers agreement, which reflects IRWD's ownership of 10 cfs of capacity. The 1989 agreement obligates LBCWD, as the managing agent and trustee for the CSL, to purchase water and deliver it into the CSL for IRWD. LBCWD purchases such supply, delivered by MWD to the Fernleaf connection, pursuant to the 1955 Agreement with Coastal (now MWDOC).

Baker Water Treatment Plant (under development)

IRWD has begun construction of the Baker Water Treatment Plant project (the Baker WTP) in partnership with El Toro Water District, Moulton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP will be supplied with untreated imported water from MWD and native Irvine Lake water supply. IRWD will own 10.5 cfs of treatment capacity rights in

the Baker WTP.⁸

•POTABLE SUPPLY - GROUNDWATER

(i) Orange County Water District Act, Water Code App., Ch. 40 ("Act"). IRWD is an operator of groundwater-producing facilities in the Orange County Groundwater Basin (the "Basin"). Although the rights of the producers within the Basin vis a vis one another have not been adjudicated, they nevertheless exist and have not been abrogated by the Act (§40-77). The rights consist of municipal appropriators' rights and may include overlying and riparian rights. The Basin is managed by OCWD under the Act, which functions as a statutorily-imposed physical solution. The Act empowers OCWD to impose replenishment assessments and basin equity assessments on production and to require registration of water-producing facilities and the filing of certain reports; however, OCWD is expressly prohibited from limiting extraction unless a producer agrees (§ 40-2(6) (c)) and from impairing vested rights to the use of water (§ 40-77). Thus, producers may install and operate production facilities under the Act; OCWD approval is not required. OCWD is required to annually investigate the condition of the Basin, assess overdraft and accumulated overdraft, and determine the amount of water necessary for replenishment (§40-26). OCWD has studied the Basin replenishment needs and potential projects to address growth in demand until 2020. This is described in detail in the OCWD Master Plan Report, dated April, 1999. OCWD's analysis has been expanded and updated through 2025 in its Final Draft Long-Term Facilities Plan (January, 2006).

(ii) *Irvine Ranch Water District v. Orange County Water District*, OCSC No. 795827. A portion of IRWD is outside the jurisdictional boundary of OCWD. IRWD is eligible to annex the Santa Ana River Watershed portion of this territory to OCWD, under OCWD's current annexation policy (Resolution No. 86-2-15, adopted on February 19, 1986 and reaffirmed on June 2, 1999), and anticipates doing so. However, this September 29, 1998, Superior Court ruling indicates that IRWD is entitled to deliver groundwater from the Basin to the IRWD service area irrespective of whether such area is also within OCWD.

Dyer Road Wellfield (DRWF) / Deep Aquifer Treatment System (DATS) (currently available)

(iii) Agreement For Water Production and Transmission Facilities, dated March 18, 1981, as amended May 2, 1984, September 19, 1990 and November 3, 1999 (the "DRWF Agreement"). The DRWF Agreement, among IRWD, OCWD and Santa Ana, concerns the development of IRWD's Dyer Road Wellfield ("DRWF"), within the Basin. The DRWF consists of 16 wells pumping from the non-colored water zone of the Basin and 2 wells (with colored-water treatment facilities) pumping from the deep, colored-water zone of the Basin (the colored-water

⁸ The Baker WTP shall be supplied nonpotable imported water through the existing Baker Pipeline. IRWD's existing Baker Pipeline capacity (see Section 2(b)(1) NONPOTABLE SUPPLY – IMPORTED) shall be apportioned to the Baker WTP participants based on Baker WTP capacity ownership, and IRWD shall retain 10.5 cfs of pipeline capacity through the Baker WTP for potable supply and shall retain 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply.

portion of the DRWF is sometimes referred to as the Deep Aquifer Treatment System or "DATS".) Under the DRWF Agreement, an "equivalent" basin production percentage (BPP) has been established for the DRWF, currently 28,000 AFY of non-colored water and 8,000 AFY of colored water, provided any amount of the latter 8,000 AFY not produced results in a matching reduction of the 28,000 AFY BPP. Although typically IRWD production from the DRWF does not materially exceed the equivalent BPP, the equivalent BPP is not an extraction limitation; it results in imposition of monetary assessments on the excess production. The DRWF Agreement also establishes monthly pumping amounts for the DRWF. With the addition of the Concentrated Treatment System (CATS), IRWD has increased the yield of DATS.

Irvine Subbasin / Irvine Desalter (currently available)

(iv) First Amended and Restated Agreement, dated March 11, 2002, as amended June 15, 2006, restating May 5, 1988 agreement ("Irvine Subbasin Agreement"). TIC has historically pumped agricultural water from the Irvine Subbasin. (As in the rest of the Basin of which this subbasin is a part, the groundwater rights have not been adjudicated, and OCWD provides governance and management under the Act.) The 1988 agreement between IRWD and TIC provided for the joint use and management of the Irvine Subbasin. The 1988 agreement further provided that the 13,000 AFY annual yield of the Irvine Subbasin would be allocated 1,000 AFY to IRWD and 12,000 AFY to TIC. Under the restated Irvine Subbasin Agreement, the foregoing allocations were superseded as a result of TIC's commencement of the building its Northern Sphere Area project, with the effect that the Subbasin production capability, wells and other facilities, and associated rights have been transferred from TIC to IRWD, and IRWD has assumed the production from the Subbasin. In consideration of the transfer, IRWD is required to count the supplies attributable to the transferred Subbasin production in calculating available supplies for the Northern Sphere Area project and other TIC development and has agreed that they will not be counted toward non-TIC development.

A portion of the existing Subbasin water production facilities produce water which is of potable quality. IRWD could treat some of the water produced from the Subbasin for potable use, by means of the Desalter and other projects. Although, as noted above, the Subbasin has not been adjudicated and is managed by OCWD, TIC reserved water rights from conveyances of its lands as development over the Subbasin has occurred, and under the Irvine Subbasin Agreement TIC has transferred its rights to IRWD.

(v) Second Amended and Restated Agreement Between Orange County Water District and Irvine Ranch Water District Regarding the Irvine Desalter Project, dated June 11, 2001, and other agreements referenced therein. This agreement provides for the extraction and treatment of subpotable groundwater from the Irvine Subbasin, a portion of the Basin. As is the case with the remainder of the Basin, IRWD's entitlement to extract this water is not adjudicated, but the use of the entitlement is governed by the OCWD Act. (See also, discussion of Irvine Subbasin in the preceding paragraph.) A portion of the product water has been delivered into the IRWD potable system, and the remainder has been delivered into the IRWD nonpotable system.

Orange Park Acres (currently available)

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including well [OPA Well]. The well is operated within the Orange County Groundwater Basin.

Wells 21 and 22 (currently available)

IRWD completed construction of treatment facilities, pipelines and wellhead facilities for Wells 21 and 22. Water supplied through this project became available in 2013. The wells are operated within the Orange County Groundwater Basin.

Irvine Wells (under development)

(vi) IRWD is pursuing the installation of production facilities in the west Irvine, Tustin Legacy and Tustin Ranch portions of the Basin. These groundwater supplies are considered to be under development; however, four wells have been drilled and have previously produced groundwater, three wells have been drilled but have not been used as production wells to date, a site for an additional well and treatment facility has been acquired by IRWD. The production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. Appropriate environmental review would be conducted for each facility. See discussion of the Act under Potable Supply - Groundwater, paragraph (i), above.

•NONPOTABLE SUPPLY - RECLAIMED

Water Reclamation Plants (currently available)

Water Code Section 1210. IRWD supplies its own reclaimed water from wastewater collected by IRWD and delivered to IRWD's Michelson Water Reclamation Plant (MWRP) and Los Alisos Water Reclamation Plant (LAWRP). MWRP currently has a permitted capacity of 18 million gallons per day (MGD) and LAWRP currently has a permitted capacity of 5.5 MGD. Water Code Section 1210 provides that the owner of a wastewater treatment plant operated for the purposes of treating wastes from a sanitary sewer system holds the exclusive right to the treated effluent as against anyone who has supplied the water discharged into the sewer system. IRWD's permits for the operation of MWRP and LAWRP allow only irrigation and other customer uses of reclaimed water, and do not permit stream discharge of reclaimed water; thus, no issue of downstream appropriation arises, and IRWD is entitled to deliver all of the effluent to meet contractual and customer demands.

Water Reclamation Plant Expansion (current available)

IRWD is completing construction of the Michelson Water Reclamation Plant Phase 2 Capacity Expansion Project later in 2015. With this expansion, IRWD will increase its capacity on the existing MWRP site to produce sufficient reclaimed water to meet the projected demand in the year 2035. Additional

reclamation capacity will augment local nonpotable supplies and improve reliability.

•**NONPOTABLE SUPPLY - IMPORTED**⁹

Baker Pipeline (currently available)

Santiago Aqueduct Commission Joint Powers Agreement, dated September 11, 1961, as amended December 20, 1974, January 13, 1978, November 1, 1978, September 1, 1981, October 22, 1986, and July 8, 1999 (the "SAC Agreement"); Agreement Between Irvine Ranch Water District and Carma-Whiting Joint Venture Relative to Proposed Annexation of Certain Property to Irvine Ranch Water District, dated May 26, 1981 (the "Whiting Annexation Agreement"). Service connections OC-13/13A, OC-33/33A. The imported untreated water pipeline initially known as the Santiago Aqueduct and now known as the Baker Pipeline was constructed under the SAC Agreement, a joint powers agreement. The Baker Pipeline is connected to MWD's Santiago Lateral. IRWD's capacity in the Baker Pipeline includes the capacity it subleases as successor to LAWD, as well as capacity rights IRWD acquired through the Whiting Annexation Agreement. (To finance the construction of AMP parallel untreated reaches which were incorporated into the Baker Pipeline, replacing original SAC untreated reaches that were made a part of the AMP potable system, it was provided that the MWDOC Water Facilities Corporation, and subsequently MWDOC, would have ownership, and the participants would be sublessees.) IRWD has 52.70 cfs in the first reach, 12.50 cfs in each of the second, third and fourth reaches and 7.51 cfs in the fifth reach of the Baker Pipeline. Water is subject to availability from MWD.

•**NONPOTABLE SUPPLY - NATIVE**

Irvine Lake (currently available)

(i) Permit For Diversion and Use of Water (Permit No. 19306) issued pursuant to Application No. 27503; License For Diversion and Use of Water (License 2347) resulting from Application No. 4302 and Permit No. 3238; License For Diversion and Use of Water (License 2348) resulting from Application No. 9005 and Permit No. 5202. The foregoing permit and licenses, jointly held by IRWD (as successor to The Irvine Company (TIC) and Carpenter Irrigation District (CID)) and Serrano Water District (SWD), secure appropriative rights to the flows of Santiago Creek. Under Licenses 2347 and 2348, IRWD and SWD have the right to diversion by storage at Santiago Dam (Irvine Lake) and a submerged dam, of a total of 25,000 AFY. Under Permit No. 19306, IRWD and SWD have the right to diversion by storage of an additional 3,000 AFY by flashboards at Santiago Dam (Irvine Lake). (Rights under Permit No. 19306 may be junior to an OCWD permit to divert up to 35,000 AFY of Santiago Creek flows to spreading pits downstream of Santiago Dam.) The combined total of native water that may be diverted to storage under these licenses and permit is 28,000 AFY. A 1996 amendment to

⁹ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

License Nos. 2347, 2348 and 2349 [replaced by Permit No. 19306 in 1984] limits the withdrawal of water from the Lake to 15,483 AFY under the licenses. This limitation specifically references the licenses and doesn't reference water stored pursuant to other legal entitlements. The use and allocation of the native water is governed by the agreements described in the next paragraph.

(ii) Agreement, dated February 6, 1928 ("1928 Agreement"); Agreement, dated May 15, 1956, as amended November 12, 1973 ("1956 Agreement"); Agreement, dated as of December 21, 1970 ("1970 Agreement"); Agreement Between Irvine Ranch Water District and The Irvine Company Relative to Irvine Lake and the Acquisition of Water Rights In and To Santiago Creek, As Well As Additional Storage Capacity in Irvine Lake, dated as of May 31, 1974 ("1974 Agreement"). The 1928 Agreement was entered into among SWD, CID and TIC, providing for the use and allocation of native water in Irvine Lake. Through the 1970 Agreement and the 1974 Agreement, IRWD acquired the interests of CID and TIC, leaving IRWD and SWD as the two co-owners. TIC retains certain reserved rights. The 1928 Agreement divides the stored native water by a formula which allocates to IRWD one-half of the first 1,000 AF, plus increments that generally yield three-fourths of the amount over 1,000 AF.¹⁰ The agreements also provide for evaporation and spill losses and carryover water remaining in the Lake at the annual allocation dates. Given the dependence of native water on rainfall, for purposes of this assessment only a small portion of IRWD's share of the 28,000 AFY of native water rights (4,000 AFY in normal years and 1,000 AFY in single and multiple-dry years) is shown in currently available supplies, based on averaging of historical data. However, IRWD's ability to supplement Irvine Lake storage with its imported untreated water supplies, described herein, offsets the uncertainty associated with the native water supply.

•NONPOTABLE SUPPLY - GROUNDWATER

Irvine Subbasin / Irvine Desalter (currently available)

(i) IRWD's entitlement to produce nonpotable water from the Irvine Subbasin is included within the Irvine Subbasin Agreement. See discussion of the Irvine Subbasin Agreement under Potable Supply - Groundwater; paragraph (iv), above.

(ii) See discussion of the Irvine Desalter project under Potable Supply - Groundwater, paragraph (v), above. The Irvine Desalter project will produce nonpotable as well as potable water.

•IMPORTED SUPPLY - ADDITIONAL INFORMATION

As described above, the imported supply from MWD is contractually subject to

¹⁰ The 1956 Agreement provides for facilities to deliver MWD imported water into the Lake, and grants storage capacity for the imported water. By succession, IRWD owns 9,000 AFY of this 12,000 AFY imported water storage capacity. This storage capacity does not affect availability of the imported supply, which can be either stored or delivered for direct use by customers.

availability. To assist local water providers in assessing the adequacy of local water supplies that are reliant in whole or in part on MWD's imported supply; MWD has provided information concerning the availability of the supplies to its entire service area. In its most recently adopted RUWMP, MWD has extended its planning timeframe out through 2035 to ensure that MWD's 2010 RUWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the RUWMP includes "Justifications for Supply Projections" (Appendix A-3) that details the planning, legal, financial, and regulatory basis for including each source of supply in the plan. The RUWMP summarizes MWD's planning initiatives over the past ten years, which includes the Integrated Resources Plan (IRP), the IRP Update, the Water Surplus and Drought Management Plan, Strategic Plan and Rate Structure. The reliability analysis in MWD's IRP Update (October 2010) showed that MWD can maintain reliable supplies under the conditions that have existed in past dry periods throughout the period 2015 through 2035. The RUWMP includes tables that show the region can provide reliable supplies under both the single driest year (1977) and multiple dry years (1990-92) through 2035. MWD has also identified buffer supplies, including additional State Water Project groundwater storage and transfers that could serve to supply the additional water needed.

It is anticipated that MWD will revise its regional supply availability analysis periodically to supplement its RUWMP in years when the RUWMP is not being updated.

IRWD is permitted by the statute to rely upon the water supply information provided by the wholesaler concerning a wholesale water supply source, for use in preparing its UWMPs. In turn, the statute provides for the use of UWMP information to support water supply assessments and verifications. In accordance with these provisions, IRWD is entitled to rely upon the conclusions of the MWD RUWMP. As referenced above under Summary of Results of Demand-Supply Comparisons - Recent Actions on Delta Pumping, MWD has provided additional information on its imported water supply.

MWD's reserve supplies, together with the fact that IRWD relies on MWD supplies as supplemental supplies that need not be used to the extent IRWD operates currently available and under-development local supplies, build a margin of safety into IRWD's supply availability.

(2) Adopted capital outlay program to finance delivery of the water supplies.

All necessary delivery facilities currently exist for the use of the *currently available* and *under-development* supplies assessed herein, with the exception of future groundwater wells, MWRP expansion and IRWD sub-regional and developer-dedicated conveyance facilities necessary to complete the local distribution systems for the Project. IRWD's turnout at each MWD connection and IRWD's regional delivery facilities are sufficiently sized to deliver all of the supply to the sub-regional and local distribution systems.

With respect to future groundwater wells (PR Nos. 11405, 11473), the MWRP Phase 2 expansion (PR. Nos. 20214 and 30214), and Baker WTP (PR No.

11218), IRWD adopted its fiscal year 2014-15 capital budget on June 9, 2014 (Resolution No. 2014-29), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) For these facilities, as well as unbuilt IRWD sub-regional conveyance facilities, the sources of funding are previously authorized general obligation bonds, revenue-supported certificates of participation and/or capital funds held by IRWD Improvement Districts. IRWD has maintained a successful program for the issuance of general obligation bonds and certificates of participation on favorable borrowing terms, and IRWD has received AAA public bond ratings. IRWD has approximately \$615.2 million (water) and \$784.8 million (wastewater) of unissued, voter-approved bond authorization. Certificates of participation do not require voter approval. Proceeds of bonds and available capital funds are expected to be sufficient to fund all IRWD facilities for delivery of the supplies under development. Tract-level conveyance facilities are required to be donated to IRWD by the Applicant or its successor(s) at time of development.

See also *MWD's RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

(3) Federal, state and local permits for construction of delivery infrastructure.

Most IRWD delivery facilities are constructed in public right-of-way or future right-of-way. State statute confers on IRWD the right to construct works along, under or across any stream of water, watercourse, street, avenue, highway, railway, canal, ditch or flume (Water Code Section 35603). Although this right cannot be denied, local agencies may require encroachment permits when work is to be performed within a street. If easements are necessary for delivery infrastructure, IRWD requires the developer to provide them. The crossing of watercourses or areas with protected species requires federal and/or state permits as applicable.

See also *MWD's RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to permits related to MWD's supplies.

(4) Regulatory approvals for conveyance or delivery of the supplies.

See response to preceding item (3).

See also *MWD's RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

3. Other users and contractholders (identified supply not previously used).

For each of the water supply sources identified by IRWD, if no water has been received from that source(s), IRWD is required to identify other public water systems or water service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, that source(s):

Water has been received from all listed sources. A small quantity of Subbasin water is used by Woodbridge Village Association for the purpose of supplying its North and South Lakes. There are no other public water systems or water

service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, the Irvine Subbasin.

4. Information concerning groundwater included in the supply identified for the Project:

(a) Relevant information in the Urban Water Management Plan (UWMP):

See Irvine Ranch Water District 2010 UWMP, sections 4-D through 4-J.

(b) Description of the groundwater basin(s) from which the Project will be supplied:

The Orange County Groundwater Basin ("Basin") is described at pages 3-1 through 3-14 of the OCWD Master Plan Report, dated April, 1999 ("MPR") and in the more recent Groundwater Management Plan ("GMP") at pages 2-1 through 6-33¹¹. The rights of the producers within the Basin vis a vis one another have not been adjudicated. The Basin is managed by the Orange County Water District (OCWD) for the benefit of municipal, agricultural and private groundwater producers. OCWD is responsible for the protection of water rights to the Santa Ana River in Orange County as well as the management and replenishment of the Basin. Current production from the Basin is approximately 332,000 AFY.

The Department of Water Resources has not identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118 (2003). The efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin are described in the OCWD MPR, including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan ("LTFP") which provides updated information and was received by the OCWD Board in July 2009. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin.

Although the water supply assessment statute (Water Code Section 10910(f)) refers to elimination of "long-term overdraft," overdraft includes conditions which may be managed for optimum basin storage, rather than eliminated. OCWD's Act defines annual groundwater overdraft to be the quantity by which production exceeds the natural replenishment of the Basin. Accumulated overdraft is defined in the OCWD Act to be the quantity of water needed in the groundwater basin forebay to prevent landward movement of seawater into the fresh groundwater body. However, seawater intrusion control facilities have been constructed by OCWD since the Act was written, and have been effective in preventing landward movement of seawater. These facilities allow greater utilization of the storage capacity of the Basin.

OCWD has invested over \$250 million in seawater intrusion control (injection barriers), recharge facilities, laboratories, and Basin monitoring to effectively

¹¹ OCWD has also prepared a Long Term Facilities Plan which provides updated information which was received and filed by its Board in July 2009.

manage the Basin. Consequently, although the Basin is defined to be in an “overdraft” condition, it is actually managed to allow utilization of up to 500,000 acre-feet of storage capacity of the basin during dry periods, acting as an underground reservoir and buffer against drought. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft provides sufficient storage space to accommodate increased supplies from one wet year while also provide enough water in storage to offset decreased supplies during a two- to three year drought. If the Basin is too full, artesian conditions can occur along the coastal area, causing rising water and water logging, an adverse condition. Since the formation of OCWD in 1933, OCWD has made substantial investment in facilities, Basin management and water rights protection, resulting in the elimination and prevention of adverse long-term “mining” overdraft conditions. OCWD continues to develop new replenishment supplies, recharge capacity and basin protection measures to meet projected production from the basin during normal rainfall and drought periods. (OCWD MPR and LTFP)

OCWD’s efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD’s management of overdraft to maximize its use for annual production and recharge operations, overdraft varies over time as the Basin is managed to keep it in balance over the long term. The Basin is not operated on an annual safe-yield basis. (OCWD MPR, section 3.2 and LTFP, section 6)

(c) Description and analysis of the amount and location of groundwater pumped by IRWD from the Basin for the past five years:

The following table shows the amounts pumped, by groundwater source:

(In AFY)

Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD¹²
2014	42,424	10,995	0	376
2013	38,617	8,629	0	282
2012	37,059	7,059	0	0
2011	34,275	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16
2007	37,864	5,407	0	6
2006	37,046	2,825	0	268

¹² The water produced from IRWD’s Los Alisos wells is not included in this assessment. IRWD is presently evaluating the future use of these wells.

2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598
2002	25,855	2,533	5,075	744

(d) Description and analysis of the amount and location of groundwater projected to be pumped by IRWD from the Basin:

IRWD has a developed groundwater supply of 35,200 AFY from its Dyer Road Wellfield (including the Deep Aquifer Treatment System), in the main portion of the Basin.

Although TIC's historical production from the Subbasin declined as its use of the Subbasin for agricultural water diminished, OCWD's and other historical production records for the Subbasin show that production has been as high as 13,000 AFY. Plans are also underway to expand IRWD's main Orange County Groundwater Basin supply (characterized as *under-development* supplies herein). (See Section 2 (a) (1) herein). IRWD anticipates the development of additional production facilities within both the main Basin and the Irvine Subbasin. However, such additional facilities have not been included or relied upon in this assessment. Additional groundwater development will provide an additional margin of safety as well as reduce future water supply costs to IRWD.

The following table summarizes future IRWD groundwater production from currently available and under-development supplies.

(In AFY)

Year (ending 6/30)	DRWF ¹³	Future GW ¹⁴	IDP (Potable)	IDP (Nonpotable)
2015	43,300	0	5,640	3,898
2020	43,300	3,469	5,640	3,898
2025	43,300	12,352	5,640	3,898
2035	43,300	12,352	5,640	3,898

(e) If not included in the UWMP, analysis of the sufficiency of groundwater projected to be pumped by IRWD from the Basin to meet to meet the projected water demand of the Project:

See responses to 4(b) and 4(d).

¹³ See Potable Supply - Groundwater, paragraph (iii), above. DRWF non-colored production above 28,000 AFY and colored water production above 8,000 AFY are subject to contractually-imposed assessments. In addition, seasonal production amounts apply. This also includes 1,000 AFY for the OPA well and 6,300 for Wells 21&22.

¹⁴ Under development.

The OCWD MPR and LTFP examined future Basin conditions and capabilities, water supply and demand, and identified projects to meet increased replenishment needs of the basin. With the implementation of OCWD's preferred projects, the Basin yield in the year 2025 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage ("BPP") that OCWD sets based on these factors.¹⁵ Sufficient replenishment supplies are projected by the OCWD MPR to be available to OCWD to meet the increasing demand on the Basin. These supplies include capture of increasing Santa Ana River flows, purchases of replenishment water from MWD, and development of new local supplies. OCWD has completed its replenishment supply project, the Groundwater Replenishment System project ("GWRS"). The OCWD MPR indicates that the GWRS will produce over 100,000 AFY of new replenishment supply from recycled water.

Production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or emergencies. Additional groundwater production is anticipated by OCWD in the Basin in dry years, as producers reduce their use of imported supplies, and the Basin is "mined" in anticipation of the eventual availability of replenishment water. (OCWD MPR, section 14.6.)

See also, Figures 1-8. IRWD assesses sufficiency of supplies on an aggregated basis, as neither groundwater nor other supply sources are allocated to particular projects or customers. Under the Irvine Subbasin Agreement, IRWD is contractually obligated to attribute the Subbasin supply only to TIC development projects for assessment purposes; however, the agreement does not allocate or assign rights in the Subbasin supply to any project.

Sustainable Groundwater Management Act. Pursuant to the Sustainable Groundwater Management Act (SGMA), the DWR has designated the Orange County groundwater basin as a medium priority basin for purposes of groundwater management. By January 31, 2017, local groundwater producers must establish or designate an entity (referred to as a groundwater sustainability agency, or "GSA"), subject to DWR's approval, to manage each high and medium priority groundwater basin. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the GSA for such basin.

¹⁵ OCWD has adopted a basin production percentage of 72% for 2014-15. In prior years OCWD has maintained a basin production percentage that is higher than the current percentage, and IRWD anticipates that such reductions may occur from time to time as a temporary measure employed by OCWD to encourage lower pumping levels as OCWD implements other measures to reduce the current accumulated overdraft in the Basin. Any such reductions are not expected to affect any of IRWD's currently available groundwater supplies listed in this assessment, which are subject to a contractually-set equivalent basin production percentage as described, or are exempt from the basin production percentage.

5. ☐ This Water Supply Assessment is being completed for a project included in a prior water supply assessment. Check all of the following that apply:

- ☐ Changes in the Project have substantially increased water demand.
- ☐ Changes in circumstances or conditions have substantially affected IRWD's ability to provide a sufficient water supply for the Project.
- ☐ Significant new information has become available which was not known and could not have been known at the date of the prior Water Supply Assessment.

6. References

Water Resources Master Plan, Irvine Ranch Water District, March, 2002 (supplemented January, 2004)

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

Integrated Water Resources Plan Update, Metropolitan Water District of Southern California, July, 2004

Proposed Framework for Metropolitan Water District's Delta Action Plan, Metropolitan Water District of Southern California, May 8, 2007

Board Information Report, Metropolitan Water District of Southern California, October 9, 2007

2007 IRP Implementation Report, Metropolitan Water District of Southern California, October, 2007

Master Plan Report, Orange County Water District, April, 1999

Groundwater Management Plan, Orange County Water District, March, 2004

Final Draft Long-Term Facilities Plan, Orange County Water District, January 2006

2008-2009 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

2009-2010 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

2012-2013 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

Progress on Incorporating Climate Change into Management of California's Water Resources, California Department of Water Resources, July 2006

Section 15 of the Rules and Regulations – Water Conservation and Water Supply Shortage Program, Irvine Ranch Water District, February 2009

Water Shortage Contingency Plan, Irvine Ranch Water District, February 2009

2010 Integrated Resources Plan Update, Metropolitan Water District of Southern California, October 2010

Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November 2010

Exhibit A
Depiction of Project Area

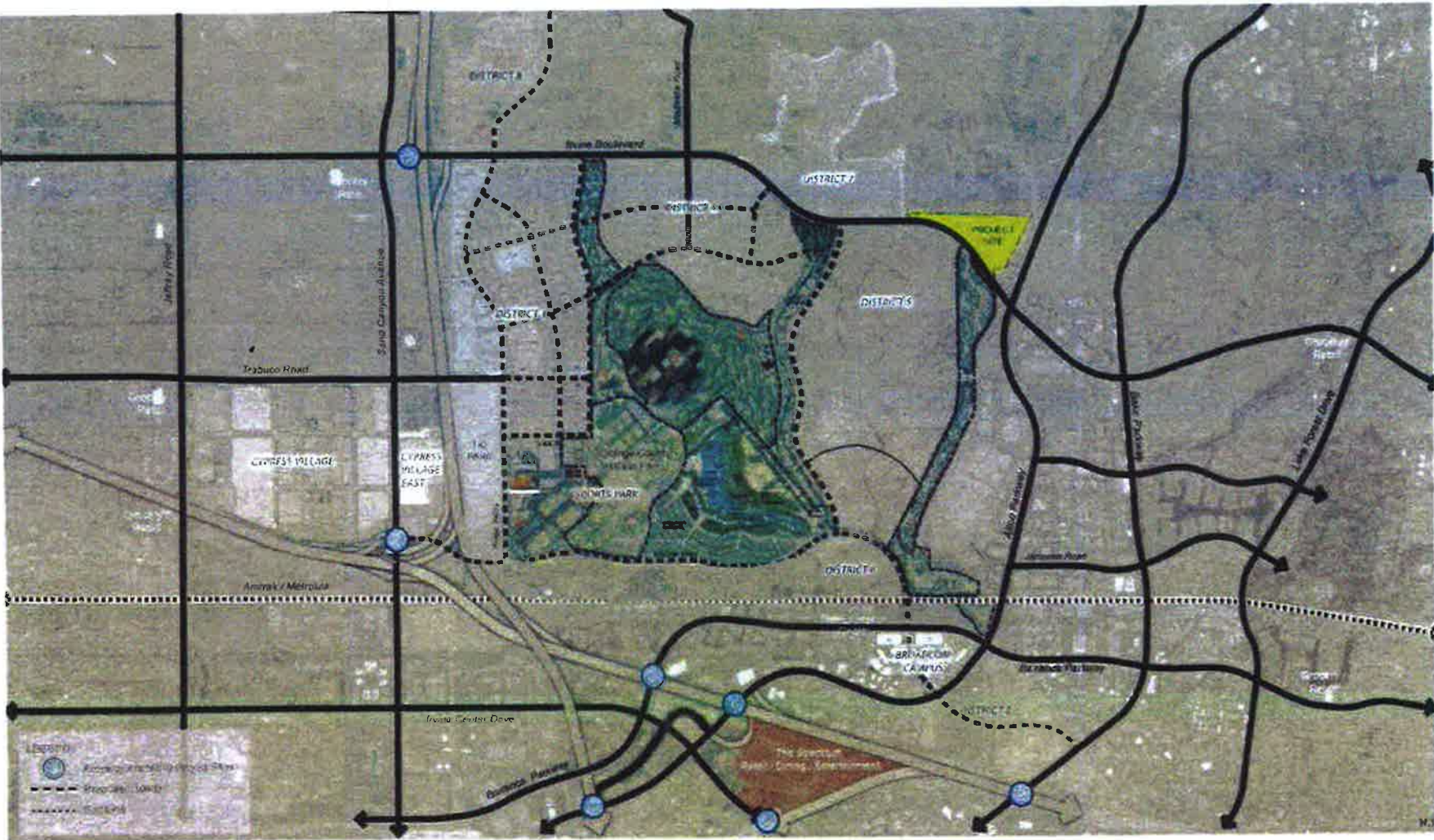


Exhibit B

Uses Included in Project



County of Orange
California

James Campbell
Land Development Manager

January 22, 2015

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000

Re: Request for Water Supply Availability Assessment (Water Code §10910 et seq.) for West Alton Development Plan

The County of Orange hereby requests an assessment of water supply availability for the below-described project. The County has determined that the project is a "project" as defined in Water Code §10912, and has determined that [[an environmental impact report/negative declaration/mitigated negative declaration]] is required for the project.

Proposed Project Information

Project Title: West Alton Development Plan

Location of project: On the former USMC El Toro Air Station and northwest of the intersection of Alton Parkway and Irvine Boulevard. Site is located along the Irvine Boulevard and north of an existing industrial complex and an existing IRWD Facility; and in the City of Irvine Planning Area 51.

☒ (For projects requiring a new assessment under Water Code §10910 (h).) Previous Water Supply Assessment including this project was prepared on: _____. This application requests a new Water Supply Assessment, due to the following (check all that apply):

- ☐ Changes in the project have substantially increased water demand
☐ Changes in circumstances or conditions have substantially affected IRWD's ability to provide a sufficient water supply for the project
☒ Significant new information has become available which was not known and could not have been known at the date of the prior Water Supply Assessment (Enclose maps and exhibits of the project)

Type of Development:

- ☒ Residential: No. of dwelling units: 970
☐ Shopping center or business: No. of employees _____ Sq. ft. of floor space _____
☐ Commercial office: No. of employees _____ Sq. ft. of floor space _____
☐ Hotel or motel: No. of rooms _____
☐ Industrial, manufacturing, processing or industrial park: No. of employees _____ No. of acres _____ Sq. ft. of floor space _____
☐ Mixed use (check and complete all above that apply)
☐ Other: _____

Total acreage of project: 32.3

Acreage devoted to landscape:

Greenbelt None golf course None parks 2.5 acres (Passive use)
Agriculture None other landscaped areas 10.4 Acres
Number of schools None Number of public facilities None

County Executive Office
333 W. Santa Ana Blvd.
Third Floor
Santa Ana, California
92701-4062

Tel: (714) 227-1011
Web: www.ocgov.com

Other factors or uses that would affect the quantity of water needed, such as peak flow requirements or potential uses to be added to the project to reduce or mitigate environmental impacts:

Low flow fixtures and a water efficient landscape irrigation system with drought tolerant landscape design

What is the current land use of the area subject to a land use change under the project?

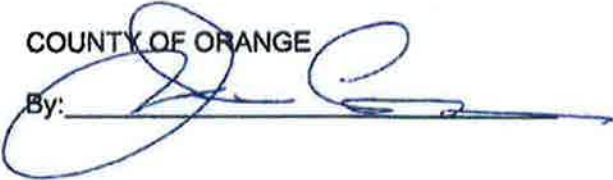
Agricultural

Is the project included in the existing General Plan? No If no, describe the existing General Plan Designation Agriculture

The County acknowledges that IRWD's assessment will be based on the information hereby provided to IRWD concerning the project. If it is necessary for corrected or additional information to be submitted to enable IRWD to complete the assessment, the request will be considered incomplete until IRWD's receipt of the corrected or additional information. If the project, circumstances or conditions change or new information becomes available after the issuance of a Water Supply Assessment, the Water Supply Assessment may no longer be valid. The County will request a new Water Supply Assessment if it determines that one is required.

The County acknowledges that the Water Supply Assessment shall not constitute a "will-serve" or in any way entitle the project applicant to service or to any right, priority or allocation in any supply, capacity or facility, and that the issuance of the Water Supply Assessment shall not affect IRWD's obligation to provide service to its existing customers or any potential future customers including the project applicant. In order to receive service, the project applicant shall be required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

COUNTY OF ORANGE

By: 

REQUEST RECEIVED:

Date: Jan. 24, 2015

By: Kellie Walker
Irvine Ranch Water District

REQUEST COMPLETE:

Date: Jan. 28, 2015

By: Kellie Walker
Irvine Ranch Water District

EXHIBIT "C"

IRVINE RANCH WATER DISTRICT VERIFICATION OF SUFFICIENT WATER SUPPLY Government Code §66473.7

To: (Lead Agency)
County of Orange
333 W. Santa Ana Blvd., Third Floor
Santa Ana, CA 92701-4062

(Applicant)
County of Orange
333 W. Santa Ana Blvd., Third Floor
Santa Ana, CA 92701-4062

Project Information

Project Title: El Toro 100 Acre Parcel Development (see Exhibit A)
☐ Tentative Map Application No. _____ ☐ Verification requested prior to tentative map application

Number of residential units in Project: 2,103
Non-residential uses in Project (type, no. of employees, sq. ft. of floor space, acreage): (see Exhibit B)
Acreage to be devoted to landscape (excluding individual residence yards): (see Exhibit B)

☐ The projected water demand for the Project was included in IRWD's most recently adopted urban water management plan.

☒ A water supply assessment that included the Project was adopted by IRWD on April 15, 2015. A copy is attached hereto and incorporated herein by this reference (see Exhibit C).

Verification of Availability of Sufficient Water Supply

On _____, 2016 the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within Verification and made the following determination regarding the above-described Project:

- ☐ A sufficient water supply is available for the Project.
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.
- ☐ A sufficient water supply is not available for the Project.

The foregoing determination is based on the following Water Supply Verification Information and supporting information in the records of IRWD.

Signature	Date	Title
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WATER SUPPLY VERIFICATION INFORMATION

Purpose of Verification

Irvine Ranch Water District ("IRWD") is the public water system that will supply water service (both potable and nonpotable) to the project identified on the cover page of this verification (the "Project"). As a public water system, IRWD is required by Section 66473.7 of the Government Code (the "Verification Law") to provide the County with a verification of the availability of a sufficient water supply for non-exempt subdivisions of more than 500 residential units in conjunction with (or prior to) the County's approval of a tentative map. The County has found the Project to include a subdivision that is subject to verification and not exempt under the Verification Law.

The Verification Law provides that a verification shall be supported by substantial evidence, which may include, but is not limited to, any of the following (i) IRWD's most recently adopted urban water management plan; (ii) a water supply assessment previously adopted for the project under Water Code 10910, *et seq.*; or (iii) other analytical information substantially similar to the assessment of service reliability required by Water Code Section 10635 to be included in the urban water management plan. The Verification Law also specifies the elements to be contained in a verification with respect to (i) supplies relied upon that are not currently available; (ii) reasonably foreseeable impacts of the subdivision on the availability of water resources for agricultural and industrial uses within IRWD's service area that are not currently receiving water; and (iii) rights to extract additional groundwater needed to supply the subdivision.

A verification does not entitle the Project to service or to any right, priority or allocation in any supply, capacity or facility, or affect IRWD's obligation to provide service to its existing customers or any potential future customers. In order to receive service, the Project applicant is required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

Methodology of Verification for Project With Prior Water Supply Assessment

As referenced on the cover page of this verification (the "Verification"), the Project was included within an assessment of water supply approved by IRWD. The Assessment contained IRWD's determination that a sufficient water supply is available for the Project. As described in the Assessment, IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area. However, upon approval of each assessment containing a determination of a sufficient supply, IRWD attributes the demands identified by that assessment to IRWD's existing and committed demand. Thereafter, each verification approved by IRWD for a subdivision covered by that assessment is based on the assessment, and reflects IRWD's confirmation that the water demands of the subdivision, together with any other subdivisions or developments that have previously received verifications, will-serves or other approval by IRWD under the same assessment, are, in the aggregate, within the demand identified by that assessment. In accordance with that procedure, this Verification is based on the Assessment. The Assessment's determination of sufficiency extends through 2035. In addition, this Verification includes the elements required by the Verification Law that are not included within the required contents of assessments.

Supporting Documentation

As noted above, the principal supporting document for this Verification is the Assessment. Other documentation supports the Assessment and this Verification: IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent update was adopted in June 2011 and the next update for 2015 is anticipated in July 2016. The project water demand for the Project will be included in IRWD's 2015 UWMP update.

In addition to the Assessment, the most recent WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 5 of this Verification. This includes the Metropolitan Water District of Southern California's Regional Urban Water Management Plan detailing an evaluation by Metropolitan Water District of Southern California (MWD), the wholesaler of IRWD's imported water supplies, of the reliability of MWD's supplies. (MWD 2015 UWMP dated March 2016 (MWD UWMP)).

The Verification Law requires written proof of entitlement for "not currently available" (referred to herein as "under development") supplies. The Assessment includes such information for both currently available and under development supplies. Due to the number of contracts, statutes and other documents comprising IRWD's written proof of entitlement to its water supplies, in lieu of attachment of such items, they are identified by title and summarized in Section 2 of the Assessment. Copies of the summarized items have been provided to the County.

Sufficiency Calculation Methodology

The methodology for IRWD's comparison of its demands and supplies is set forth in the Assessment, in the section entitled "Assessment Methodology" and subsections thereof entitled "water use factors; dry-year increases;" "planning horizon;" "assessment of demands;" "assessment of supplies;" and "comparison of demand and supply."

Detailed Verification

1. Determination of sufficiency of water supply

(a) Supply and demand comparison

See the Assessment, Section 1, incorporated herein by reference.

(b) Factors considered in determining the sufficiency of the water supply:

(i) The availability of water supplies over a historical record of at least 20 years.

Quantities received in prior years from existing sources identified in (a)(1):

Source	1985	1990	1995	2000	2005	2010	2015
Potable - imported	43,320	44,401	28,397	36,777	19,306	15,227	12,790
Potable - groundwater	38	10,215	20,020	20,919	37,160	42,089	46,770
Nonpotable - recycled	12,399	11,589	10,518	14,630	15,296	20,847	22,866
Nonpotable - groundwater	36	816	1,834	2,890	2,285	3,761	4,063
Nonpotable - native	3,587	2,778	5,980	4,949	7,251	814	2,826
Total	71,639	94,699	69,082	96,508	86,602	82,738	89,315

See also the Assessment, Section 1, incorporated herein by reference.

(ii) The applicability of a water shortage contingency analysis prepared pursuant to Water Code Section 10632 that includes actions to be undertaken by IRWD in response to water supply shortages.

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect the implementation of water shortage emergency measures. In February 2009, IRWD updated Section 15 of its Rules and Regulations – Water Conservation and Water Supply Shortage Program and also updated its Water Shortage Contingency Plan, which is a supporting document for Section 15. The Water Shortage Contingency Plan was further revised on October 13, 2014, and is currently being updated as part of IRWD's UWMP 2015 update (expected to be adopted in June 2016). Section 15 of the Rules and Regulations serves as IRWD's "conservation ordinance". As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are assumed to be in use to the maximum extent possible during declared shortage levels. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment to account for any water savings that could be achieved by these measures.

(iii) Reduction by IRWD in water supply allocated to a specific water use sector, pursuant to a resolution, ordinance or contract uses.

The supply and demand comparisons incorporated from the Assessment into this Verification (see 1(a)) do not reflect any allocated reductions by IRWD. As noted under the preceding item (ii), IRWD's water shortage contingency plan and Rules and Regulations provide for voluntary and mandatory water conservation measures that could be invoked in declared water shortage emergencies. These include reductions to certain water uses. However, in order to be conservative, IRWD has not reduced its single-dry or multiple-dry year demand projections or increased its single-dry or multiple-dry year supply projections in the Assessment to account for water savings that could be achieved by any allocated reductions.

With respect to items (ii) and (iii) above, it is noted that MWD has in effect a management plan for dealing with periodic surplus and shortage conditions, known as Metropolitan Report No. 1150, *Water Surplus and Drought Management Plan*, and as also described in the MWD UWMP. MWD's demand projections account for the effects of long-term conservation best management practices.

Recent Actions Related to Drought Conditions. In response to the historically dry conditions throughout the state of California, on April 1, 2015, Governor Brown issued an Executive Order directing the State Water Resources Control Board (SWRCB) to impose restrictions to achieve an aggregate statewide 25 percent reduction in potable water use through February 2016. The Governor's Order also includes mandatory actions aimed at reducing water demands, with a particular focus on outdoor water use. On May 5, 2015, the SWRCB adopted regulations which required that IRWD achieve a 16% reduction in potable water use from the 2013 levels. On November 13, 2015, Governor Brown issued an Executive Order directing the SWRCB to extend the 2015 Emergency Regulation through October 31, 2016 if drought conditions continued. On February 2, 2016, the SWRCB adopted an extended and modified Emergency Regulation. As a result of the modification, IRWD's mandated reduction was changed from 16% to 9% effective March 1, 2016. On April 14, 2015, MWD approved actions to implement the Water Supply Allocation Plan at a level 3 Regional Shortage Level and a 15% reduction in regional deliveries effective July 1, 2015, through June 30, 2016. IRWD has and will continue to implement actions to reduce potable water demands during the drought; however, this does not affect IRWD's long-term supply capability to meet the demands.

As discussed under Assessment "IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD", IRWD has effectively analyzed an imported water supply reduction as shown in Assessment Figures 1a, 2a, 3a. These Figures do not reflect a reduction in demands thus representing a more conservative view of IRWD's supply capability. In particular, the reduction in demand mandated by Senate Bill 7 in 2010, requiring urban retail water suppliers to establish water use targets to achieve a 20% reduction in daily per capita water use by 2020, has not been factored into the demands in this analysis. Similarly, notwithstanding the Governor's order, IRWD's conservative supply-sufficiency analysis in Assessment Figures 1a, 2a and 3a does not include the ordered reduction in potable demands.

(iv) The amount of water that IRWD can reasonably rely on receiving from other water supply projects, such as conjunctive use, reclaimed water, water conservation, and water transfer, including programs identified under federal, state and local water initiatives such as CALFED and Colorado River tentative agreements, based on the inclusion of information with respect to such supplies in Section 2, below.

Local. IRWD directly relies (for a portion of its full build-out annual demand in single and multiple dry-year projections) on the following under development supplies (see 1(a), above): the Irvine Wells (see the Assessment, Section 2(b)(1)(vi) – “POTABLE SUPPLY – GROUNDWATER”). In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan (“LTFP”) which provides updated information and was received by the OCWD Board in July 2009 and updated in 2014. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft which provides sufficient storage space to accommodate increased supplies from one wet year while also provides enough water in storage to offset decreased supplies during a two- to three year drought. (Source: “Evaluation of Orange County Groundwater Basin Storage and Operational Strategy”, as referenced in *2014-2015 Engineer’s Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District*).

With the implementation of OCWD’s preferred projects, the Basin yield in the year 2030 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage (“BPP”) that OCWD sets based on these factors.

IRWD’s own recycled water expansion program is also shown as an under development supply. IRWD also has a currently available recycled water supply from its own existing recycling program. The recycled water supplies are discussed in Section 2 below (see the Assessment, Section 1 – Figures 5, 6, 7 and 8 (supplies denominated “MWRP” and “LAWRP”), Section 2(a), and Section 2(b)(1) - “NONPOTABLE SUPPLY – RECLAIMED”), IRWD has completed construction of the Michelson Water Recycling Plant Phase 2 Capacity Expansion Project to tertiary capacity of 28 million gallons per day (MDG). With this expansion, IRWD increased its tertiary treatment capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand in the year 2035. Additional recycling capacity will augment local nonpotable supplies and improve reliability.

As noted in the Assessment, IRWD’s demand projections reflect the effect of IRWD’s water conservation pricing and other conservation practices; in particular, IRWD’s water use factors used to derive its demand projections are based on average water use and incorporate the effect of IRWD’s tiered-rate conservation pricing and its other long-term water conservation programs. System losses at a rate of approximately 5% are built into the water use factors. As discussed above, IRWD’s supply and demand projections do not take into account water savings that could be achieved by water shortage emergency measures.

Imported. MWD, the supplier of IRWD’s imported supplies, relies upon several of the listed projects and programs. MWD supports and provides financial incentives to water recycling, groundwater recovery, water conservation, ocean desalination and other local resource development programs. MWD calculates its demand forecast by first estimating total retail demand for the region and then factoring in impacts of conservation. Next, it derives

projections of local supplies using data on current and expected local supply programs and Integrated Resource Planning (IRP) Local Resource Program Target. The difference between the resulting local demands is the expected regional demand on MWD. These estimates of demands on MWD were developed for a single dry year, multiple dry years and average years. (MWD UWMP, see Tables pages 2-14 through 2-16). In the MWD UWMP, MWD states it has supply capability that would be sufficient to meet expected demands from 2020 to 2040 under single dry year, multiple dry year and normal year conditions.

Also, In January 2016, MWD adopted its 2015 IRP Update. In the 2015 IRP Update, MWD continued its adaptive management strategy and integrated future supply actions to improve the viability of potential contingency resources as needed, and to position the region to effectively implement these resources in a timely manner. The 2015 IRP finds additional action is needed in investments in conservation, local supplies, the California WaterFix, and stabilizing Colorado River supplies. Among the supply actions, MWD will continue to work collaboratively with state and federal agencies on the WaterFix, maximize its storage and transfer approach, and continue to develop and protect local supplies and conservation.

MWD also relies upon the implementation of the CALFED Bay-Delta Program, as an under development supply, to attain an increase in its existing Bay-Delta deliveries. Other under water development programs relied upon by MWD include: additional transfers and storage agreements such as IID/MWD Conservation Project, ICS Program, Agreements with CVWD, Additional Palo Verde Irrigation District Transfers, SNWA Interstate Agreement, Desert Water/CVWD Transfer, Kern County storage programs, AVEK Exchange Program, Mojave Storage Program, North of Delta/In-Delta Transfers, Yuba Accord Purchase, San Bernardino Valley Water Storage Program, Central Valley Transfer Programs, (MWD UWMP, Sections 3.1, 3.2, and 3.3) See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to MWD's current and under development supplies.

In addition, as noted in the Assessment, IRWD has developed water banking projects in Kern County, California which be called upon for delivery of supplemental banked water to IRWD, if needed, in response to shortage conditions or potential water supply interruptions.

2. Required information concerning *under-development* supplies

(a) Written contracts or other proof of valid rights to the identified supplies

See the Assessment, Section 2(b)(1), incorporated herein by reference. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to written contracts and other proof related to MWD's supplies.

(b) Adopted capital outlay program to finance delivery of the supplies

See the Assessment, Section 2(b)(2), incorporated herein by reference. With respect to future groundwater wells (PR Nos. 1100, 7140, 1402) and Baker Water Treatment Plant (PR No. 5027), IRWD adopted its fiscal year 2016-17 capital budget on April 25, 2016 (Resolution No. 2016-7), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) IRWD has approximately \$615.2 million (water) and \$784.8 million (wastewater) of unissued, voter-approved bond authorization. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's

supplies.

(c) Federal, state and local permits to construct of delivery infrastructure

See the Assessment, Section 2(b)(3), incorporated herein by reference. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to permits related to MWD's supplies.

(d) Regulatory approvals for conveyance or delivery of the supplies

See the Assessment, Section 2(b)(4), incorporated herein by reference. In addition, future recycling plant expansion will require approval of amendments to IRWD's permits issued by the Regional Water Quality Control Board. See also MWD UWMP, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

3. Foreseeable impacts of the Project on the availability of water for agricultural and industrial uses in IRWD's service area not currently receiving water

Based on city planning and other information known to IRWD, there are no agricultural or industrial uses in IRWD's service area that are not within either existing and committed demand or future demand, both of which are included within the supply and demand comparison and determination of sufficiency (see 1(a)).

4. Information concerning the right to extract additional groundwater included in the supply identified for the Project:

Where the water supply for the Project includes groundwater, the verification is required to include an evaluation of the extent to which IRWD or the landowner has the right to extract the additional groundwater needed to supply the Project. See the Assessment, Section 2(b)(1), "POTABLE SUPPLY – GROUNDWATER" and "NONPOTABLE SUPPLY – GROUNDWATER," and Section 4, incorporated herein by reference.

5. References

Water Resources Master Plan, Irvine Ranch Water District, Updated 2007

Section 15 of the Rules and Regulations – Water Conservation and Water Supply Shortage Program, Irvine Ranch Water District, February 2009

Water Shortage Contingency Plan, Irvine Ranch Water District, February 2009

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

Southern California's Integrated Water Resources Plan, Metropolitan Water District of Southern California, March 1996

Proposed Framework for Metropolitan Water District's Delta Action Plan, Metropolitan Water District of Southern California, May 8, 2007

2007 IRP Implementation Report, Metropolitan Water District of Southern California, October 7, 2007

Board Letter, Action plan for updating the Integrated Resources Plan, Metropolitan Water District of Southern California, December 11, 2007

2010 Integrated Resources Plan Update, Metropolitan Water District of Southern California, October 2010

2015 Integrated Resources Plan Update, Metropolitan Water District of Southern California, January 2016

2015 Urban Water Management Plan, Metropolitan Water District of Southern California, March 2016

Master Plan Report, Orange County Water District, April, 1999

Groundwater Management Plan, Orange County Water District, March, 2004

Final Draft Long-Term Facilities Plan, Orange County Water District, January 2006

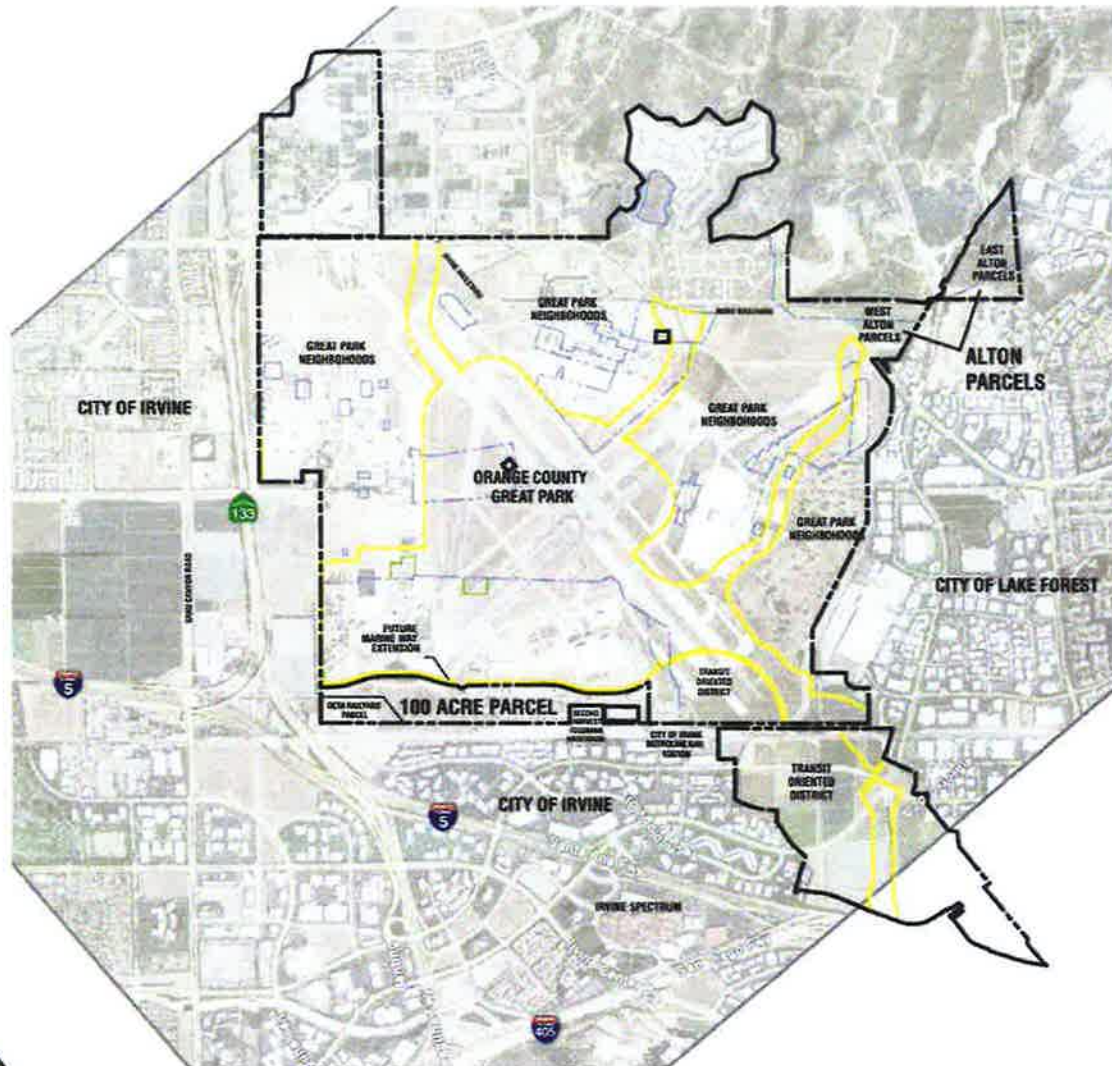
Long-Term Facilities Plan 2014 Update, Orange County Water District, November 2014

2014-2015 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2016

Progress on Incorporating Climate Change into Management of California's Water Resources, California Department of Water Resources, July 2006

Exhibit A

Depiction of Project Area



- Orange County Great Park Boundary
- Former USMC El Toro Base
- Existing Dept. of Navy Lease in Furtherance of Conveyance (LIFOC) Areas



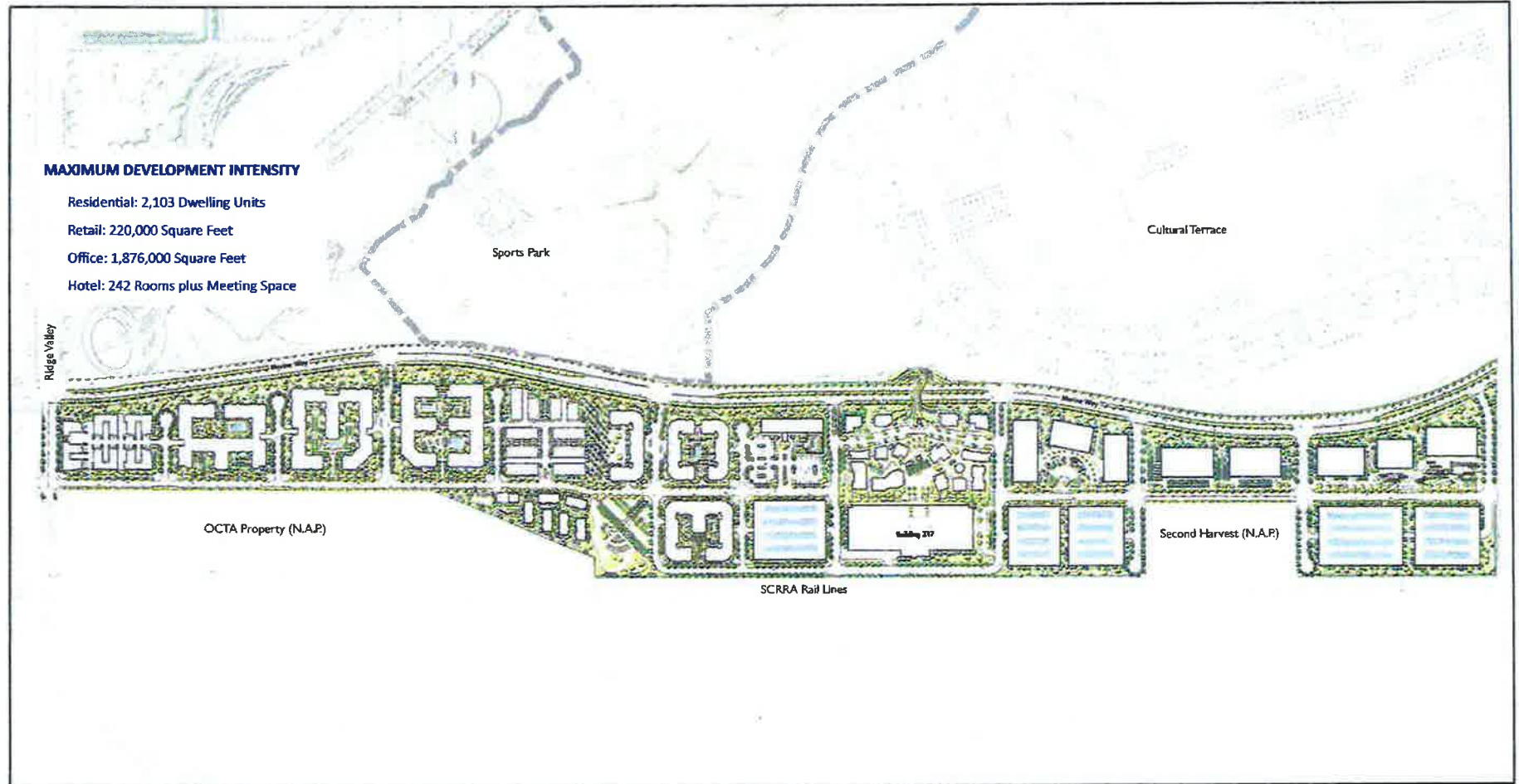
ORANGE COUNTY
PUBLIC WORKS
CONSULTANTS

TAIT
ARCHITECTS
PLANNERS
ENGINEERS

VICINITY MAP

ORANGE COUNTY PUBLIC WORKS | USMC EL TORO PARCELS

JANUARY 21, 2011 | FIGURE 1



C-12

N.T.S.

Source: EPT DESIGN, KTG, IRWD

Exhibit B

Non-residential Uses Included in Project



County of Orange

County Executive Office

February 16, 2016

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000

Re: Request for Verification of Sufficient Water Supplies (Government Code
§66473.7(b)(1))
El Toro 100 Acre Parcel

The County of Orange hereby requests verification of the availability of a sufficient water supply for the below-described project. Under Government Code §66473.7(b)(1), written verification of the availability of a sufficient water supply is required in conjunction with or prior to the approval of any tentative map that includes a residential subdivision of more than 500 dwelling units, subject to certain exemptions.

The County has determined that the subject project (1) includes a subdivision meeting the criteria requiring verification of availability of sufficient water supply and (2) does not fall within one of the statutory exemptions for previously developed urban sites, sites surrounded by urban use, or low-income housing sites.

Proposed Project Information

Project Title: El Toro 100-Acre Parcel Development

Location of project: within the City of Irvine southwest of future Marine Way roadway extension on the former El Toro Marine Corps Air Station

Planning Area(s): City of Irvine Planning Area 51

(Enclose a project map and exhibits)

Was the project included as part of a previously completed Water Supply Assessment (Water Code §10910)? ☒ yes ☐ no

If yes, date and project title of Water Supply Assessment El Toro Development Plan April 15, 2015

If no, state reason: ☐ CEQA documentation not requiring a Water Supply Assessment was completed prior to January 1, 2002 ☐ other: _____

Was a Water Supply Verification previously completed for the project? ☐ yes ☒ no

If yes, indicate reason for reverification: ☐ tract map expiration ☐ new Water Supply Assessment required due to project revisions, changed circumstances or new information

☐ Tentative Map Application No. *Not Applicable ☐ Tentative Tract No. * Not Applicable

☒ Verification is being requested prior to tentative map application (Government Code §66473.7(1) (Indicate next project approval sought: CEQA Environmental Clearance

(*A copy of the tentative map application including the proposed subdivision was sent to IRWD on: _____, (Government Code §66455.3))

Type of development included in the project:

☒ Residential: No. of dwelling units: 2103

☒ Shopping center or business: No. of employees _____ Sq. ft. of floor space 222,000

☒ Commercial office: No. of employees _____ Sq. ft. of floor space 1,876,000

☒ Hotel or motel: No. of rooms 222

☐ Industrial, manufacturing, processing or industrial park: No. of employees _____
No. of acres _____ Sq. ft. of floor space _____

☒ Mixed use (check and complete all above that apply)

☒ Other: Private Roadways at 19.2 acres

Total acreage of project: 106.7 Acres

Acreage devoted to landscape:

Greenbelt 7.26 acres golf course _____ parks 3.66 Acres

Agriculture _____ other landscaped areas _____

Other factors or uses that would affect the quantity of water needed, such as peak flow requirements:

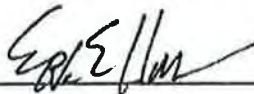
Is the project included in the existing General Plan? No If no, describe the existing General Plan Designation Institutional

The County acknowledges that IRWD's verification will be based on the information hereby provided to IRWD concerning the project. If it is necessary for corrected or additional

information to be submitted to enable IRWD to complete the verification, the request will be considered incomplete until IRWD's receipt of the corrected or additional information. If the project changes or the tentative map approval expires after the issuance of a Water Supply Verification, the County will request a new Water Supply Verification if required. In the event of changes in the project, circumstances or conditions of the availability of new information, it will be necessary for the County to request a new Water Supply Assessment prior to completion of the new Water Supply Verification.

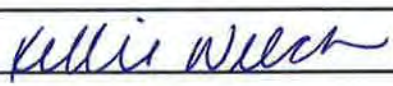
The County acknowledges that the Water Supply Verification shall not constitute a "will-serve" or in any way entitle the project applicant to service or to any right, priority or allocation in any supply, capacity or facility, and that the issuance of the Water Supply Verification shall not affect IRWD's obligation to provide service to its existing customers or any potential future customers including the project applicant. In order to receive service, the project applicant shall be required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

COUNTY OF ORANGE

By: 

REQUEST RECEIVED:

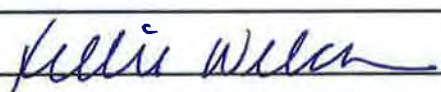
Date: February 17, 2016

By: 

Irvine Ranch Water District

REQUEST COMPLETE:

Date: February 22, 2016

By: 

Irvine Ranch Water District

Exhibit C
Water Supply Assessment

**IRVINE RANCH WATER DISTRICT
ASSESSMENT OF WATER SUPPLY**
Water Code §10910 *et seq.*

To: (Lead Agency)

City of Irvine, County of Orange
R.O. Box 19575, 333 W. Santa Ana Blvd., Third Fl.
Irvine, CA 92623-0575 Santa Ana, CA 92701-4062

(Applicant)
County of Orange
333 W. Santa Ana Blvd., Third Floor
Santa Ana, CA 92701-4062

Project Information

Project Title: El Toro Development Plan (Exhibit A)

- ☐ Residential: No. of dwelling units: _____
- ☐ Shopping center or business: No. of employees_____ Sq. ft. of floor space _____
- ☐ Commercial office: No. of employees_____ Sq. ft. of floor space _____
- ☐ Hotel or motel: No. of rooms _____
- ☐ Industrial, manufacturing or processing: No. of employees_____ No. of acres _____
Sq. ft. of floor space _____
- ☒ Mixed use (check and complete all above that apply) (see Exhibit B)
- ☐ Other: _____

Assessment of Availability of Water Supply

On April 13, 2015 the Board of Directors of the Irvine Ranch Water District (IRWD) approved the within assessment and made the following determination regarding the above-described Project:

- ☐ The projected water demand for the Project ☐ was ☐ was not included in IRWD's most recently adopted urban water management plan.
- ☒ A sufficient water supply is available for the Project.
The total water supplies available to IRWD during normal, single-dry and multiple-dry years within a 20-year projection will meet the projected water demand of the Project in addition to the demand of existing and other planned future uses, including, but not limited to, agricultural and manufacturing uses.
- ☐ A sufficient water supply is not available for the Project. *[Plan for acquiring and developing sufficient supply attached. Water Code § 10911(a)]*

The foregoing determination is based on the following Water Supply Assessment Information and supporting information in the records of IRWD.

Signature: Leslie Bonkowski Date: 4/15/15 Title: District Secretary

Water Supply Assessment Information

Purpose of Assessment

Irvine Ranch Water District ("IRWD") has been identified by the County as a public water system that will supply water service (both potable and nonpotable) to the project identified on the cover page of this assessment (the "Project"). As the public water system, IRWD is required by Section 10910 *et seq.* of the Water Code to provide the County with an assessment of water supply availability ("assessment") for defined types of projects. The Project has been found by the County to be a project requiring an assessment. The County is required to include this assessment in the environmental document for the Project, and, based on the record, make a determination whether projected water supplies are sufficient for the Project and existing and planned uses.

Water Code Section 10910 (the "Assessment Law") contains the requirements for the information to be set forth in the assessment.

Prior Water Supply Assessments

IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area. Because of IRWD's aggregation of demands and supplies, each assessment completed by IRWD is expected to be generally similar to the most recent assessment, with changes as needed to take into account changes, if any, in demands and supplies, and any updated and corrected information obtained by IRWD. Previously assessed projects' water demands will be included in the baseline. A newly assessed project's water demand will have been included in previous water supply assessments for other projects (as part of IRWD's "full build-out" demand) to the extent of any land use planning or other water demand information for the project that was available to IRWD.

The Project's water demand was included (as part of IRWD's "full build-out" demand) in previous water supply assessments performed by IRWD, based on land use planning information then available to IRWD. In this water supply assessment, the Project demand will be revised in accordance with updated information provided by the applicant and included in the "with project" demand.

Supporting Documentation

IRWD prepares two planning documents to guide water supply decision-making. IRWD's principal planning document is IRWD's "Water Resources Master Plan" ("WRMP"). The WRMP is a comprehensive document compiling data and analyses that IRWD considers necessary for its planning needs. IRWD also prepares an Urban Water Management Plan ("UWMP"), a document required by statute. The UWMP is based on the WRMP, but contains defined elements as listed in the statute (Water Code Section 10631, *et seq.*), and as a result, is more limited than the WRMP in the treatment of supply and demand issues. Therefore, IRWD primarily relies on its most recent WRMP. The UWMP is required to be updated in years ending with "five" and "zero," and IRWD's most recent update of that document was adopted June 13, 2011.

In addition to the WRMP and the 2010 UWMP mentioned above, other supporting documentation referenced herein is found in Section 6 of this assessment.

Due to the number of contracts, statutes and other documents comprising IRWD's written proof of entitlement to its water supplies, in lieu of attachment of such items, they are identified by title and summarized in Section 2(b) of this assessment (written contracts/proof of entitlement). Copies of the summarized items can be obtained from IRWD.

Assessment Methodology

Water use factors; dry-year increases. IRWD employs water use factors to enable it to assign water demands to the various land use types and aggregate the demands. The water use factors are based on average water use and incorporate the effect of IRWD's tiered-rate conservation pricing and its other water conservation programs. The factors are derived from historical usage (billing data) and a detailed review of water use factors within the IRWD service areas conducted as a part of the WRMP. System losses at a rate of approximately 5% are built into the water use factors. Water demands also reflect normal hydrologic conditions (precipitation). Lower levels of precipitation and higher temperatures will result in higher water demands, due primarily to the need for additional water for irrigation. To reflect this, base (normal) WRMP water demands have been increased 7% in the assessment during both "single-dry" and "multiple-dry" years. This is consistent with IRWD's 2010 UWMP and historical regional demand variation as documented in the Metropolitan Water District of Southern California's ("MWD's") Integrated Resources Plan (1996) (Volume 1, page 2-10).

Planning horizon. For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2035, which is considered to represent build-out or "ultimate development".

Assessment of demands. Water demands are reviewed in this assessment for three development projections (to 2035):

- Existing and committed demand (without the Project) ("baseline"). This provides a baseline condition as of the date of this assessment, consisting of demand from existing development, plus demand from development that has both approved zoning and (if required by the Assessment Law) an adopted water supply assessment.
- Existing and committed demand, plus the Project ("with-project"). This projection adds the Project water demands to the baseline demands.
- Full WRMP build-out ("full build-out"). In addition to the Project, this projection adds potential demands for all presently undeveloped areas of IRWD based on current general plan information, modified by more specific information available to IRWD, as more fully described in Chapter 2 of the WRMP.

Assessment of supplies. For comparison with demands, water supplies are classified as *currently available* or *under development*:

- **Currently available** supplies include those that are presently operational, and those that will be operational within the next several years. Supplies expected to be operational in the next several years are those having completed or substantially completed the environmental and regulatory review process, as well as having necessary contracts (if any) in place to move forward. These supplies are in various stages of planning, design, or construction.

- In general, supplies *under development* may necessitate the preparation and completion of environmental documents, regulatory approvals, and/or contracts prior to full construction and implementation.

IRWD is also evaluating the development of additional supplies that are not included in either *currently available* or *under-development* supplies for purposes of this assessment. As outlined in the WRMP, prudent water supply and financial planning dictates that development of supplies be phased over time consistent with the growth in demand.

Water supplies available to IRWD include several sources: groundwater pumped from the Orange County groundwater basin (including the Irvine Subbasin); captured local (native) surface water; reclaimed wastewater, and supplemental imported water supplied by MWD through the Municipal Water District of Orange County ("MWD OC"). The supply-demand comparisons in this assessment are broken down among the various sources, and are further separated into potable and nonpotable water sources.

Comparison of demand and supply. The three demand projections noted above (baseline, with-project and full build-out) are compared with supplies in the following ways:

- On a total *annual* quantity basis (stated in acre-feet per year (AFY)).
- On a *peak-flow* (maximum day) basis (stated in cubic feet per second (cfs)).
- Under three climate conditions: base (normal) conditions and single-dry and multiple-dry year conditions. (Note: These conditions are compared for *annual* demands and not for *peak-flow* demands. *Peak-flow* is a measure of a water delivery system's ability to meet the highest day's demand of the fluctuating demands that will be experienced in a year's time. Peak demands occur during the hot, dry season and as a result are not appreciably changed by dry-year conditions; dry-year conditions do affect *annual* demand by increasing the quantity of water needed to supplement normal wet-season precipitation.)

Summary of Results of Demand-Supply Comparisons

Listed below are Figures provided in this assessment, comparing projected potable and nonpotable water supplies and demands under the three development projections:

- Figure 1: Normal Year Supply and Demand – Potable Water
- Figure 2: Single Dry-Year Supply and Demand – Potable Water
- Figure 3: Multiple Dry-Year Supply and Demand – Potable Water
- Figure 4: Maximum-Day Supply and Demand – Potable Water
- Figure 5: Normal Year Supply and Demand – Nonpotable Water
- Figure 6: Single Dry-Year Supply and Demand – Nonpotable Water
- Figure 7: Multiple Dry-Year Supply and Demand – Nonpotable Water
- Figure 8: Maximum-Day Supply and Demand – Nonpotable Water

It can be observed in the Figures that IRWD's *supplies* remain essentially constant between normal, single-dry and multiple-dry years. This result is due to the fact that groundwater and MWD imported water account for all of IRWD's potable supply, and reclaimed water, groundwater and imported water comprise most of IRWD's nonpotable supply. Groundwater production typically remains constant or increases in cycles of dry years, even if

overdraft of the basin temporarily increases, as groundwater producers reduce their demand on imported supplies to secure reliability. (See Section 4 herein.) As to imported water, MWD's 2010 Regional Urban Water Management Plan (RUWMP) shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods through 2035, including a repeat of the 1990-1992 multiple dry-year hydrology and the 1977 single dry-year hydrology. (See Section 2(b) (1) "IMPORTED SUPPLY - ADDITIONAL INFORMATION," below, for a summary of information provided by MWD.) Reclaimed water production also remains constant, and is considered "drought-proof" as a result of the fact that sewage flows remain virtually unaffected by dry years. Only a small portion of IRWD's nonpotable supply, native water captured in Irvine Lake, is reduced in single-dry and multiple-dry years. The foregoing factors also serve to explain why there is no difference in IRWD's supplies between single-dry and multiple-dry years.

A review of the Figures indicates the following:

- *Currently available* supplies of potable water are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under the normal and both dry-year conditions through the year 2025. (Figures 1, 2 and 3.)
- Meeting both single- and multiple-dry-year annual demands for *full build-out* will require the completion of *under-development* supplies. (Figures 2 and 3.)
- Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2035. (Figure 4.)
- With respect to nonpotable water, *currently available* supplies are adequate to meet projected annual demands for both the *baseline* and *with-project* demand projections under both dry-year conditions through the year 2035. (Figures 5, 6, 7 and 8). IRWD is proceeding with the implementation of *under-development* nonpotable supplies, as shown in the Figures, to improve local reliability during dry-year conditions.

The foregoing Figures provide an overview of IRWD potable and nonpotable water supply capabilities. More detailed information on the anticipated development and use of supplies, which incorporates source costs and reliability issues, is provided in the WRMP.

Margins of safety. The Figures and other information described in this assessment show that IRWD's assessment of supply availability contains several margins of safety or buffers:

- "Reserve" water supplies (excess of supplies over demands) will be available to serve as a buffer against inaccuracies in demand projections, future changes in land use, or alterations in supply availability.
- Conservative estimates of annual potable and nonpotable *imported* supplies have been made based on connected delivery capacity (by application of peaking factors as described below in Section 2, footnote 1); additional supplies are expected to be available from these sources, based on legal entitlements, historical uses and information provided by MWD. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Information provided by MWD, as the imported water supplier, concerning the adequacy of its regional supplies, summarized herein, demonstrates MWD's inclusion of reserves in its regional supply assessments. In addition to MWD's existing regional supply assessments, this assessment has considered MWD information concerning recent events. See "**Recent Actions on Delta Pumping**," below.

- Although groundwater supply amounts shown in this assessment assume production levels within applicable basin production percentages described herein, production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or emergencies.

Recent Actions on Delta Pumping. The Sacramento/San Joaquin Delta (Delta) is a vulnerable component in both the State and Federal systems to convey water from northern portions of California to areas south of the Delta. Issues associated with the Delta have generally been known for years; however, most recently, the continuing decline in the number of endangered Delta smelt resulted in the filing of litigation challenging permits for the operation of the Delta pumping facilities. On August 31, 2007, a Federal court ordered interim protective measures for the endangered Delta smelt, including operational limits on Delta pumping, which will have an effect on State Water Project (SWP) operations and supplies in 2008 and subsequent years. On June 4, 2009, a federal biological opinion imposed rules that will further restrict water diversions from the Delta to protect endangered salmon and other endangered fish species. At present, several proceedings concerning Delta operations are ongoing to evaluate options to address Delta smelt impacts and other environmental concerns. In addition to the regulatory and judicial proceedings to address immediate environmental concerns, the Delta Vision process and Bay-Delta Conservation Plan process are defining long-term solutions for the Delta (MWD 2010 IRP Update). Prior to the 2007 court decision, MWD's Board approved a Delta Action Plan in May 2007 that described short, mid and long-term conditions and the actions to mitigate potential supply shortages and to develop and implement long-term solutions. To comprehensively address the impacts of the SWP cut back on MWD's water supply development targets, MWD brought to its Board a strategy and work plan to update the long-term Integrated Resources Plan (IRP) in December 2007. As part of the IRP Update, MWD developed a region-wide collaborative process that included a broad-based stakeholder involvement. MWD held several stakeholder forums in 2008 and 2009 and the MWD Board adopted the 2010 IRP Update on October 12, 2010. In the 2010 IRP Update, MWD identified changes to the long-term plan and established direction to address the range of potential changes in water supply planning. The IRP also discusses dealing with uncertainties related to impacts of climate change (see additional discussion of this below) as well as actions to protect endangered fisheries. Based on MWD's Findings and Conclusions as stated in the MWD 2010 IRP Update, MWD's reliability goal that full-service demands at the retail level will be satisfied for all foreseeable hydrologic conditions remains unchanged in the 2010 IRP Update, and MWD will accomplish this through its core resources strategies. The 2010 IRP Update emphasizes an evolving approach and suite of actions to address the water supply challenges that are posed by uncertain weather patterns, regulatory and environmental restrictions, water quality impacts and changes in the state and the region. MWD's Adaptive Resource Management Strategy includes three components: Core Resources Strategy, Supply Buffer Implementation and Foundational Actions which together provides the basis for the 2010 IRP Update. The 2010 IRP Update expands the concept of developing a planning buffer from the 2004 IRP Update by implementing a supply buffer equal to 10 percent of the total retail demand. MWD will collaborate with the member agencies to implement this buffer through complying with Senate Bill 7 which calls for the state to reduce per capita water use 20 percent by the year 2020.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: MWD states it is sufficiently reliable to meet full-service demands at the retail level for all foreseeable hydrologic conditions. For purposes of ensuring a conservative analysis, IRWD has compiled information from the prior "MWD IRP Implementation Report" (October 2010) and MWD's RUWMP (November 2010), to provide information in this assessment relative to how reduced SWP supplies could potentially affect IRWD's supplies from MWD.

Based on IRWD's evaluation of MWD's SWP supplies, IRWD estimates that the 22% used by MWD's October 2007 IRP Implementation Report as a potential reduction of MWD's SWP supplies conservatively translates to approximately 16% reduction in all of MWD's imported supplies over the years 2015 through 2035.¹ For this purpose it is assumed that MWD's total supplies consist only of imported SWP and Colorado deliveries. As shown in MWD's RUWMP (Tables A.3-7), SWP deliveries on average over the 20-year period are 1,682,000 acre-feet and Colorado base average supplies are 656,000 acre-feet. A 22% reduction of SWP supplies equates to 370,000 acre-feet which is approximately 16% of MWD's total imported supplies. Based on this estimate, this assessment projects a 16% reduction in MWD supplies available to IRWD for the years 2010 through 2035, using IRWD's connected capacity without any water supply allocation imposed by MWD. This reduction in MWD supplies is reflected in Figures 1, 2, 3, 5, 6, and 7.

As an alternative means of analyzing the 22% stated reduction, Figures 1a, 2a, and 3a show IRWD estimated supplies in all of the 5-year increments (average and single and multiple dry years) under a short-term MWD allocation scenario whereby MWD declares Shortage Stage 2 and a 10% cutback is applied to IRWD's actual usage rather than its connected capacity. In February 2009, MWD adopted a Water Supply Allocation Plan based on its declared level of shortage. In response to potential water shortages and a request by MWD to have water service providers within its service area adopt a water conservation ordinance, in February 2009, IRWD updated Section 15 of its Rules and Regulations – Water Conservation and Water Supply Shortage Program and also updated its Water Shortage Contingency Plan which is a supporting document for Section 15. Section 15 of the Rules and Regulations serves as IRWD's "conservation ordinance". As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are assumed to be in use to the maximum extent possible during declared shortage levels.

¹ MWD's 2010 RUWMP cites to DWR's Water Allocation Analysis dated March 22, 2010, which incorporated the Delta smelt biological opinion's effect on SWP operations, export restrictions could reduce deliveries to MWD by 150 to 200 thousand acre-feet for 2010. DWR estimated that approximately 520,000 AF had been lost to the SWP for 2010 of which nearly 240,000 AF would have been available to MWD. This amount is equivalent to about 16% reduction in SWP supplies, a smaller percentage reduction than MWD's 2007 figure of 22% that was used by IRWD for purposes of this analysis.

Under shortage scenarios, IRWD may need to supplement supplies with production of groundwater, which can exceed the applicable basin production percentage on a short-term basis, providing additional reliability during dry years or emergencies.² In addition, IRWD has developed water banking projects in Kern County, California which may be called upon for delivery of supplemental banked water to IRWD under a short-term MWD allocation.³ In addition, if needed resultant net shortage levels can be addressed by demand reduction programs as described in IRWD's Water Shortage Contingency Plan.

Listed below are Figures provided comparing projected potable water supplies and demands in all of the five year increments, under a temporary MWD allocation scenario:

Figure 1a: Normal Year Supply and Demand (MWD Allocated) – Potable Water
Figure 2a: Single Dry-Year Supply and Demand (MWD Allocated) – Potable Water
Figure 3a: Multiple Dry-Year Supply and Demand (MWD Allocated) – Potable Water

It can be noted that IRWD's above approach is conservative, in that IRWD evaluates the effect of the 16% reduction through 2035 and shows the effect of current allocation scenarios in all of the five-year increments but MWD reports that it has made significant progress in other water resource categories such as transfers, groundwater storage and developing other local resources, and supplies will be available from these resources over the long-term.

Climate Change. The California Department of Water Resources ("DWR") released a report "Progress on Incorporating Climate Change into Management of California's Water Resources" (July 2006), considering the impacts of climate change on the State's water supply. DWR emphasizes that "the report represents an example of an impacts assessment based on four scenarios defining an expected range of potential climate change impacts." DWR's major goal is to extend the analysis for long-term water resource planning from "assessing impacts" to "assessing risk." The report presents directions for further work in incorporating climate change into the management of California's water resources. Emphasis is placed on associating probability estimates with potential climate change scenarios in order to provide policymakers with both ranges of impacts and the likelihoods associated with those impacts. DWR's report acknowledges "that all results presented in this report are preliminary, incorporate several assumptions, reflect a limited number of climate change scenarios, and do not address the likelihood of each scenario. Therefore, these results are not sufficient by themselves to make policy decisions."

² In these scenarios, it is anticipated that other water suppliers who produce water from the Orange County Basin will also experience cutbacks of imported supplies and will increase groundwater production and that Orange County Water District (OCWD) imported replenishment water may also be cutback. The OCWD's "2010-2011 Engineer's Report on the groundwater conditions, water supply and basin utilization" references a report (OCWD Report on Evaluation of Orange County Groundwater Basin Storage and Operational Strategy) which recommends a basin management strategy that provides general guidelines for annual basin refill or storage decrease based on the level of accumulated overdraft. It states, "Although it is considered to be generally acceptable to allow the basin to decline to 500,000 AF overdraft for brief periods due to severe drought conditions and lack of supplemental water...an accumulated overdraft of 100,000 AF best represents an optimal basin management target. This optimal target level provides sufficient storage space to accommodate anticipated recharge from a single wet year while also providing water in storage for at least 2 or 3 consecutive years of drought." MWD replenishment water is a supplemental source of recharge water and OCWD estimates other main supply sources for recharge are available.

³ IRWD has developed water banking projects (Water Bank) in Kern County, California and has entered into a 30-year water banking partnership with Rosedale-Rio Bravo Water Storage District (RRB) to operate IRWD's Strand Ranch portion of the Water Bank. The Water Bank can improve IRWD's water supply reliability by capturing lower cost water available during wet hydrologic periods for use during dry periods. The Water Bank can enhance IRWD's ability to respond to drought conditions and potential water supply interruptions.

In MWD's 2010 IRP Update, MWD recognizes there is a significant uncertainty in the impact of climate change on water supply and changes in weather patterns could significantly affect water supply reliability. MWD plans to hedge against supply and environmental uncertainties by implementing a supply buffer equivalent to 10 percent of total retail demand. This buffer will be implemented through meeting the SB7 water use efficiency goals, implementing aggressive adaptive actions, development of local supplies and transfers.

Per MWD's RUWMP, MWD continues to incorporate current climate change science into its planning efforts. As stated in MWD's RUWMP, the 2010 IRP Update supports the MWD Board adopted principles on climate change by: 1) Supporting reasonable, economically viable, and technologically feasible management strategies for reducing impacts on water supply, 2) Supporting flexible "no regret" solutions that provide water supply and quality benefits while increasing the ability to manage future climate change impacts, and 3) Evaluating staff recommendations regarding climate change and water resources against the California Environmental Quality Act to avoid adverse effects on the environment. Potential climate change impacts on state, regional and local water supplies and relevant information for the Orange County hydrologic basin and Santa Ana Watershed have not been sufficiently developed at this time to permit IRWD to assess and quantify the effect of any such impact on its conclusions in the Assessment.

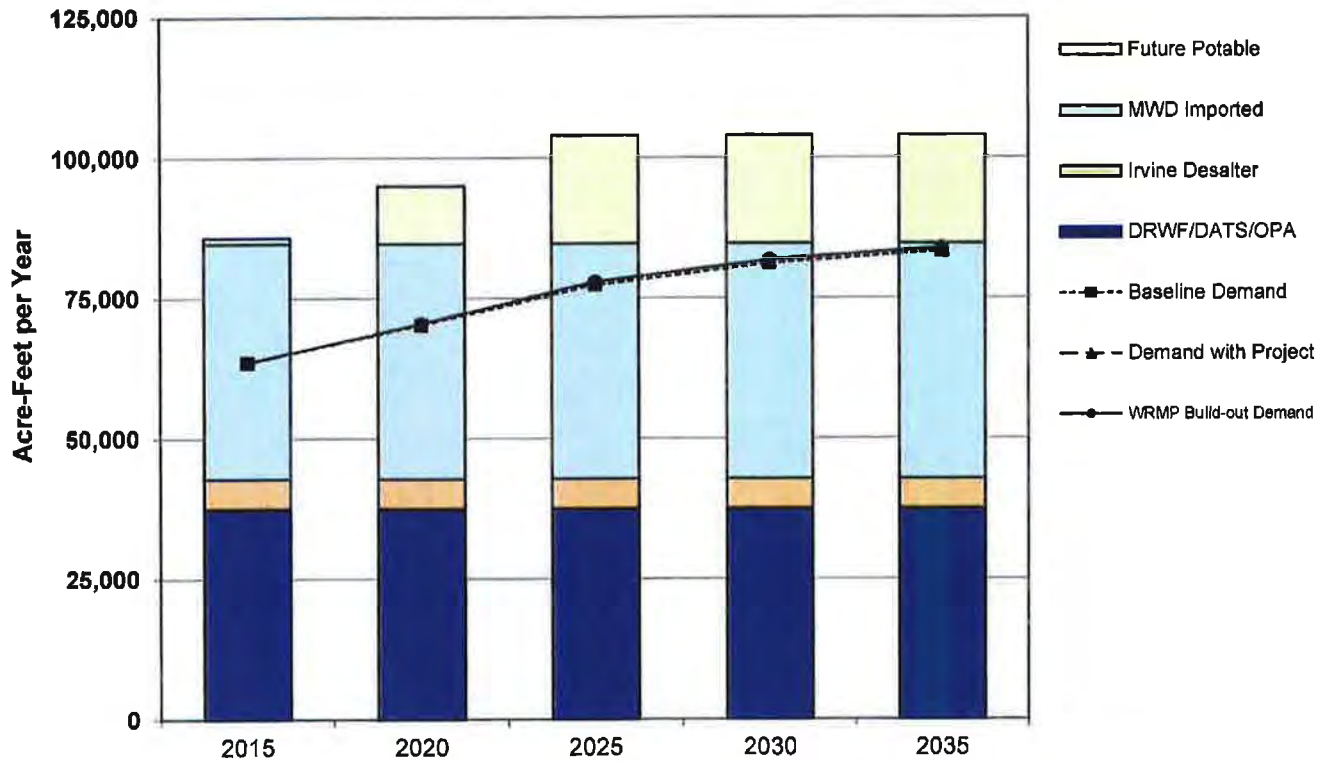
Catastrophic Supply Interruption Planning. MWD has developed Emergency Storage Requirements (2010 RUWMP) to safeguard the region from catastrophic loss of water supply. MWD has made substantial investments in emergency storage and has based its planning on a 100% reduction in its supplies for a period of six months. The emergency plan outlines that under such a catastrophe, non-firm service deliveries would be suspended, and firm supplies would be restricted by a mandatory cutback of 25 percent from normal year demand deliveries. In addition, MWD discusses the long term Delta plan in its 2010 RUWMP (pages 3-18 to 3-21). IRWD has also addressed supply interruption planning in its WRMP and UWMP.

Detailed Assessment

1. Supply and demand comparison

Comparisons of IRWD's average annual and peak (maximum day) demands and supplies, under *baseline* (existing and committed demand, without the Project), *with-project* (baseline plus Project), and *full build-out* development projections, are shown in the following Figures 1-4 (potable water), Figures 5-8 (nonpotable water) and Figures 1a, 2a, and 3a (short term MWD allocation potable water). See also the "Recent Actions on Delta Pumping" above.

Figure 1
IRWD Normal-Year Supply & Demand - Potable Water

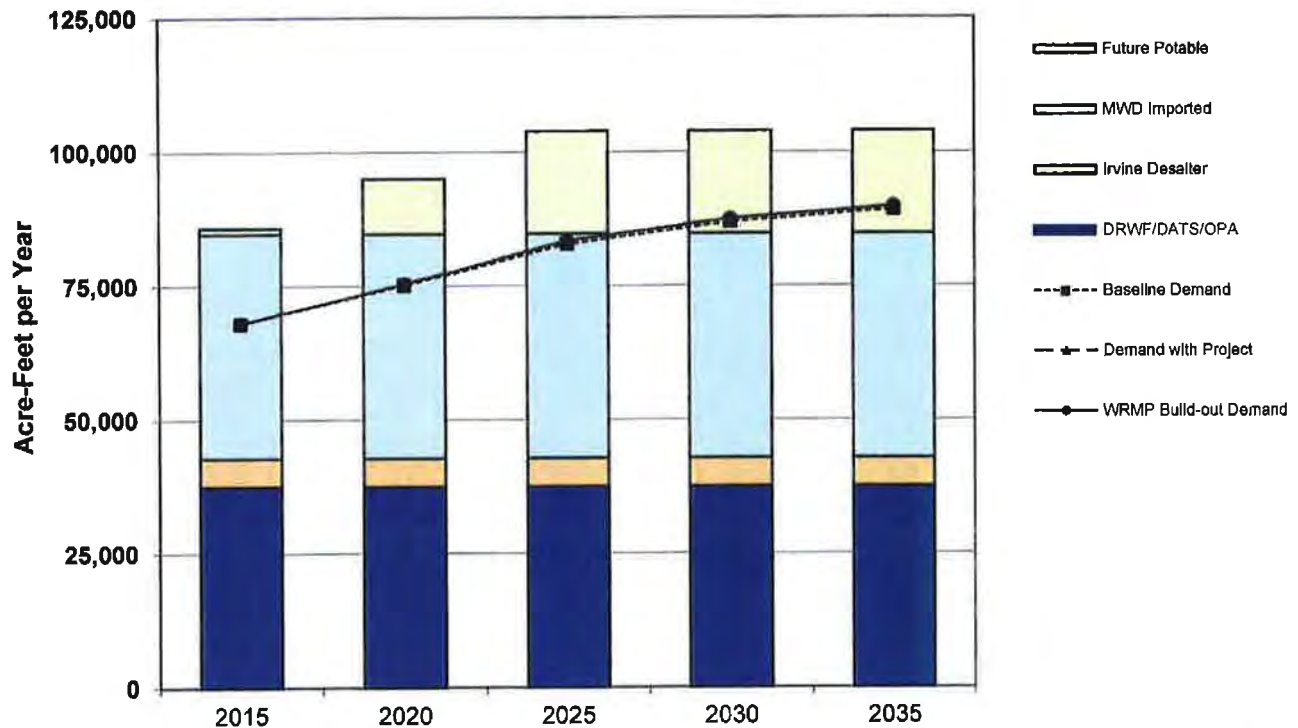


(in acre-feet per year)	2015	2020	2025	2030	2035
<u>Current Potable Supplies</u>					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
<u>Supplies Under Development</u>					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	63,671	70,307	77,451	81,254	83,433
Demand with Project	63,671	70,527	78,001	81,804	83,983
WRMP Build-out Demand	63,671	70,527	78,001	81,804	83,983
Reserve Supply with Project	28,547	30,900	32,310	28,506	26,327

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 2
IRWD Single Dry-Year Supply & Demand - Potable Water

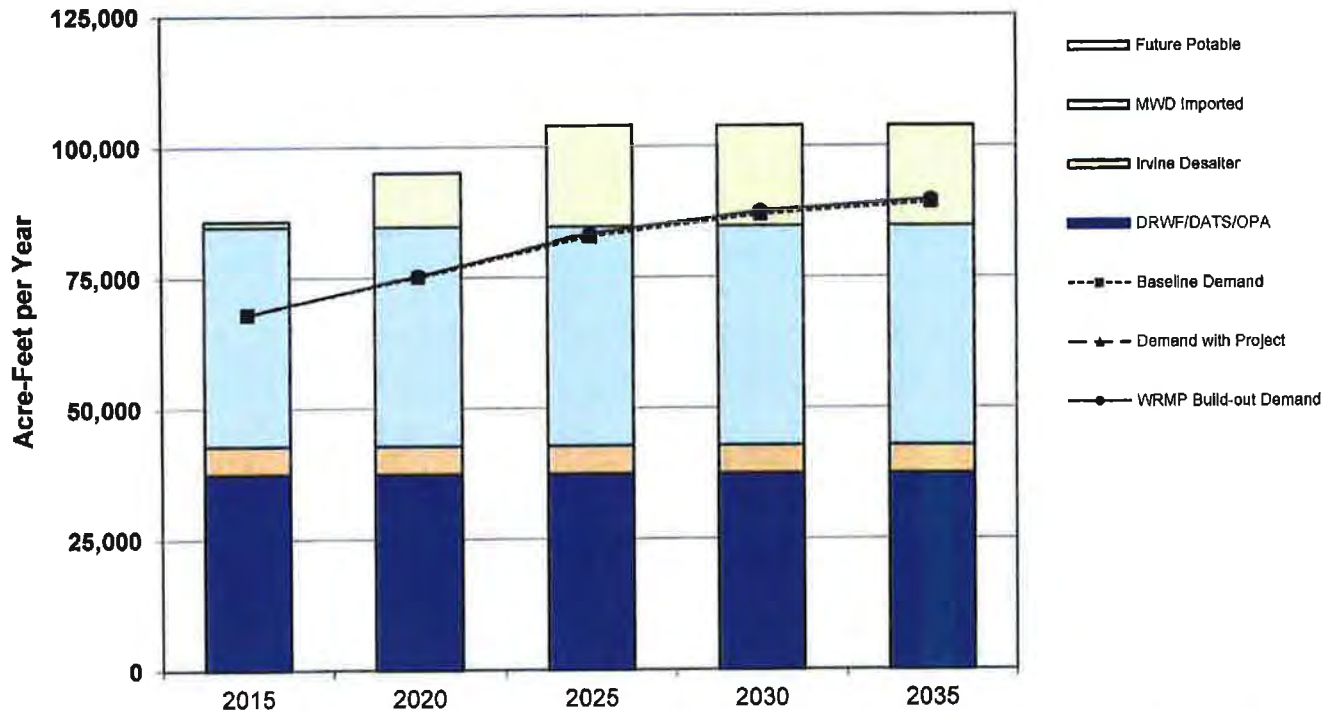


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	24,090	25,963	26,850	22,780	20,448

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 3
IRWD Multiple Dry-Year Supply & Demand - Potable Water

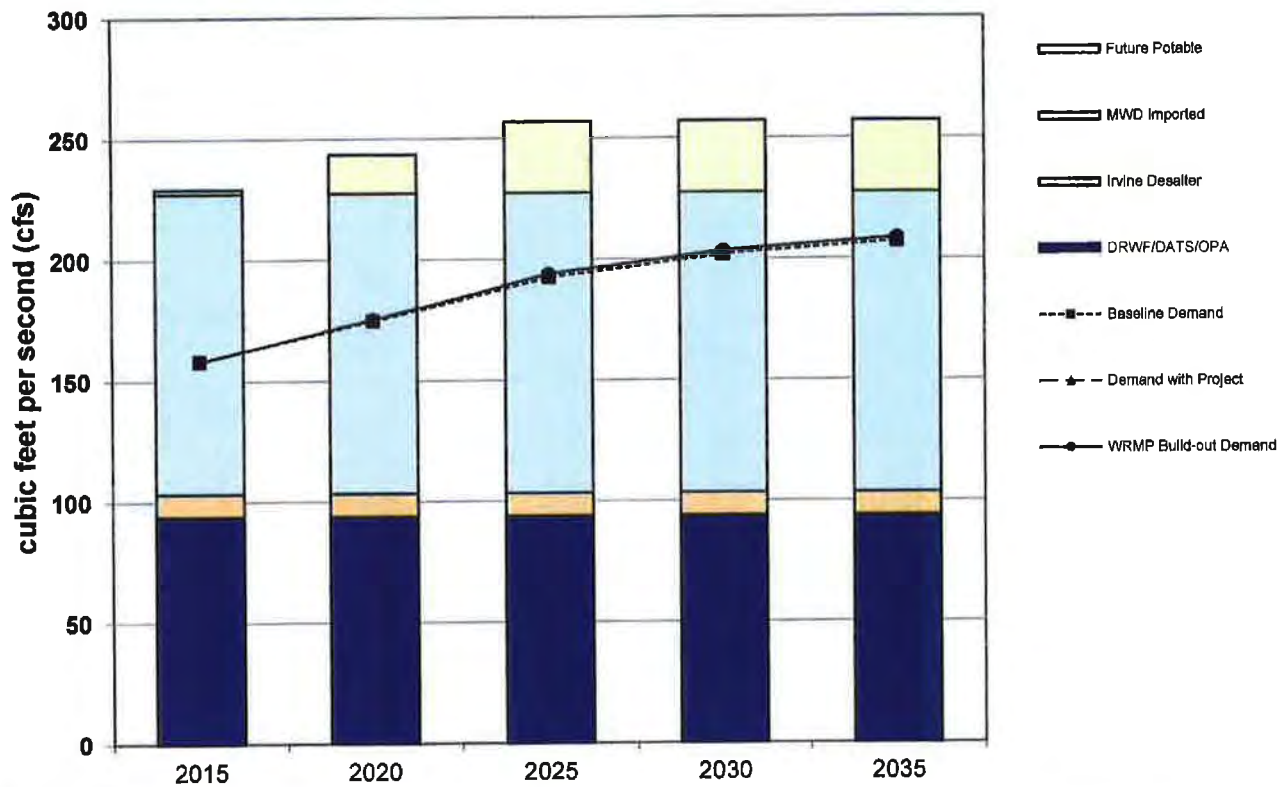


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	41,929	41,929	41,929	41,929	41,929
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	10,328	19,211	19,211	19,211
Maximum Supply Capability	92,217	101,427	110,311	110,311	110,311
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	24,090	25,963	26,850	22,780	20,448

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan (11/8/05) and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

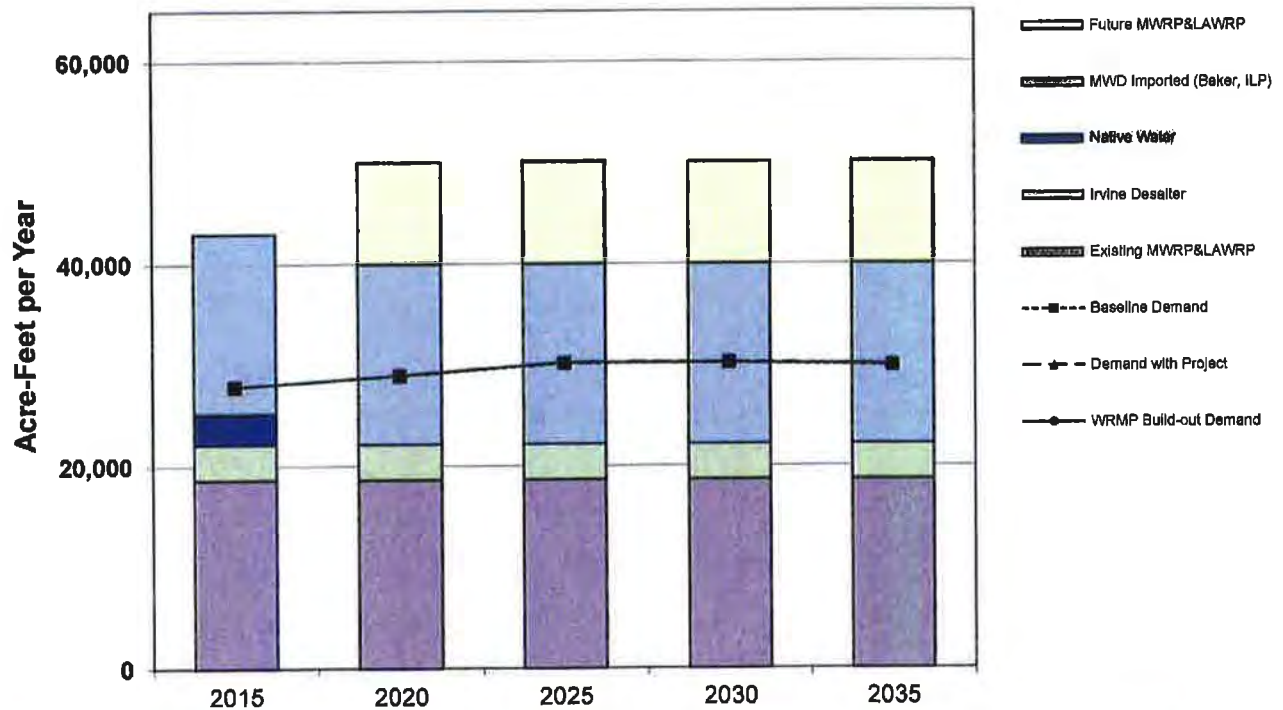
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 4
IRWD Maximum-Day Supply & Demand - Potable Water



(in cfs)	2015	2020	2025	2030	2035
<u>Current Potable Supplies</u>					
MWD Imported (EOCF#2, AMP, OCF)	124.1	124.1	124.1	124.1	124.1
DRWF/DATS/OPA	93.9	93.9	93.9	93.9	93.9
Irvine Desalter	9.5	9.5	9.5	9.5	9.5
Wells 21 & 22	10.9	10.9	10.9	10.9	10.9
<u>Supplies Under Development</u>					
Future Potable	2.0	16.1	29.7	29.7	29.7
Maximum Supply Capability	240.4	254.5	268.1	268.1	268.1
Baseline Demand	158.3	174.8	192.6	202.0	207.4
Demand with Project	158.3	175.3	193.9	203.4	208.8
WRMP Build-out Demand	158.3	175.3	193.9	203.4	208.8
Reserve Supply with Project	82.1	79.2	74.2	64.7	59.3

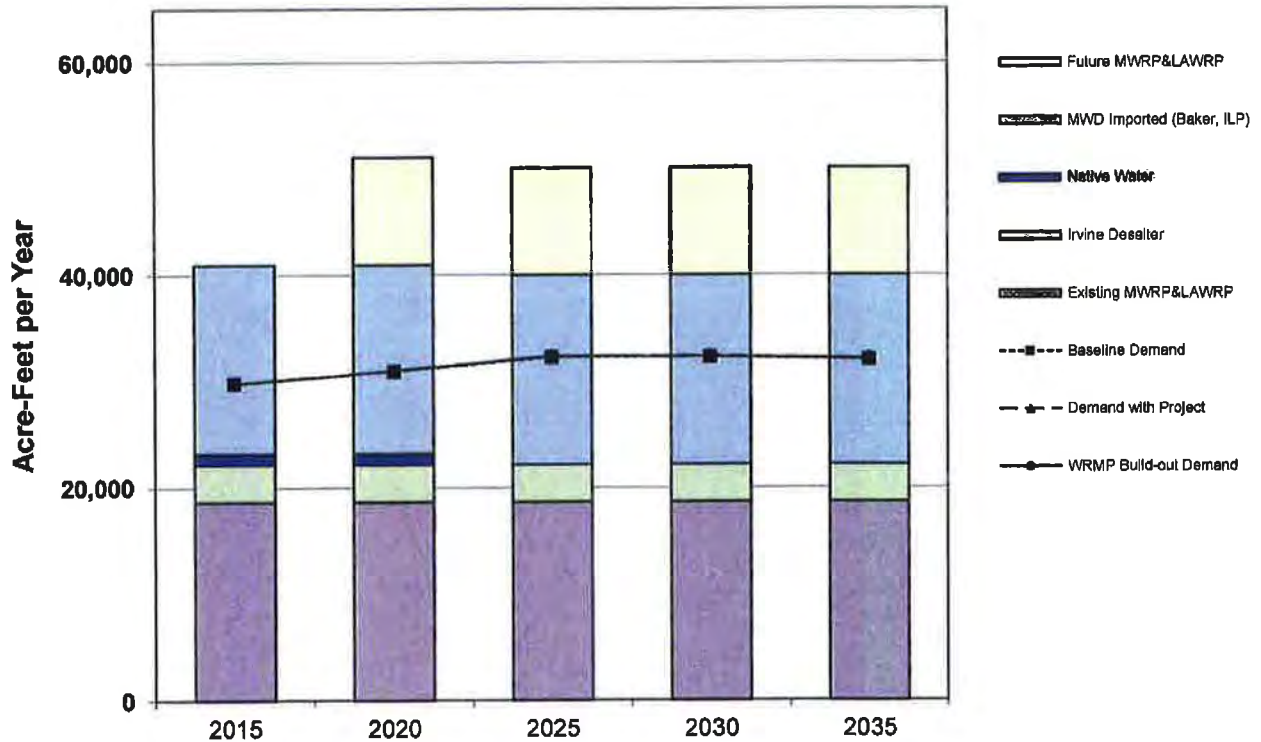
Figure 5
IRWD Normal-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2015	2020	2025	2030	2035
<u>Current Nonpotable Supplies</u>					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	3,000	-	-	-	-
<u>Supplies Under Development</u>					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	42,997	50,097	50,097	50,097	50,097
Baseline Demand	27,859	28,958	30,152	30,189	29,928
Demand with Project	27,859	28,989	30,229	30,267	30,005
WRMP Build-out Demand	27,859	28,989	30,229	30,189	30,005
Reserve Supply with Project	15,138	21,108	19,868	19,907	20,092

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

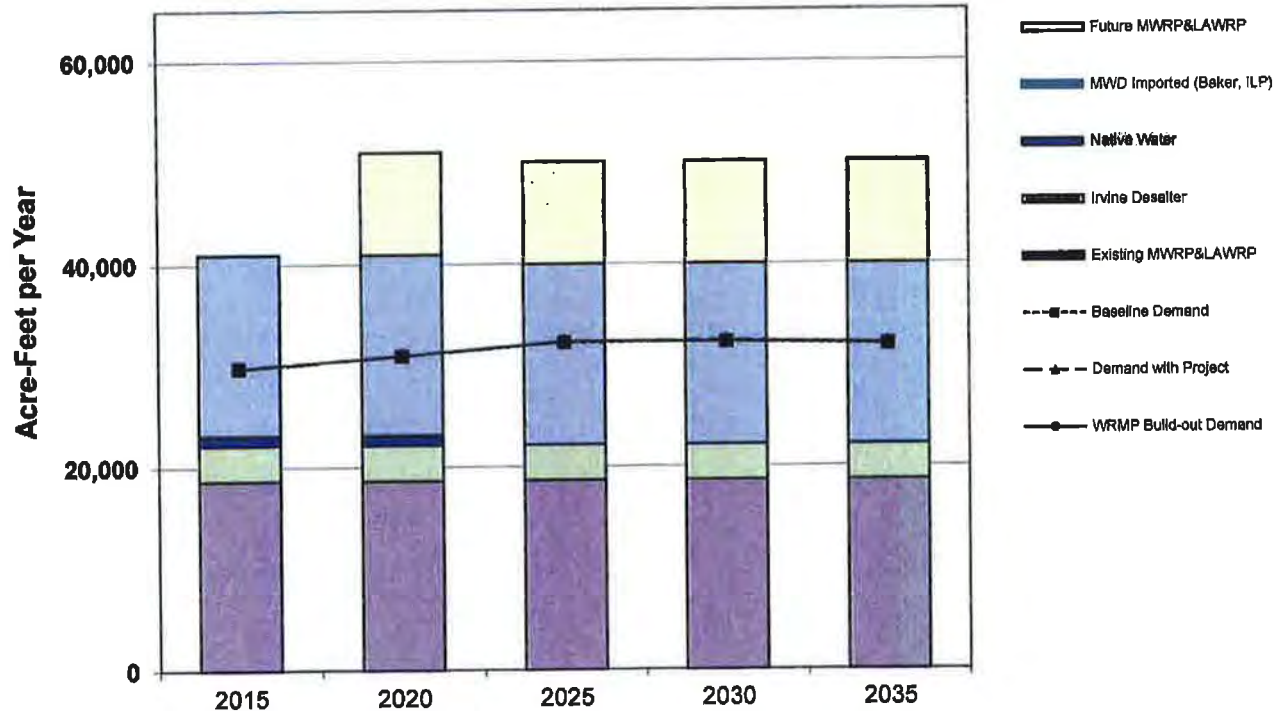
Figure 6
IRWD Single Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2015	2020	2025	2030	2035
<u>Current Nonpotable Supplies</u>					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	1,000	-	-	-
<u>Supplies Under Development</u>					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	29,809	30,985	32,262	32,303	32,023
Demand with Project	29,809	31,018	32,345	32,386	32,106
WRMP Build-out Demand	29,809	31,018	32,345	32,303	32,106
Reserve Supply with Project	11,187	20,079	17,752	17,711	17,991

Note: Downward trend reflects reduction in agricultural use over time.
Native water will be treated to potable through the Baker Water Treatment Plant after 2016.
MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

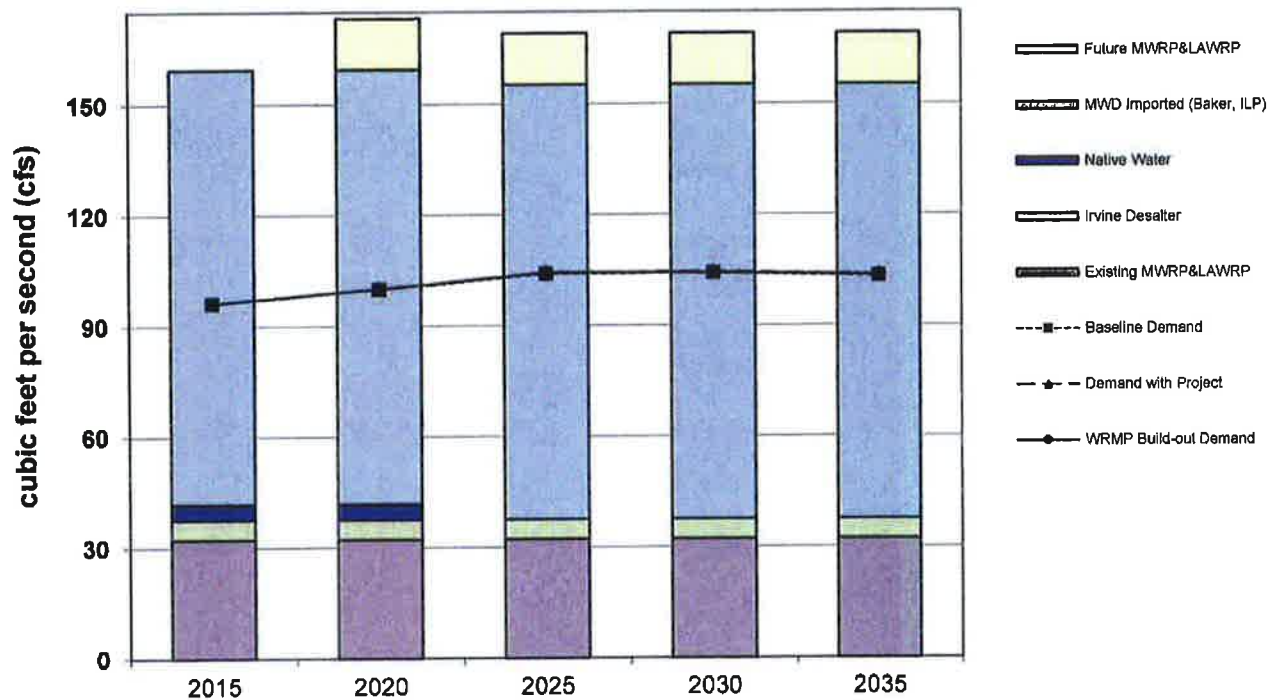
Figure 7
IRWD Multiple Dry-Year Supply & Demand - Nonpotable Water



(in acre-feet per year)	2015	2020	2025	2030	2035
<u>Current Nonpotable Supplies</u>					
Existing MWRP&LAWRP	18,657	18,657	18,657	18,657	18,657
MWD Imported (Baker, ILP)	17,826	17,826	17,826	17,826	17,826
Irvine Desalter	3,514	3,514	3,514	3,514	3,514
Native Water	1,000	1,000	-	-	-
<u>Supplies Under Development</u>					
Future MWRP&LAWRP	-	10,100	10,100	10,100	10,100
Maximum Supply Capability	40,997	51,097	50,097	50,097	50,097
Baseline Demand	29,809	30,985	32,262	32,303	32,023
Demand with Project	29,809	31,018	32,345	32,386	32,106
WRMP Build-out Demand	29,809	31,018	32,345	32,303	32,106
Reserve Supply with Project	11,187	20,079	17,752	17,711	17,991

Note: Downward trend reflects reduction in agricultural use over time.
 Native water will be treated to potable through the Baker Water Treatment Plant after 2016.
 MWD Imported Supplies are shown at 16% reduction off of average connected capacity.

Figure 8
IRWD Maximum-Dry Supply & Demand - Nonpotable Water

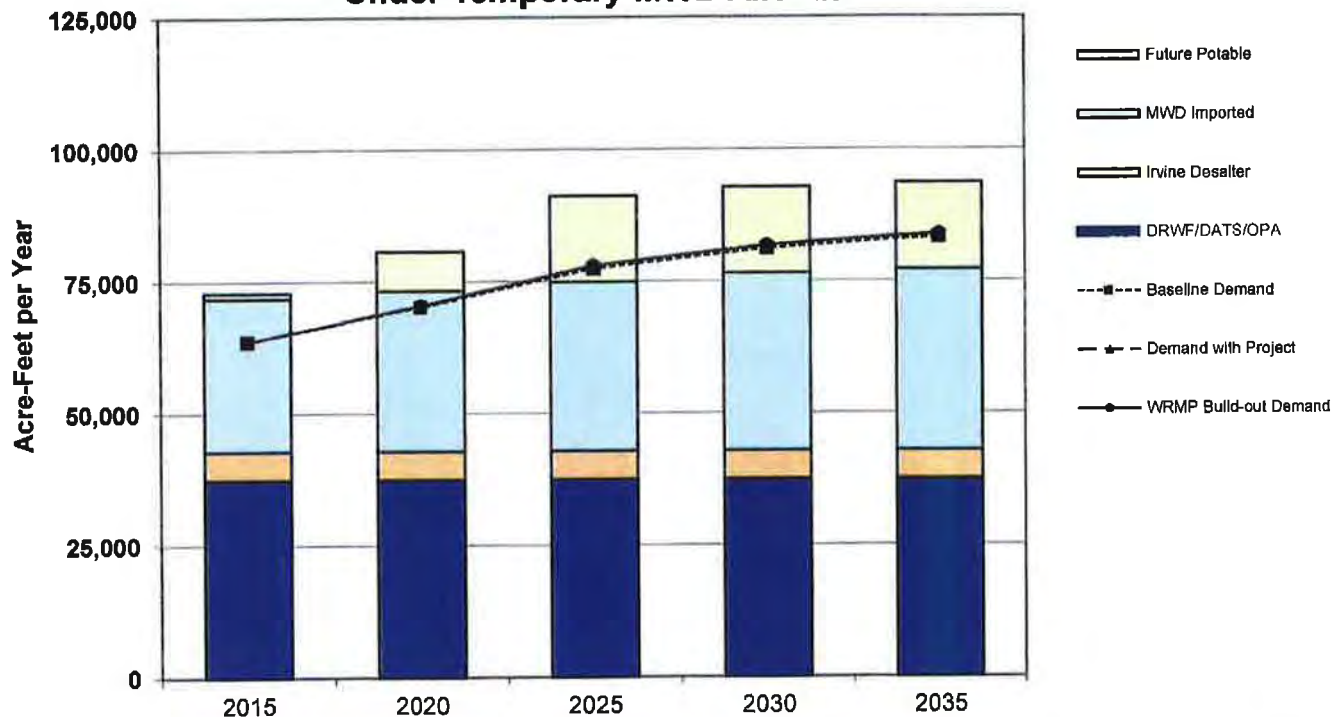


(in cfs)	2015	2020	2025	2030	2035
Current Nonpotable Supplies					
Existing MWRP&LAWRP	32.2	32.2	32.2	32.2	32.2
MWD Imported (Baker, ILP)	117.7	117.7	117.7	117.7	117.7
Irvine Desalter	5.4	5.4	5.4	5.4	5.4
Native Water	4.2	4.2	-	-	-
Supplies Under Development					
Future MWRP&LAWRP	-	14.0	14.0	14.0	14.0
Maximum Supply Capability	159.5	173.4	169.2	169.2	169.2
Baseline Demand	96.2	100.0	104.1	104.2	103.3
Demand with Project	96.2	100.1	104.4	104.5	103.6
WRMP Build-out Demand	96.2	100.1	104.4	104.2	103.6
Reserve Supply with Project	63.3	73.3	64.8	65.0	65.6

Note: Downward trend reflects reduction in agricultural use over time.

Native water will be treated to potable through the Baker Water Treatment Plant after 2016.

Figure 1a
IRWD Normal-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*

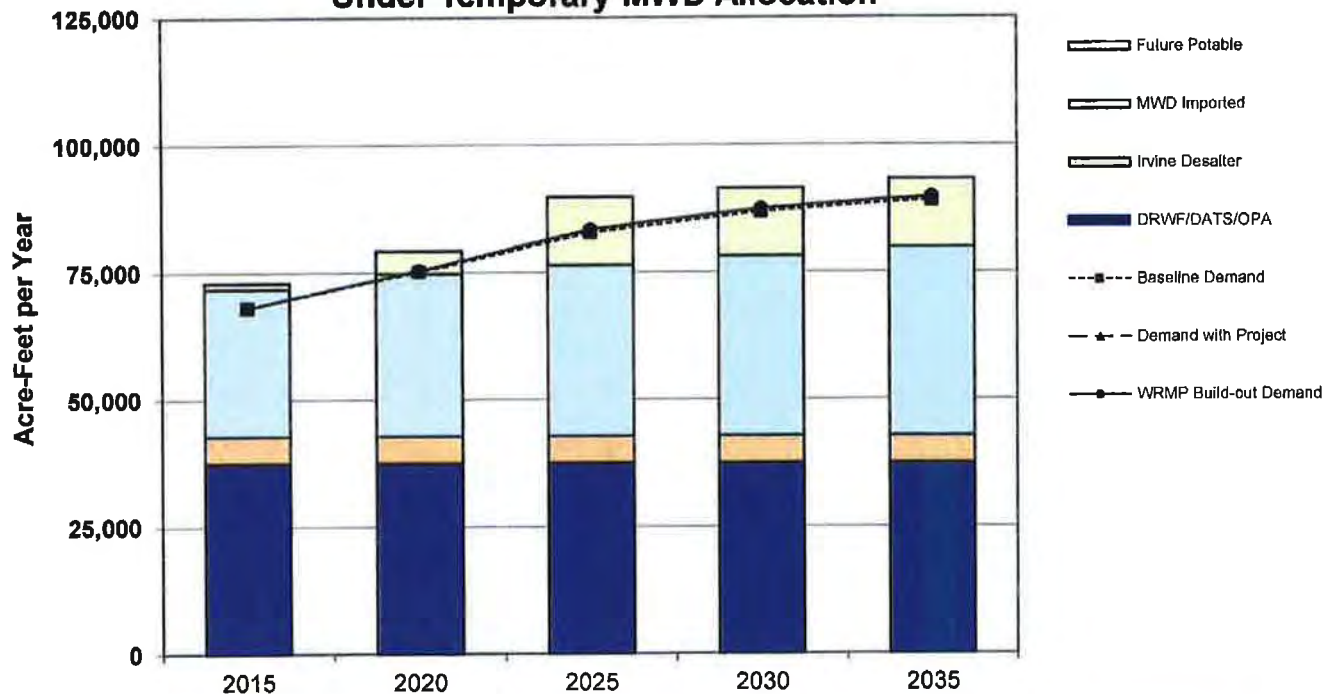


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	30,479	32,034	33,668	34,345
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	7,469	16,352	16,352	16,352
Maximum Supply Capability	79,288	87,119	97,557	99,191	99,868
Baseline Demand	63,671	70,307	77,451	81,254	83,433
Demand with Project	63,671	70,527	78,001	81,804	83,983
WRMP Build-out Demand	63,671	70,527	78,001	81,804	83,983
Reserve Supply with Project	15,617	16,592	19,556	17,387	15,884

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the UWMP. Under a MWD allocation, the Baker WTP supplies (under "Future Potable") will be limited to available native water only.

Figure 2a
IRWD Single Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*

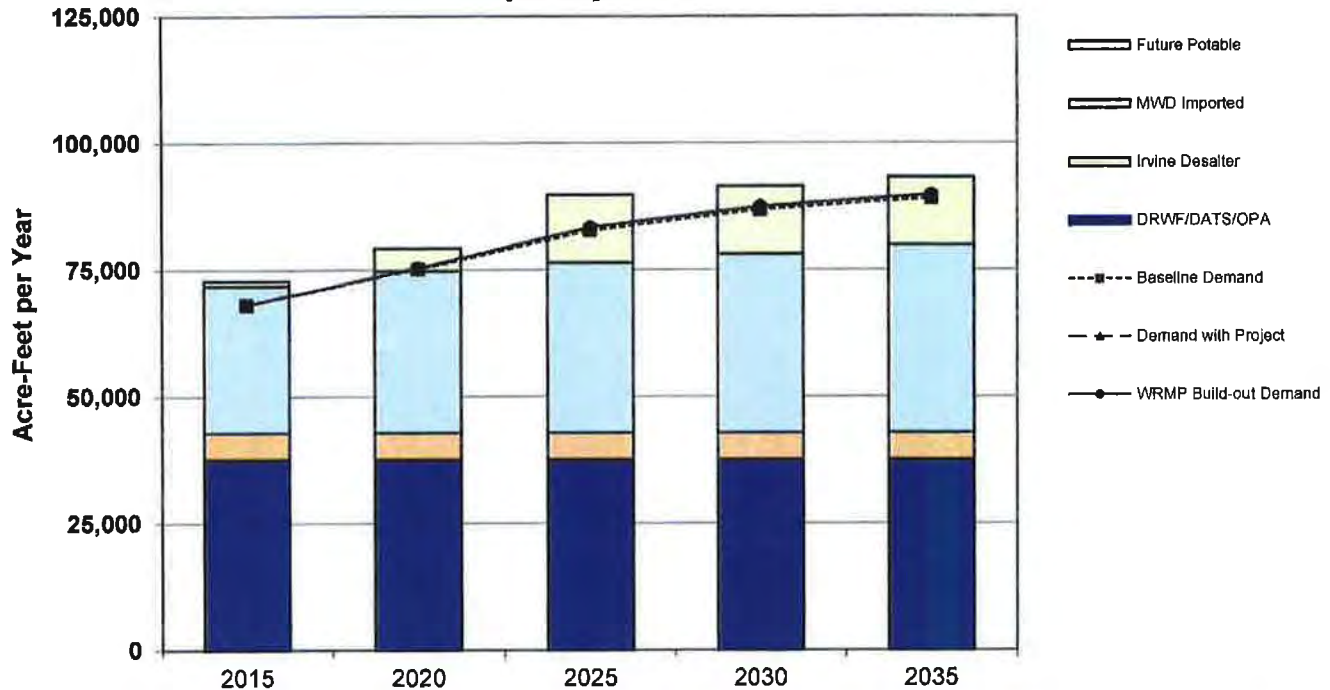


(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	11,161	10,179	12,665	10,276	9,708

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the UWMP. Under a MWD allocation, the Baker WTP supplies (under "Future Potable") will be limited to available native water only.

Figure 3a
IRWD Multiple Dry-Year Supply & Demand - Potable Water
Under Temporary MWD Allocation*



(in acre-feet per year)	2015	2020	2025	2030	2035
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF)	29,000	32,003	33,603	35,284	37,048
DRWF/DATS/OPA	37,533	37,533	37,533	37,533	37,533
Irvine Desalter	5,309	5,309	5,309	5,309	5,309
Wells 21 & 22	6,329	6,329	6,329	6,329	6,329
Supplies Under Development					
Future Potable	1,118	4,469	13,352	13,352	13,352
Maximum Supply Capability	79,288	85,643	96,126	97,806	99,571
Baseline Demand	68,128	75,229	82,872	86,942	89,274
Demand with Project	68,128	75,464	83,461	87,530	89,862
WRMP Build-out Demand	68,128	75,464	83,461	87,530	89,862
Reserve Supply with Project	11,161	10,179	12,665	10,276	9,708

Notes: Supplies identical to Normal-Year based on Metropolitan's Regional Urban Water Management Plan and usage of groundwater under drought conditions (OCWD Master Plan). Demands increased 7% from Normal-Year. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments (see Potable Supply-Groundwater).

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a short-term 10% allocation, Shortage Stage 2 in all of the 5-year increments. However, it is likely that such a scenario would only be temporary. Under a MWD Allocation, IRWD could supplement supplies with groundwater production which can exceed applicable basin percentages on a short-term basis or transfer water from IRWD's water bank. IRWD may also reduce demands by implementing shortage contingency measures as described in the UWMP. Under a MWD allocation, the Baker WTP supplies (under "Future Potable") will be limited to available native water only.

2. Information concerning supplies

(a)(1) Existing sources of identified water supply for the proposed project: IRWD does not allocate particular supplies to any project, but identifies total supplies for its service area, as updated in the following table:

	Max Day (cfs)	Avg. Annual (AFY)	Annual by Category (AFY)
Current Supplies			
Potable - Imported			
East Orange County Feeder No. 2	41.4	16,652	1
Allen-McColloch Pipeline*	64.7	26,024	1
Orange County Feeder	18.0	7,240	1
Potable - Groundwater			
Dyer Road Wellfield	80.0	28,000	2
OPA Well	1.4	914	
Deep Aquifer Treatment System-DATS	12.5	8,618	2
Wells 21 & 22	10.9	6,329	2
Irvine Desalter	9.5	5,309	3
Total Potable Current Supplies	238.4		99,086
Nonpotable - Reclaimed Water			
MWRP (18 mgd)	23.9	17,340	4
LAWRP (5.5 mgd)	8.3	5,975	4
Nonpotable - Imported			
Baker Aqueduct	52.7	12,221	5
Irvine Lake Pipeline	65.0	9,000	6
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	5.4	3,514	7
Nonpotable Native			
Irvine Lake	4.2	3,048	8
Total Nonpotable Current Supplies	159.5		51,098
Total Combined Current Supplies	397.9		150,185
Supplies Under Development			
Potable Supplies			
Well 106	2.0	1,118	
Well 53	5.6	3,658	
Future OPA Wells	8.0	5,225	
Baker Water Treatment Plant	10.5	6,858	
Wells 51 & 52	3.6	2,351	
Total Potable Under Development Supplies	29.7	19,211	
Nonpotable Supplies: MWRP&LAWRP Reclaimed			
Total Under Development	49.7		9
Total Supplies			33,661
Potable Supplies	268.1		118,297
Nonpotable Supplies	179.4		65,548
Total Supplies (Current and Under Development)	447.5		183,846

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.8 (see Footnote 4, page 22).

2 Contract amount - See Potable Supply-Groundwater(iii).

3 Contract amount - See Potable Supply-Groundwater (iv) and (v). Maximum day well capacity is compatible with contract amount.

4 MWRP 18.0 mgd treatment capacity (17,400 AFY RW production) and LAWRP 5.5 mgd tertiary treatment capacity (5,975 AFY)

5 By 2020, Baker capacity will be allocated to Baker Water Treatment Plant (WTP) participants and IRWD will own 46.50 cfs in Baker Aqueduct after Baker WTP, of which 10.5 cfs will be for potable treatment. IRWD will have 35 cfs remaining capacity for non-potable uses. The nonpotable average use is based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 2.5 (see Footnote 8, page 25).

6 Based on IRWD's proportion of Irvine Lake imported water storage; Actual ILP capacity would allow the use of additional Imported water from MWD through the Santiago Lateral.

7 Contract amount - See Nonpotable Supply-Groundwater (i) and (ii). Maximum day well capacity (cfs) is compatible with contract amount.

8 Based on 70+ years historical average of Santiago Creek Inflow into Irvine Lake. By 2020, native water will be treated through Baker WTP.

9 Future estimated MWRP & LAWRP reclaimed water production.

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 23 (b)(1)(iii))

(b) Required information concerning currently available and under-development water supply entitlements, water rights and water service contracts:

(1) Written contracts or other proof of entitlement.^{4 5}

•POTABLE SUPPLY - IMPORTED⁶

Potable imported water service connections (currently available).

(i) Potable imported water is delivered to IRWD at various service connections to the imported water delivery system of The Metropolitan Water District of Southern California ("MWD"): service connections CM-01A and OC-7 (Orange County Feeder); CM-10, CM-12, OC-38, OC-39, OC-57, OC-58, OC-63 (East Orange County Feeder No. 2); and OC-68, OC-71, OC-72, OC-73/73A, OC-74, OC-75, OC-83, OC-84, OC-87 (Allen-McColloch Pipeline). IRWD's entitlements regarding service from the MWD delivery system facilities are described in the following paragraphs and summarized in the above Table ((2)(a)(1)). IRWD receives imported water service through Municipal Water District of Orange County ("MWDOC"), a member agency of MWD.

Allen-McColloch Pipeline ("AMP") (currently available).

(ii) Agreement For Sale and Purchase of Allen-McColloch Pipeline, dated as of July 1, 1994 (Metropolitan Water District Agreement No. 4623) ("AMP Sale Agreement"). Under the AMP Sale Agreement, MWD purchased the Allen-McColloch Pipeline (formerly known as the "Diemer Intertie") from MWDOC, the MWDOC Water Facilities Corporation and certain agencies, including IRWD and Los Alisos Water District ("LAWD"),⁷ identified as "Participants" therein. Section 5.02 of the AMP Sale Agreement obligates MWD to meet IRWD's and the other Participants' requests for deliveries and specified minimum hydraulic grade lines at each connection serving a Participant, subject to availability of water. MWD

⁴ In some instances, the contractual and other legal entitlements referred to in the following descriptions are stated in terms of flow capacities, in cubic feet per second ("cfs"). In such instances, the cfs flows are converted to volumes of AFY for purposes of analyzing supply sufficiency in this assessment, by dividing the capacity by a peaking factor of 1.8 (potable) or 2.5 (nonpotable), consistent with maximum day peaking factors used in the WRMP. The resulting reduction in assumed available annual AFY volumes through the application of these factors recognizes that connected capacity is provided to meet peak demands and that seasonal variation in demand and limitations in local storage prevent these capacities from being utilized at peak capacity on a year-round basis. However, the application of these factors produces a conservatively low estimate of annual AFY volumes from these connections; additional volumes of water are expected to be available from these sources.

⁵ In the following discussion, contractual and other legal entitlements are characterized as either potable or nonpotable, according to the characterization of the source of supply. Some of the nonpotable supplies surplus to nonpotable demand could potentially be rendered potable by the addition of treatment facilities; however, except where otherwise noted, IRWD has no current plans to do so.

⁶ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

⁷ IRWD has succeeded to LAWD's interests in the AMP and other LAWD water supply facilities and rights mentioned in this assessment, by virtue of the consolidation of IRWD and LAWD on December 31, 2000.

agrees to operate the AMP as any other MWD pipeline. MWD has the right to operate the AMP on a "utility basis," meaning that MWD need not observe capacity allocations of the Participants but may use available capacity to meet demand at any service connection.

The AMP Sale Agreement obligates MWD to monitor and project AMP demands and to construct specified pump facilities or make other provision for augmenting MWD's capacity along the AMP, at MWD's expense, should that be necessary to meet demands of all of the Participants (Section 5.08).

(iii) Agreement For Allocation of Proceeds of Sale of Allen-McColloch Pipeline, dated as of July 1, 1994 ("AMP Allocation Agreement"). This agreement, entered into concurrently with the AMP Sale Agreement, provided each Participant, including IRWD, with a capacity allocation in the AMP, for the purpose of allocating the sale proceeds among the Participants in accordance with their prior contractual capacities adjusted to conform to their respective future demands. IRWD's capacity under the AMP Allocation Agreement (including its capacity as legal successor agency to LAWD) is 64.69 cfs at IRWD's first four AMP connections, 49.69 cfs at IRWD's next five downstream AMP connections and 35.01 and 10.00 cfs, respectively at IRWD's remaining two downstream connections. The AMP Allocation Agreement further provides that if a Participant's peak flow exceeds its capacity, the Participant shall "purchase" additional capacity from the other Participants who are using less than their capacity, until such time as MWD augments the capacity of the AMP. The foregoing notwithstanding, as mentioned in the preceding paragraph, the allocated capacities do not alter MWD's obligation under the AMP Sale Agreement to meet all Participants' demands along the AMP, and to augment the capacity of the AMP if necessary. Accordingly, under these agreements, IRWD can legally increase its use of the AMP beyond the above-stated capacities, but would be required to reimburse other Participants from a portion of the proceeds IRWD received from the sale of the AMP.

(iv) Improvement Subleases (or "FAP" Subleases) [MWDOC and LAWD; MWDOC and IRWD], dated August 1, 1989; 1996 Amended and Restated Allen-McColloch Pipeline Subleases [MWDOC and LAWD; MWDOC and IRWD], dated March 1, 1996. IRWD subleases its AMP capacity, including the capacity it acquired as successor to LAWD. To facilitate bond financing for the construction of the AMP, it was provided that the MWDOC Water Facilities Corporation, and subsequently MWDOC, would have ownership of the pipeline, and the Participants would be sublessees. As is the case with the AMP Sale Agreement, the subleases similarly provide that water is subject to availability.

East Orange County Feeder No. 2 ("EOCF#2") (currently available).

(v) Agreement For Joint Exercise of Powers For Construction, Operation and Maintenance of East Orange County Feeder No. 2, dated July 11, 1961, as amended on July 25, 1962 and April 26, 1965; Agreement Re Capacity Rights In Proposed Water Line, dated September 11, 1961 ("IRWD MWDOC Assignment Agreement"); Agreement Regarding Capacity Rights In the East Orange County Feeder No. 2, dated August 28, 2000 ("IRWD Coastal Assignment Agreement"). East Orange County Feeder No. 2 ("EOCF#2"), a feeder linking Orange County

with MWD's feeder system, was constructed pursuant to a joint powers agreement among MWDOC (then called Orange County Municipal Water District), MWD, Coastal Municipal Water District ("Coastal"), Anaheim and Santa Ana. A portion of IRWD's territory is within MWDOC and the remainder is within the former Coastal (which was consolidated with MWDOC in 2001). Under the IRWD MWDOC Assignment Agreement, MWDOC assigned 41 cfs of capacity to IRWD in the reaches of EOCF#2 upstream of the point known as Coastal Junction (reaches 1 through 3), and 27 cfs in reach 4, downstream of Coastal Junction. Similarly, under the IRWD Coastal Assignment Agreement, prior to Coastal's consolidation with MWDOC, Coastal assigned to IRWD 0.4 cfs of capacity in reaches 1 through 3 and 0.6 cfs in reach 4 of EOCF#2. Delivery of water through EOCF#2 is subject to the rules and regulations of MWD and MWDOC, and is further subject to application and agreement of IRWD respecting turnouts.

Orange County Feeder (currently available)

(vi) Agreement, dated March 13, 1956. This 1956 Agreement between MWDOC's predecessor district and the Santa Ana Heights Water Company ("SAHWC") provides for delivery of MWD imported supply to the former SAHWC service area. SAHWC's interests were acquired on behalf of IRWD through a stock purchase and IRWD annexation of the SAHWC service area in 1997. The supply is delivered through a connection to MWD's Orange County Feeder designated as OC-7.

(vii) Agreement For Transfer of Interest In Pacific Coast Highway Water Transmission and Storage Facilities From The Irvine Company To the Irvine Ranch Water District, dated April 23, 1984; Joint Powers Agreement For the Construction, Operation and Maintenance of Sections 1a, 1b and 2 of the Coast Supply Line, dated June 9, 1989; Agreement, dated January 13, 1955 ("1955 Agreement"). The jointly constructed facility known as the Coast Supply Line ("CSL"), extending southward from a connection with MWD's Orange County Feeder at Fernleaf Street in Newport Beach, was originally constructed pursuant to a 1952 agreement among Laguna Beach County Water District ("LBCWD"), The Irvine Company (TIC) and South Coast County Water District. Portions were later reconstructed. Under the above-referenced transfer agreement in 1984, IRWD succeeded to TIC's interests in the CSL. The CSL is presently operated under the above-referenced 1989 joint powers agreement, which reflects IRWD's ownership of 10 cfs of capacity. The 1989 agreement obligates LBCWD, as the managing agent and trustee for the CSL, to purchase water and deliver it into the CSL for IRWD. LBCWD purchases such supply, delivered by MWD to the Fernleaf connection, pursuant to the 1955 Agreement with Coastal (now MWDOC).

Baker Water Treatment Plant (under development)

IRWD has begun construction of the Baker Water Treatment Plant project (the Baker WTP) in partnership with El Toro Water District, Moulton-Niguel Water District, Santa Margarita Water District and Trabuco Canyon Water District. The Baker WTP will be supplied with untreated imported water from MWD and native Irvine Lake water supply. IRWD will own 10.5 cfs of treatment capacity rights in

the Baker WTP.⁸

•POTABLE SUPPLY - GROUNDWATER

(i) Orange County Water District Act, Water Code App., Ch. 40 ("Act"). IRWD is an operator of groundwater-producing facilities in the Orange County Groundwater Basin (the "Basin"). Although the rights of the producers within the Basin vis a vis one another have not been adjudicated, they nevertheless exist and have not been abrogated by the Act (§40-77). The rights consist of municipal appropriators' rights and may include overlying and riparian rights. The Basin is managed by OCWD under the Act, which functions as a statutorily-imposed physical solution. The Act empowers OCWD to impose replenishment assessments and basin equity assessments on production and to require registration of water-producing facilities and the filing of certain reports; however, OCWD is expressly prohibited from limiting extraction unless a producer agrees (§ 40-2(6) (c)) and from impairing vested rights to the use of water (§ 40-77). Thus, producers may install and operate production facilities under the Act; OCWD approval is not required. OCWD is required to annually investigate the condition of the Basin, assess overdraft and accumulated overdraft, and determine the amount of water necessary for replenishment (§40-26). OCWD has studied the Basin replenishment needs and potential projects to address growth in demand until 2020. This is described in detail in the OCWD Master Plan Report, dated April, 1999. OCWD's analysis has been expanded and updated through 2025 in its Final Draft Long-Term Facilities Plan (January, 2006).

(ii) *Irvine Ranch Water District v. Orange County Water District*, OCSC No. 795827. A portion of IRWD is outside the jurisdictional boundary of OCWD. IRWD is eligible to annex the Santa Ana River Watershed portion of this territory to OCWD, under OCWD's current annexation policy (Resolution No. 86-2-15, adopted on February 19, 1986 and reaffirmed on June 2, 1999), and anticipates doing so. However, this September 29, 1998, Superior Court ruling indicates that IRWD is entitled to deliver groundwater from the Basin to the IRWD service area irrespective of whether such area is also within OCWD.

Dyer Road Wellfield (DRWF) / Deep Aquifer Treatment System (DATS) (currently available)

(iii) Agreement For Water Production and Transmission Facilities, dated March 18, 1981, as amended May 2, 1984, September 19, 1990 and November 3, 1999 (the "DRWF Agreement"). The DRWF Agreement, among IRWD, OCWD and Santa Ana, concerns the development of IRWD's Dyer Road Wellfield ("DRWF"), within the Basin. The DRWF consists of 16 wells pumping from the non-colored water zone of the Basin and 2 wells (with colored-water treatment facilities) pumping from the deep, colored-water zone of the Basin (the colored-water

⁸ The Baker WTP shall be supplied nonpotable imported water through the existing Baker Pipeline. IRWD's existing Baker Pipeline capacity (see Section 2(b)(1) NONPOTABLE SUPPLY – IMPORTED) shall be apportioned to the Baker WTP participants based on Baker WTP capacity ownership, and IRWD shall retain 10.5 cfs of pipeline capacity through the Baker WTP for potable supply and shall retain 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply.

portion of the DRWF is sometimes referred to as the Deep Aquifer Treatment System or "DATS".) Under the DRWF Agreement, an "equivalent" basin production percentage (BPP) has been established for the DRWF, currently 28,000 AFY of non-colored water and 8,000 AFY of colored water, provided any amount of the latter 8,000 AFY not produced results in a matching reduction of the 28,000 AFY BPP. Although typically IRWD production from the DRWF does not materially exceed the equivalent BPP, the equivalent BPP is not an extraction limitation; it results in imposition of monetary assessments on the excess production. The DRWF Agreement also establishes monthly pumping amounts for the DRWF. With the addition of the Concentrated Treatment System (CATS), IRWD has increased the yield of DATS.

Irvine Subbasin / Irvine Desalter (currently available)

(iv) First Amended and Restated Agreement, dated March 11, 2002, as amended June 15, 2006, restating May 5, 1988 agreement ("Irvine Subbasin Agreement"). TIC has historically pumped agricultural water from the Irvine Subbasin. (As in the rest of the Basin of which this subbasin is a part, the groundwater rights have not been adjudicated, and OCWD provides governance and management under the Act.) The 1988 agreement between IRWD and TIC provided for the joint use and management of the Irvine Subbasin. The 1988 agreement further provided that the 13,000 AFY annual yield of the Irvine Subbasin would be allocated 1,000 AFY to IRWD and 12,000 AFY to TIC. Under the restated Irvine Subbasin Agreement, the foregoing allocations were superseded as a result of TIC's commencement of the building its Northern Sphere Area project, with the effect that the Subbasin production capability, wells and other facilities, and associated rights have been transferred from TIC to IRWD, and IRWD has assumed the production from the Subbasin. In consideration of the transfer, IRWD is required to count the supplies attributable to the transferred Subbasin production in calculating available supplies for the Northern Sphere Area project and other TIC development and has agreed that they will not be counted toward non-TIC development.

A portion of the existing Subbasin water production facilities produce water which is of potable quality. IRWD could treat some of the water produced from the Subbasin for potable use, by means of the Desalter and other projects. Although, as noted above, the Subbasin has not been adjudicated and is managed by OCWD, TIC reserved water rights from conveyances of its lands as development over the Subbasin has occurred, and under the Irvine Subbasin Agreement TIC has transferred its rights to IRWD.

(v) Second Amended and Restated Agreement Between Orange County Water District and Irvine Ranch Water District Regarding the Irvine Desalter Project, dated June 11, 2001, and other agreements referenced therein. This agreement provides for the extraction and treatment of subpotable groundwater from the Irvine Subbasin, a portion of the Basin. As is the case with the remainder of the Basin, IRWD's entitlement to extract this water is not adjudicated, but the use of the entitlement is governed by the OCWD Act. (See also, discussion of Irvine Subbasin in the preceding paragraph.) A portion of the product water has been delivered into the IRWD potable system, and the remainder has been delivered into the IRWD nonpotable system.

Orange Park Acres (currently available)

On June 1, 2008, through annexation and merger, IRWD acquired the water system of the former Orange Park Acres Mutual Water company, including well [OPA Well]. The well is operated within the Orange County Groundwater Basin.

Wells 21 and 22 (currently available)

IRWD completed construction of treatment facilities, pipelines and wellhead facilities for Wells 21 and 22. Water supplied through this project became available in 2013. The wells are operated within the Orange County Groundwater Basin.

Irvine Wells (under development)

(vi) IRWD is pursuing the installation of production facilities in the west Irvine, Tustin Legacy and Tustin Ranch portions of the Basin. These groundwater supplies are considered to be under development; however, four wells have been drilled and have previously produced groundwater, three wells have been drilled but have not been used as production wells to date, a site for an additional well and treatment facility has been acquired by IRWD. The production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. Appropriate environmental review would be conducted for each facility. See discussion of the Act under Potable Supply - Groundwater, paragraph (i), above.

•NONPOTABLE SUPPLY - RECLAIMED

Water Reclamation Plants (currently available)

Water Code Section 1210. IRWD supplies its own reclaimed water from wastewater collected by IRWD and delivered to IRWD's Michelson Water Reclamation Plant (MWRP) and Los Alisos Water Reclamation Plant (LAWRP). MWRP currently has a permitted capacity of 18 million gallons per day (MGD) and LAWRP currently has a permitted capacity of 5.5 MGD. Water Code Section 1210 provides that the owner of a wastewater treatment plant operated for the purposes of treating wastes from a sanitary sewer system holds the exclusive right to the treated effluent as against anyone who has supplied the water discharged into the sewer system. IRWD's permits for the operation of MWRP and LAWRP allow only irrigation and other customer uses of reclaimed water, and do not permit stream discharge of reclaimed water; thus, no issue of downstream appropriation arises, and IRWD is entitled to deliver all of the effluent to meet contractual and customer demands.

Water Reclamation Plant Expansion (current available)

IRWD is completing construction of the Michelson Water Reclamation Plant Phase 2 Capacity Expansion Project later in 2015. With this expansion, IRWD will increase its capacity on the existing MWRP site to produce sufficient reclaimed water to meet the projected demand in the year 2035. Additional

reclamation capacity will augment local nonpotable supplies and improve reliability.

•NONPOTABLE SUPPLY - IMPORTED⁹

Baker Pipeline (currently available)

Santiago Aqueduct Commission Joint Powers Agreement, dated September 11, 1961, as amended December 20, 1974, January 13, 1978, November 1, 1978, September 1, 1981, October 22, 1986, and July 8, 1999 (the "SAC Agreement"); Agreement Between Irvine Ranch Water District and Carma-Whiting Joint Venture Relative to Proposed Annexation of Certain Property to Irvine Ranch Water District, dated May 26, 1981 (the "Whiting Annexation Agreement"). Service connections OC-13/13A, OC-33/33A. The imported untreated water pipeline initially known as the Santiago Aqueduct and now known as the Baker Pipeline was constructed under the SAC Agreement, a joint powers agreement. The Baker Pipeline is connected to MWD's Santiago Lateral. IRWD's capacity in the Baker Pipeline includes the capacity it subleases as successor to LAWD, as well as capacity rights IRWD acquired through the Whiting Annexation Agreement. (To finance the construction of AMP parallel untreated reaches which were incorporated into the Baker Pipeline, replacing original SAC untreated reaches that were made a part of the AMP potable system, it was provided that the MWDOC Water Facilities Corporation, and subsequently MWDOC, would have ownership, and the participants would be sublessees.) IRWD has 52.70 cfs in the first reach, 12.50 cfs in each of the second, third and fourth reaches and 7.51 cfs in the fifth reach of the Baker Pipeline. Water is subject to availability from MWD.

•NONPOTABLE SUPPLY - NATIVE

Irvine Lake (currently available)

(I) Permit For Diversion and Use of Water (Permit No. 19306) issued pursuant to Application No. 27503; License For Diversion and Use of Water (License 2347) resulting from Application No. 4302 and Permit No. 3238; License For Diversion and Use of Water (License 2348) resulting from Application No. 9005 and Permit No. 5202. The foregoing permit and licenses, jointly held by IRWD (as successor to The Irvine Company (TIC) and Carpenter Irrigation District (CID)) and Serrano Water District (SWD), secure appropriative rights to the flows of Santiago Creek. Under Licenses 2347 and 2348, IRWD and SWD have the right to diversion by storage at Santiago Dam (Irvine Lake) and a submerged dam, of a total of 25,000 AFY. Under Permit No. 19306, IRWD and SWD have the right to diversion by storage of an additional 3,000 AFY by flashboards at Santiago Dam (Irvine Lake). (Rights under Permit No. 19306 may be junior to an OCWD permit to divert up to 35,000 AFY of Santiago Creek flows to spreading pits downstream of Santiago Dam.) The combined total of native water that may be diverted to storage under these licenses and permit is 28,000 AFY. A 1996 amendment to

⁹ See Imported Supply - Additional Information, below, for information concerning the availability of the MWD supply.

License Nos. 2347, 2348 and 2349 [replaced by Permit No. 19306 in 1984] limits the withdrawal of water from the Lake to 15,483 AFY under the licenses. This limitation specifically references the licenses and doesn't reference water stored pursuant to other legal entitlements. The use and allocation of the native water is governed by the agreements described in the next paragraph.

(ii) Agreement, dated February 6, 1928 ("1928 Agreement"); Agreement, dated May 15, 1956, as amended November 12, 1973 ("1956 Agreement"); Agreement, dated as of December 21, 1970 ("1970 Agreement"); Agreement Between Irvine Ranch Water District and The Irvine Company Relative to Irvine Lake and the Acquisition of Water Rights In and To Santiago Creek, As Well As Additional Storage Capacity in Irvine Lake, dated as of May 31, 1974 ("1974 Agreement"). The 1928 Agreement was entered into among SWD, CID and TIC, providing for the use and allocation of native water in Irvine Lake. Through the 1970 Agreement and the 1974 Agreement, IRWD acquired the interests of CID and TIC, leaving IRWD and SWD as the two co-owners. TIC retains certain reserved rights. The 1928 Agreement divides the stored native water by a formula which allocates to IRWD one-half of the first 1,000 AF, plus increments that generally yield three-fourths of the amount over 1,000 AF.¹⁰ The agreements also provide for evaporation and spill losses and carryover water remaining in the Lake at the annual allocation dates. Given the dependence of native water on rainfall, for purposes of this assessment only a small portion of IRWD's share of the 28,000 AFY of native water rights (4,000 AFY in normal years and 1,000 AFY in single and multiple-dry years) is shown in currently available supplies, based on averaging of historical data. However, IRWD's ability to supplement Irvine Lake storage with its imported untreated water supplies, described herein, offsets the uncertainty associated with the native water supply.

•NONPOTABLE SUPPLY - GROUNDWATER

Irvine Subbasin / Irvine Desalter (currently available)

(i) IRWD's entitlement to produce nonpotable water from the Irvine Subbasin is included within the Irvine Subbasin Agreement. See discussion of the Irvine Subbasin Agreement under Potable Supply - Groundwater; paragraph (iv), above.

(ii) See discussion of the Irvine Desalter project under Potable Supply - Groundwater, paragraph (v), above. The Irvine Desalter project will produce nonpotable as well as potable water.

¹⁰ The 1956 Agreement provides for facilities to deliver MWD imported water into the Lake, and grants storage capacity for the imported water. By succession, IRWD owns 9,000 AFY of this 12,000 AFY imported water storage capacity. This storage capacity does not affect availability of the imported supply, which can be either stored or delivered for direct use by customers.

•IMPORTED SUPPLY - ADDITIONAL INFORMATION

As described above, the imported supply from MWD is contractually subject to availability. To assist local water providers in assessing the adequacy of local water supplies that are reliant in whole or in part on MWD's imported supply; MWD has provided information concerning the availability of the supplies to its entire service area. In its most recently adopted RUWMP, MWD has extended its planning timeframe out through 2035 to ensure that MWD's 2010 RUWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the RUWMP includes "Justifications for Supply Projections" (Appendix A-3) that details the planning, legal, financial, and regulatory basis for including each source of supply in the plan. The RUWMP summarizes MWD's planning initiatives over the past ten years, which includes the Integrated Resources Plan (IRP), the IRP Update, the Water Surplus and Drought Management Plan, Strategic Plan and Rate Structure. The reliability analysis in MWD's IRP Update (October 2010) showed that MWD can maintain reliable supplies under the conditions that have existed in past dry periods throughout the period 2015 through 2035. The RUWMP includes tables that show the region can provide reliable supplies under both the single driest year (1977) and multiple dry years (1990-92) through 2035. MWD has also identified buffer supplies, including additional State Water Project groundwater storage and transfers that could serve to supply the additional water needed.

It is anticipated that MWD will revise its regional supply availability analysis periodically to supplement its RUWMP in years when the RUWMP is not being updated.

IRWD is permitted by the statute to rely upon the water supply information provided by the wholesaler concerning a wholesale water supply source, for use in preparing its UWMPs. In turn, the statute provides for the use of UWMP information to support water supply assessments and verifications. In accordance with these provisions, IRWD is entitled to rely upon the conclusions of the MWD RUWMP. As referenced above under Summary of Results of Demand-Supply Comparisons - Recent Actions on Delta Pumping, MWD has provided additional information on its imported water supply.

MWD's reserve supplies, together with the fact that IRWD relies on MWD supplies as supplemental supplies that need not be used to the extent IRWD operates currently available and under-development local supplies, build a margin of safety into IRWD's supply availability.

(2) Adopted capital outlay program to finance delivery of the water supplies.

All necessary delivery facilities currently exist for the use of the *currently available* and *under-development* supplies assessed herein, with the exception of future groundwater wells, MWRP expansion and IRWD sub-regional and developer-dedicated conveyance facilities necessary to complete the local distribution systems for the Project. IRWD's turnout at each MWD connection and IRWD's regional delivery facilities are sufficiently sized to deliver all of the supply to the sub-regional and local distribution systems.

With respect to future groundwater wells (PR Nos. 11405, 11473), the MWRP Phase 2 expansion (PR. Nos. 20214 and 30214), and Baker WTP (PR No. 11218), IRWD adopted its fiscal year 2014-15 capital budget on June 9, 2014 (Resolution No. 2014-29), budgeting portions of the funds for such projects. (A copy is available from IRWD on request.) For these facilities, as well as unbuilt IRWD sub-regional conveyance facilities, the sources of funding are previously authorized general obligation bonds, revenue-supported certificates of participation and/or capital funds held by IRWD Improvement Districts. IRWD has maintained a successful program for the issuance of general obligation bonds and certificates of participation on favorable borrowing terms, and IRWD has received AAA public bond ratings. IRWD has approximately \$615.2 million (water) and \$784.8 million (wastewater) of unissued, voter-approved bond authorization. Certificates of participation do not require voter approval. Proceeds of bonds and available capital funds are expected to be sufficient to fund all IRWD facilities for delivery of the supplies under development. Tract-level conveyance facilities are required to be donated to IRWD by the Applicant or its successor(s) at time of development.

See also *MWD's RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to capital outlay programs related to MWD's supplies.

(3) Federal, state and local permits for construction of delivery infrastructure.

Most IRWD delivery facilities are constructed in public right-of-way or future right-of-way. State statute confers on IRWD the right to construct works along, under or across any stream of water, watercourse, street, avenue, highway, railway, canal, ditch or flume (Water Code Section 35603). Although this right cannot be denied, local agencies may require encroachment permits when work is to be performed within a street. If easements are necessary for delivery infrastructure, IRWD requires the developer to provide them. The crossing of watercourses or areas with protected species requires federal and/or state permits as applicable.

See also *MWD's RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to permits related to MWD's supplies.

(4) Regulatory approvals for conveyance or delivery of the supplies.

See response to preceding item (3).

See also *MWD's RUWMP*, Appendix A.3 Justifications for Supply Projections with respect to regulatory approvals related to MWD's supplies.

3. Other users and contractholders (identified supply not previously used).

For each of the water supply sources identified by IRWD, if no water has been received from that source(s), IRWD is required to identify other public water systems or water service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, that source(s):

Water has been received from all listed sources. A small quantity of Subbasin water is used by Woodbridge Village Association for the purpose of supplying its North and South Lakes. There are no other public water systems or water service contractholders that receive a water supply from, or have existing water supply entitlements, water rights and water service contracts to, the Irvine Subbasin.

4. Information concerning groundwater included in the supply identified for the Project:

(a) Relevant information in the Urban Water Management Plan (UWMP):

See Irvine Ranch Water District 2010 UWMP, sections 4-D through 4-J.

(b) Description of the groundwater basin(s) from which the Project will be supplied:

The Orange County Groundwater Basin ("Basin") is described at pages 3-1 through 3-14 of the OCWD Master Plan Report, dated April, 1999 ("MPR") and in the more recent Groundwater Management Plan ("GMP") at pages 2-1 through 6-33¹¹. The rights of the producers within the Basin vis a vis one another have not been adjudicated. The Basin is managed by the Orange County Water District (OCWD) for the benefit of municipal, agricultural and private groundwater producers. OCWD is responsible for the protection of water rights to the Santa Ana River in Orange County as well as the management and replenishment of the Basin. Current production from the Basin is approximately 332,000 AFY.

The Department of Water Resources has not identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118 (2003). The efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin are described in the OCWD MPR, including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. In addition to Orange County Water District (OCWD) reports listed in the Assessment Reference List, OCWD has also prepared a Long Term Facilities Plan ("LTFP") which provides updated information and was received by the OCWD Board in July 2009. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin.

Although the water supply assessment statute (Water Code Section 10910(f)) refers to elimination of "long-term overdraft," overdraft includes conditions which may be managed for optimum basin storage, rather than eliminated. OCWD's Act defines annual groundwater overdraft to be the quantity by which production exceeds the natural replenishment of the Basin. Accumulated overdraft is defined in the OCWD Act to be the quantity of water needed in the groundwater basin forebay to prevent landward movement of seawater into the fresh groundwater body. However, seawater intrusion control facilities have been constructed by OCWD since the Act was written, and have been effective in preventing landward movement of seawater. These facilities allow greater utilization of the storage capacity of the Basin.

¹¹ OCWD has also prepared a Long Term Facilities Plan which provides updated information which was received and filed by its Board in July 2009.

OCWD has invested over \$250 million in seawater intrusion control (injection barriers), recharge facilities, laboratories, and Basin monitoring to effectively manage the Basin. Consequently, although the Basin is defined to be in an “overdraft” condition, it is actually managed to allow utilization of up to 500,000 acre-feet of storage capacity of the basin during dry periods, acting as an underground reservoir and buffer against drought. OCWD has an optimal basin management target of 100,000 acre-feet of accumulated overdraft provides sufficient storage space to accommodate increased supplies from one wet year while also provide enough water in storage to offset decreased supplies during a two- to three year drought. If the Basin is too full, artesian conditions can occur along the coastal area, causing rising water and water logging, an adverse condition. Since the formation of OCWD in 1933, OCWD has made substantial investment in facilities, Basin management and water rights protection, resulting in the elimination and prevention of adverse long-term “mining” overdraft conditions. OCWD continues to develop new replenishment supplies, recharge capacity and basin protection measures to meet projected production from the basin during normal rainfall and drought periods. (OCWD MPR and LTFP)

OCWD's efforts include ongoing replenishment programs and planned capital improvements. It should be noted under OCWD's management of overdraft to maximize its use for annual production and recharge operations, overdraft varies over time as the Basin is managed to keep it in balance over the long term. The Basin is not operated on an annual safe-yield basis. (OCWD MPR, section 3.2 and LTFP, section 6)

(c) Description and analysis of the amount and location of groundwater pumped by IRWD from the Basin for the past five years:

The following table shows the amounts pumped, by groundwater source:

(In AFY)

Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD¹²
2014	42,424	10,995	0	376
2013	38,617	8,629	0	282
2012	37,059	7,059	0	0
2011	34,275	7,055	0	0
2010	37,151	8,695	0	3
2009	38,140	7,614	0	0
2008	36,741	4,539	0	16

¹² The water produced from IRWD's Los Alisos wells is not included in this assessment. IRWD is presently evaluating the future use of these wells.

2007	37,864	5,407	0	6
2006	37,046	2,825	0	268
2005	36,316	2,285	628	357
2004	30,265	1,938	3,079	101
2003	24,040	2,132	4,234	598
2002	25,855	2,533	5,075	744

(d) Description and analysis of the amount and location of groundwater projected to be pumped by IRWD from the Basin:

IRWD has a developed groundwater supply of 35,200 AFY from its Dyer Road Wellfield (including the Deep Aquifer Treatment System), in the main portion of the Basin.

Although TIC's historical production from the Subbasin declined as its use of the Subbasin for agricultural water diminished, OCWD's and other historical production records for the Subbasin show that production has been as high as 13,000 AFY. Plans are also underway to expand IRWD's main Orange County Groundwater Basin supply (characterized as *under-development* supplies herein). (See Section 2 (a) (1) herein). IRWD anticipates the development of additional production facilities within both the main Basin and the Irvine Subbasin. However, such additional facilities have not been included or relied upon in this assessment. Additional groundwater development will provide an additional margin of safety as well as reduce future water supply costs to IRWD.

The following table summarizes future IRWD groundwater production from currently available and under-development supplies.

(In AFY)

Year (ending 6/30)	DRWF ¹³	Future GW ¹⁴	IDP (Potable)	IDP (Nonpotable)
2015	43,300	0	5,640	3,898
2020	43,300	3,469	5,640	3,898
2025	43,300	12,352	5,640	3,898
2035	43,300	12,352	5,640	3,898

(e) If not included in the UWMP, analysis of the sufficiency of groundwater projected to be pumped by IRWD from the Basin to meet to meet the projected water demand of the Project:

¹³ See Potable Supply - Groundwater, paragraph (iii), above. DRWF non-colored production above 28,000 AFY and colored water production above 8,000 AFY are subject to contractually-imposed assessments. In addition, seasonal production amounts apply. This also includes 1,000 AFY for the OPA well and 6,300 for Wells 21&22.

¹⁴ Under development.

See responses to 4(b) and 4(d).

The OCWD MPR and LTFP examined future Basin conditions and capabilities, water supply and demand, and identified projects to meet increased replenishment needs of the basin. With the implementation of OCWD's preferred projects, the Basin yield in the year 2025 would be up to 500,000 AF. The amount that can be produced will be a function of which projects will be implemented by OCWD and how much increased recharge capacity is created by those projects, total demands by all producers, and the resulting Basin Production Percentage ("BPP") that OCWD sets based on these factors.¹⁵ Sufficient replenishment supplies are projected by the OCWD MPR to be available to OCWD to meet the increasing demand on the Basin. These supplies include capture of increasing Santa Ana River flows, purchases of replenishment water from MWD, and development of new local supplies. OCWD has completed its replenishment supply project, the Groundwater Replenishment System project ("GWRS"). The OCWD MPR indicates that the GWRS will produce over 100,000 AFY of new replenishment supply from recycled water.

Production of groundwater can exceed applicable basin production percentages on a short-term basis, providing additional reliability during dry years or emergencies. Additional groundwater production is anticipated by OCWD in the Basin in dry years, as producers reduce their use of imported supplies, and the Basin is "mined" in anticipation of the eventual availability of replenishment water. (OCWD MPR, section 14.6.)

See also, Figures 1-8. IRWD assesses sufficiency of supplies on an aggregated basis, as neither groundwater nor other supply sources are allocated to particular projects or customers. Under the Irvine Subbasin Agreement, IRWD is contractually obligated to attribute the Subbasin supply only to TIC development projects for assessment purposes; however, the agreement does not allocate or assign rights in the Subbasin supply to any project.

Sustainable Groundwater Management Act. Pursuant to the Sustainable Groundwater Management Act (SGMA), the DWR has designated the Orange County groundwater basin as a medium priority basin for purposes of groundwater management. By January 31, 2017, local groundwater producers must establish or designate an entity (referred to as a groundwater sustainability agency, or "GSA"), subject to DWR's approval, to manage each high and medium priority groundwater basin. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the GSA for such basin.

¹⁵ OCWD has adopted a basin production percentage of 72% for 2014-15. In prior years OCWD has maintained a basin production percentage that is higher than the current percentage, and IRWD anticipates that such reductions may occur from time to time as a temporary measure employed by OCWD to encourage lower pumping levels as OCWD implements other measures to reduce the current accumulated overdraft in the Basin. Any such reductions are not expected to affect any of IRWD's currently available groundwater supplies listed in this assessment, which are subject to a contractually-set equivalent basin production percentage as described, or are exempt from the basin production percentage.

5. ☐ **This Water Supply Assessment is being completed for a project included in a prior water supply assessment. Check all of the following that apply:**

- ☐ Changes in the Project have substantially increased water demand.
- ☐ Changes in circumstances or conditions have substantially affected IRWD's ability to provide a sufficient water supply for the Project.
- ☐ Significant new information has become available which was not known and could not have been known at the date of the prior Water Supply Assessment.

6. References

Water Resources Master Plan, Irvine Ranch Water District, March, 2002 (supplemented January, 2004)

2010 Urban Water Management Plan, Irvine Ranch Water District, June, 2011

Integrated Water Resources Plan Update, Metropolitan Water District of Southern California, July, 2004

Proposed Framework for Metropolitan Water District's Delta Action Plan, Metropolitan Water District of Southern California, May 8, 2007

Board Information Report, Metropolitan Water District of Southern California, October 9, 2007

2007 IRP Implementation Report, Metropolitan Water District of Southern California, October, 2007

Master Plan Report, Orange County Water District, April, 1999

Groundwater Management Plan, Orange County Water District, March, 2004

Final Draft Long-Term Facilities Plan, Orange County Water District, January 2006

2008-2009 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

2009-2010 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

2012-2013 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District

Progress on Incorporating Climate Change into Management of California's Water Resources, California Department of Water Resources, July 2006

Section 15 of the Rules and Regulations – Water Conservation and Water Supply Shortage Program, Irvine Ranch Water District, February 2009

Water Shortage Contingency Plan, Irvine Ranch Water District, February 2009

2010 Integrated Resources Plan Update, Metropolitan Water District of Southern California, October 2010

Regional Urban Water Management Plan, Metropolitan Water District of Southern California, November 2010

Exhibit A
Depiction of Project Area

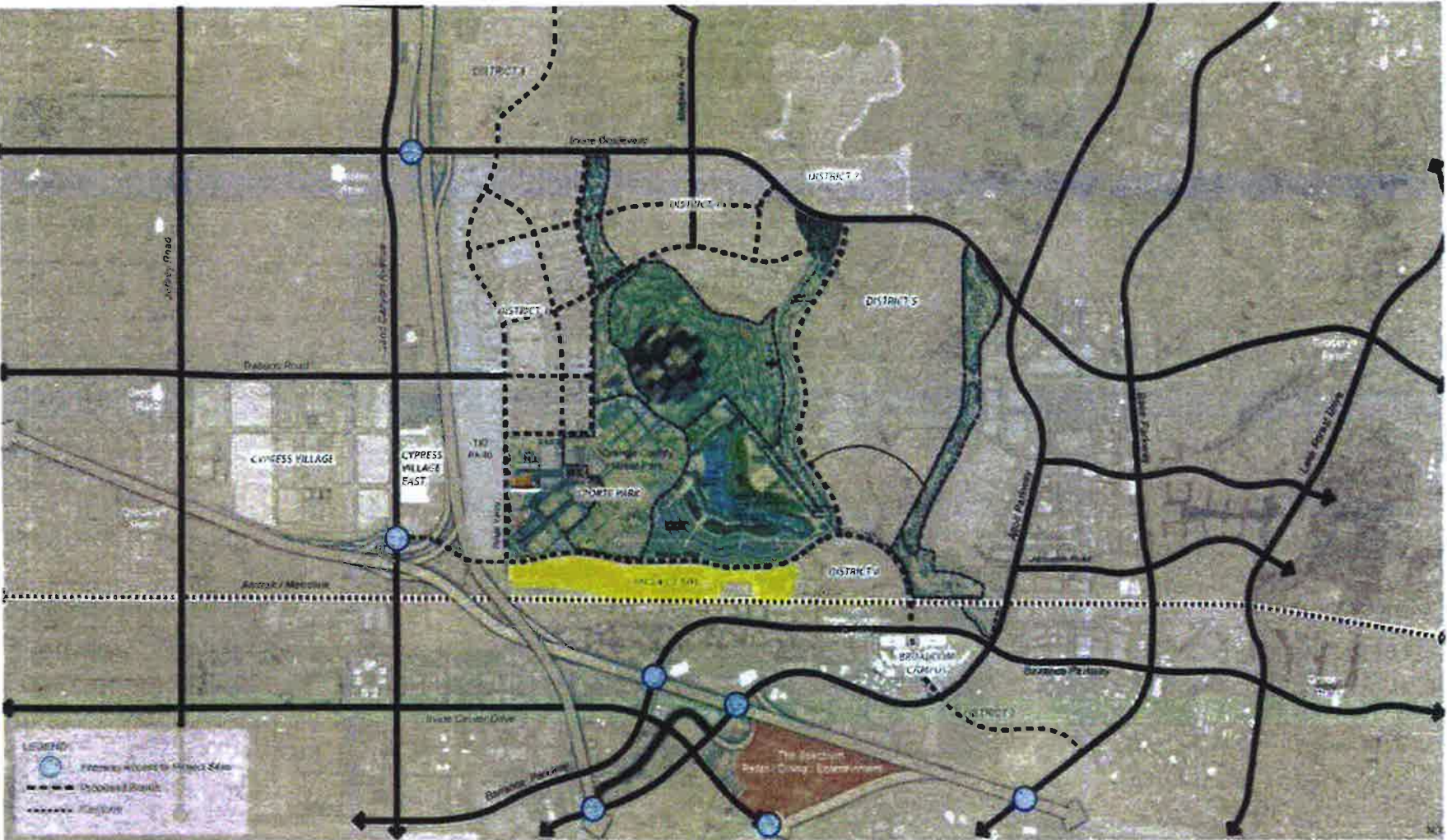


Exhibit B

Uses Included in Project



County of Orange
California

James Campbell
Land Development Manager

January 22, 2015

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000

Re: Request for Water Supply Availability Assessment (Water Code §10910 et seq.)

The County of Orange hereby requests an assessment of water supply availability for the below-described project. The County has determined that the project is a "project" as defined in Water Code §10912, and has determined that an environmental impact report is required for the project.

Proposed Project Information

Project Title: El Toro Development Plan

Location of project: On the former USMC El Toro Marine Base located southeast of the intersection of Marine Way and future Ridge Valley Drive, northeast of the SCRRA railroad right of way and southwest of the future extension of Marine Way and in the City of Irvine General Plan Planning Area 51.

- ☒ (For projects requiring a new assessment under Water Code §10910 (h).) Previous Water Supply Assessment including this project was prepared on: _____ This application requests a new Water Supply Assessment, due to the following (check all that apply):
- ☐ Changes in the project have substantially increased water demand
 - ☐ Changes in circumstances or conditions have substantially affected IRWD's ability to provide a sufficient water supply for the project
 - ☒ Significant new information has become available which was not known and could not have been known at the date of the prior Water Supply Assessment (Enclose maps and exhibits of the project)

Type of Development:

- ☒ Residential: No. of dwelling units: 2103
- ☒ Shopping center or business: No. of employees TBD Sq. ft. of floor space 220,000
- ☒ Commercial office: No. of employees TBD Sq. ft. of floor space 1,876,000
- ☒ Hotel or motel: No. of rooms 242
- ☐ Industrial, manufacturing, processing or industrial park: No. of employees _____ No. of acres _____ Sq. ft. of floor space _____
- ☒ Mixed use (check and complete all above that apply)
- ☐ Other: _____

Total acreage of project: 107.2 Acres

Acreage devoted to landscape:

Greenbelt 7.0 acres golf course None parks 4.0 Acres
Agriculture None other landscaped areas 26.0 Acres

Number of schools None Number of public facilities None

County Executive Office
333 W. Santa Ana Blvd.
Third Floor
Santa Ana, California
92701-4062

Tel: (714) 227-1011
Web: www.cogov.com

Other factors or uses that would affect the quantity of water needed, such as peak flow requirements or potential uses to be added to the project to reduce or mitigate environmental impacts:

Low flow fixtures and a water efficient landscape irrigation system with drought tolerant landscape design

What is the current land use of the area subject to a land use change under the project?

Institutional

Is the project included in the existing General Plan? No If no, describe the existing General Plan Designation Institutional

The County acknowledges that IRWD's assessment will be based on the information hereby provided to IRWD concerning the project. If it is necessary for corrected or additional information to be submitted to enable IRWD to complete the assessment, the request will be considered incomplete until IRWD's receipt of the corrected or additional information. If the project, circumstances or conditions change or new information becomes available after the issuance of a Water Supply Assessment, the Water Supply Assessment may no longer be valid. The County will request a new Water Supply Assessment if it determines that one is required.

The County acknowledges that the Water Supply Assessment shall not constitute a "will-serve" or in any way entitle the project applicant to service or to any right, priority or allocation in any supply, capacity or facility, and that the issuance of the Water Supply Assessment shall not affect IRWD's obligation to provide service to its existing customers or any potential future customers including the project applicant. In order to receive service, the project applicant shall be required to file a completed Application(s) for Service and Agreement with the Irvine Ranch Water District on IRWD's forms, together with all fees and charges, plans and specifications, bonds and conveyance of necessary easements, and meet all other requirement as specified therein.

COUNTY OF ORANGE

By: 

REQUEST RECEIVED:

Date: Jan. 24, 2015
By: Kellie Wilson
Irvine Ranch Water District

REQUEST COMPLETE:

Date: Jan. 28, 2015
By: Kellie Wilson
Irvine Ranch Water District

May 12, 2016

Prepared and

submitted by C. Compton 

Approved by: Paul Cook 

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

2016 LEGISLATIVE UPDATE

SUMMARY:

This report provides an update on the 2016 legislative session and IRWD priorities. As legislation develops, staff will provide updates and recommendations to the Water Resources Policy and Communications Committee and the Board, as appropriate.

Staff recommends that the Board consider the following actions/positions:

- *SB 970 (Leyva, D-Chino)- Greenhouse Gas Reduction Fund: Grant Program* — “SUPPORT IN CONCEPT” the development of a State program which would provide grants to wastewater agencies for the development or implementation of projects that would integrate food waste processing at wastewater treatment facilities, result in the diversion of organics from local landfills, and dedicate Cap-and-Trade revenues to the wastewater sector, and
- *Santa Ana Mountains to Sea National Monument Proposal- “SUPPORT”*.

BACKGROUND:

This year, the last day for policy committees to hear fiscal bills was April 22, while May 6 was the policy committee deadline for non-fiscal bills. The last day for fiscal committees to hear and report to the floor any bills introduced in its house is May 27, and the house of origin deadline is June 3.

A copy of the 2016 Legislative Matrix is attached as Exhibit “A”. Exhibit “B” is the 2016 Legislative Update Report Links to Bill Texts, which contains links to the bills discussed below, unless a separate exhibit is noted.

State Budget Update:

March Revenue Numbers:

On April 11, 2016, State Controller Betty Yee released her monthly report on the State’s finances. She announced that the State took in \$7.40 billion during the month of March. This amount was 3 percent higher than the Governor’s proposed Fiscal Year 2016-2017 budget. The discrepancy between the proposed budget and actual amount was due to the fact that both corporate taxes and sales taxes beat expectations. Corporate tax revenues were \$1.71 billion, which was \$47.5 million, or 2.9 percent, higher than expected. Sales tax revenues were \$1.79 billion, which was \$36.0 million, or 2.0 percent, higher than the proposed budget. Personal income tax revenues, which have normally surpassed projections over the past few years, were

below budget estimates. Personal tax revenues were \$3.49 billion or \$31.2 million less than expected.

For the first nine months of Fiscal Year 2015-16, total revenues are still ahead of the estimates included in the Governor's Fiscal Year 2016-2017 proposed budget by \$512.5 million, or 0.7 percent. Compared to the adopted Fiscal Year 2015-2016 budget, revenues for the first nine months of the fiscal year are \$2.26 billion higher than budgeted. The State ended the month of March with an outstanding loan balance of \$14.34 billion, which was approximately \$200.0 million less than projected.

2016 State Legislation:

AB 1755 (Dodd, D- Woodland)— The Open and Transparent Water Data Act:

As previously reported to the Board, Assemblymember Bill Dodd (D, Woodland) introduced AB 1755, The Open and Transparent Water Data Act. The bill would require the Department of Water Resources (DWR) to establish a public benefit corporation that would create and manage:

- A statewide water information system to improve the ability of the State to meet the growing demand for water supply reliability and healthy ecosystems, and that would integrate existing water data information from multiple databases, and
- An online water transfer information clearinghouse to report on water transactions that would include a database with information on completed water transfers, a public forum to exchange information on water market issues, and information to assist proponents with the water transfer approval processes.

The bill would also require DWR, the State Water Resources Control Board (SWRCB) and the Department of Fish and Wildlife to develop protocols for data sharing, documentation, quality control, public access, and promotion of open source platforms and decision support tools related to water data.

Staff has been participating on the ACWA State Legislative Committee's Work Group on Water Transfers which is discussing and seeking amendments to AB 1755 and AB 2304 (Levine, D-Santa Rosa). Staff will provide the Committee with an update on these discussions, which have been progressing.

AB 2304 (Levine, D-Santa Rosa) — State Water Market Exchange:

As reported to the Board last month, Assembly Water, Parks and Wildlife Chairman Marc Levin (D, Santa Rosa) introduced AB 2304 on behalf of the Environmental Defense Foundation. AB 2304 would establish the California Water Market Exchange in the Natural Resources Agency. The statewide exchange would be responsible for creating a centralized water market platform through which information regarding all transfer and exchanges of water occurring after December 31, 2017, would be recorded, and charged a fee. The bill also expresses legislative intent regarding water transfers and exchanges. It states that it is the Legislature's intent that

water transfer and exchanges protect and enhance environmental and community benefits including the following:

- Instream flows and ecosystem water supply;
- Improved water monitoring and data networks;
- Ecosystem restoration projects benefiting aquatic and riparian species;
- Improved drinking water supply and quality projects;
- The development of needed technical, managerial and financial capacity for disadvantaged communities; and
- Acquisition through the market exchange of needed water supplies for smaller community water systems.

IRWD has continued to be an active participant on Association of California Water Agencies' Water (ACWA) Transfer Task Force. The District, consistent with Board-adopted policy principles, has advocated for the development of voluntary regional water exchanges to facilitate voluntary water transfer between willing buyers and sellers consistent with existing water rights and priorities. Staff has also been participating on the ACWA State Legislative Committee's Work Group on Water Transfers which is discussing and seeking amendments to AB 1755 and AB 2304 (Levine, D-Santa Rosa). Staff will provide the Committee with an update on these discussions, which have been progressing.

SB 163 (Hertzberg, D-Van Nuys) — Wastewater Treatment: Recycled Water:

On September 3, 2015, Senator Bob Hertzberg (D, Van Nuys) amended SB 163, which had previously dealt with elections, in order to propose a 100 percent ban on ocean discharge of treated wastewater. Specifically, the bill would declare that the discharge of treated wastewater from ocean outfalls, except in compliance with the bill's provisions, is a waste and unreasonable use of water in light of the cost-effective opportunities to recycle water for further beneficial use. It would require a 50 percent reduction in ocean discharges by January 1, 2026, and a 100 percent reduction by January 1, 2036. Over the past month, staff has continued to work with the coalition led by the California Association of Sanitation Agencies and WaterReuse California. The coalition has been meeting with members of the Assembly to discuss SB 163. Staff will provide an oral update on any significant developments from these ongoing discussions.

SB 970 (Leyva, D-Chino)— Greenhouse Gas Reduction Fund: Grant Program:

The Inland Empire Utilities Agency (IEUA) is the sponsor of SB 970, authored by Senator Connie Leyva (D, Chino). Senator Leyva and IEUA are seeking to establish a grant program, which would award matching funds from Cap-and-Trade revenues for wastewater projects, which integrate food waste processing and result in the diversion of organics from local landfills. According to the author, this type of grant program is needed because:

“California must achieve deep reductions in short-lived climate pollutants by 2030 in order to meet future greenhouse gas emission targets and air quality goals. Short lived climate pollutants (SLCP), also known as “Super Pollutants,” have a much greater warming effect than CO₂. This means that reducing SLCPs such as methane will have a

significant impact on reducing our greenhouse gas emissions. Cutting methane emissions from solid waste disposal is a key state strategy to slow global warming and reduce the impacts of climate change.

SB 970 will help California achieve its world-leading climate change goals by demonstrating effective and efficient food waste diversion through utilizing existing anaerobic digestion capacity at publicly owned treatment works (POTWs). This bill would create a program that demonstrates regional cooperation between POTWs, local governments, waste haulers, and local businesses to divert food waste and other organics to centralized digesters. The demonstration projects will be designed to maximize resource recovery and better position the state to achieve its organic waste diversion and GHG reduction goals.”

On April 20, 2016, SB 970 was heard by the Senate Environmental Quality Committee. The bill was gutted and amended in the Committee as the author and IEUA continue to work with stakeholders and the Department of Resources, Recycling and Recovery (CalRecycle) on developing a grant program for POTWs. SB 970, as amended, would require CalRecycle to consider the amount of greenhouse gas emissions reductions that may result from a project receiving grants funds, and the amount of organic material that may be diverted from landfills as a result of the project.

Given the ongoing discussions taking place with CalRecycle and others, IEUA has asked wastewater agencies undertaking anaerobic digestion projects to consider adopting a “support in concept” position on the type of grant program SB 970 had originally proposed. Staff recommends that the Board adopt a “support in concept” position on the development of a State program, which would provide grants to wastewater agencies for the development or implementation of projects that would integrate food waste processing at wastewater treatment facilities and which would result in the diversion of organics from local landfills. Staff also recommends that the Board adopt a “support in concept” position on the dedication of Cap-and-Trade revenues to POTWs.

Proposition 218 Reform Efforts and Other Legislative Efforts Related to Water Rates:

Since *Capistrano Taxpayers Association, Inc. v. City of San Juan Capistrano* and the Board’s discussion regarding the need for legislative clarification on tiered water rates, staff has actively worked with the District’s industry and association partners on concepts that have been put forth seeking to clarify tiered water rates. As part of that effort, staff has participated on the ACWA Proposition 218 Work Group. At the end of April, ACWA shared a legislative concept related to tiered water rates put forward by the Water Foundation with the Proposition 218 Work Group. The Water Foundation’s concept seeks to:

- Define the proportional cost of service attributable to a parcel so that it includes low income rate subsidization;
- Define sewer service to include stormwater capture, treatment, and disposal; and

- Authorize agencies to charge a regulatory fee to create a price signal to encourage or discourage specific water service consumption patterns including to deter excess consumption of a service, such as domestic water service, as determined by the local agency; encourage the adoption of technologies supporting more efficient use of the service; and to comply with goals of avoiding waste and unreasonable use of water pursuant to Article X, Section 2, of the California Constitution.

The Water Foundation recently reached out directly to IRWD to discuss its proposal. Staff will provide the Committee with an oral update on the conversations with the Water Foundation and with its assessment of the Foundation's proposal.

A copy of the proposal is attached as Exhibit "C".

SWRCB Drinking Water Fees:

As part of the Fiscal Year 2015-2016 State Budget, the SWRCB asked and received the ability to increase the fees charged under the Safe Drinking Water Program and to change how those fees are calculated. The Safe Drinking Water Program was previously operated by the Department of Public Health but is now being operated by the SWRCB's Division of Drinking Water. The program ensures that small and large public water systems meet Safe Drinking Water Act standards.

At the end of last month, the SWRCB released its proposed regulations setting the new fees for this program. The proposed regulation abandons the fee-for-service model previously used by the Department of Public Health and proposes setting the fees charged to water agencies based on the number of connections each agency has. The proposed charges are summarized below:

Proposed Public Water Systems Annual Fee

Water System Type	Fee
Community Water System	
100 or fewer service connections	\$200.00
100 or fewer service connections (severely disadvantaged community)	\$100.00
101 to 1,000 service connections	\$4.00 per service connection
101 to 1,000 service connections (severely disadvantaged community)	\$2.00 per service connection
1,001 or more service connections	\$4.00 per service connection for the first 1,000 service connections plus \$2.00 per service connection greater than 1,000
1,001 or more service connections (severely disadvantaged community)	\$2.00 per service connection
Nontransient Noncommunity Water Systems	\$2.00 per person served, but not less than \$456.00

Wholesaler	\$6,000.00 plus \$1.36 per each million gallons. Million gallons means the annual average, rounded to the nearest million, as reported to the State Board by the wholesaler for 2012, 2013 and 2014, of the total gallons of water that the wholesaler produced from surface water and from groundwater and gallons of finished water that the wholesaler purchased or received from another public water system.
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Based on the fee schedule outlined above, IRWD's Drinking Water Program fees would increase from a range of approximately \$40,000 to \$80,000 per year to over \$200,000 per year.

Staff has been working with ACWA and the California Municipal Utilities Association (CMUA) over the last year on the drinking water program fees. Both ACWA and CMUA have expressed concern over the proposed fee structure, and are working to present an alternative to the SWRCB. Staff has been and will continue to be actively involved in these efforts. Staff will discuss this proposal and the current status of the ACWA and CMUA efforts with the Committee.

2016 Federal Legislation:

Santa Ana Mountains to Sea National Monument Proposal:

The Antiquities Act of 1906 created the federal land designation of "national monument" when it authorized the President to create national monuments on federal lands that contain "historic landmarks, historic or prehistoric structures, or other objects of historic or scientific interest." (16 U.S.C. § 431) While most national monuments have been established by Executive Order under the Antiquities Act, Congress has also enacted legislation establishing national monuments. Over the last 109 years, more than 140 monuments have been established and are currently being managed by the U.S. Forest Service, U.S. Fish and Wildlife Service, National Parks Service or the Bureau of Land Management based on management plans established for each monument.

Like many types of land use designation, national monument designations have been controversial. According to the Congressional Budget Office, the "primary objection to national monuments is that the declaration changes the property from being federal land available for multiple uses to being a national monument with possible restricted uses."

(www.fas.org/sgp/crs/misc/R41330.pdf) Since the goal of a national monument designation is to protect the resources on the land, a monument designation often restricts use of and activities on the land. Since 1996, monument designations "typically have had protections for valid existing rights for land uses, but the extent to which designations may affect existing rights is not always clear." (www.fas.org/sgp/crs/misc/R41330.pdf) Additionally, there is often concern that the designation will result in new constraints on development and limitations on the use of motorized vehicles. Supporters of national monument designations often cite environmental protection and stewardship, increased tourism, recreation and economic benefits as reasons to move forward with the designation. Each one of these concerns or benefits is impacted by the Executive Order

or legislation establishing the national monument, which includes permissive and prohibited land uses within the monument, and by the management plan established to govern the management of the monument.

Over the past few years, there has been an interest in creating a national monument in Orange County encompassing large portions of the historic Irvine Ranch. Representative Ed Royce (R-Fullerton) has agreed to sponsor legislation designating nearly 100,000 acres in Orange County as the Santa Ana Mountains to Sea National Monument. Given the vast amount of water and wastewater infrastructure within the proposed boundaries of the Santa Ana Mountains to Sea National Monument, IRWD has had an interest in the national monument's designation because as originally proposed it may have impacted District-owned facilities or its ability to construct needed infrastructure improvements in the future.

In August 2015, the Board adopted a "seek amendments" position on the proposal and authorized staff to seek amendments that would provide water and wastewater utilities and infrastructure the same protections and authorities originally given to electric and communications utilities and infrastructure. Additionally, staff was authorized to seek modifications to the monument's boundaries to limit potential impacts on IRWD's operations. Over the last nine months, staff has worked with the Representative Royce's office and the Irvine Ranch Conservancy to obtain these amendments.

At the beginning of May, Representative Royce's office provided the District with the most recent draft of his proposed legislation, which is expected to be introduced within the next few weeks. As currently drafted, the proposal creates the national monument; establishes an advisory board of local stakeholders of which IRWD is a member to help the National Forest Service manage the monument; permits only those uses and activities that are consistent with the terms and conditions of the management plan to be developed and the Orange County Central Coastal Natural Community Conservation Plan; and provides protection for infrastructure within the monument.

Additionally, staff was able to obtain the amendments sought by the District. The monument boundary has been revised to exclude the Syphon Reservoir and additional language has been added in the most recent version of the proposal to clarify that nothing in the national monument act shall affect existing water and wastewater infrastructure and utility operations. Additionally, as currently drafted, the proposal protects the establishment of new infrastructure facilities and rights-of-way if such facilities are otherwise lawful and necessary for water or wastewater service. Staff, upon reviewing the most recent proposal, inquired if the language related to future infrastructure could be modified slightly to remove the condition of necessity in order to provide greater protection for IRWD. Representative Royce's office has indicated that they are willing to take this amendment conditioned upon IRWD's support of the proposal. At this time staff is recommending that the Board adopt a "support" position on the proposal.

A map of the revised boundary of the proposed Santa Ana Mountains to Sea National Monument is attached as Exhibit "D". A copy of the proposed bill language, as provided to the District earlier this month, is attached as Exhibit "E".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board adopt a “SUPPORT IN CONCEPT” position on SB 970 (Leyva) and the development of a State program which would provide grants to wastewater agencies for the development or implementation of projects that would integrate food waste processing by the agencies at its wastewater treatment facilities, result in the diversion of organics from local landfills, and dedicate Cap-and-Trade revenues to the wastewater sector; and a “SUPPORT” position on the Santa Ana Mountains to Sea National Monument Proposal.

LIST OF EXHIBITS:

Exhibit “A” – IRWD Legislative Matrix

Exhibit “B” – 2016 Legislative Update Report Links to Bill Texts

Exhibit “C” – Water Foundation’s Proposal Related to Water and Sewer Rates

Exhibit “D” – Revised Map of the Proposed Santa Ana Mountains to Sea National Monument

Exhibit “E” – Proposed Santa Ana Mountains to Sea National Monument Bill Language

EXHIBIT "A"
IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 12</u> Cooley (D)	State Government: Administrative Regulations: Review		Requires each state agency after a noticed public hearing, to review the agency's regulations, identify any regulations that are duplicative, overlapping, inconsistent, or out of date, to revise those identified regulations, and report to the Legislature and Governor.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 45</u> Mullin (D)	Household Hazardous Waste		Requires the Department of Resources Recycling to adopt model ordinance for a comprehensive program for the collection of household hazardous waste. Authorizes a local jurisdiction proposing to enact an ordinance for the collection and diversion of such waste to adopt a Department model. Requires a determination as to whether a nonprofit organization has been created and funded to make grants to local entities for purposes related to the disposal of such waste.	02/04/2016 - To SENATE Committee on ENVIRONMENTAL QUALITY.
<u>AB 259</u> Dababneh (D)	Personal Information Privacy		Requires an agency, if the agency was the source of the breach and the breach compromised a person's social security number, driver's license number, or California identification card number, to offer to provide the person with identity theft prevention and mitigation services at no cost for not less than 12 months.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 291</u> Medina (D)	Environmental Quality Act: Local Agencies: Water		Authorizes a local agency, for certain water projects, to file a specified notice with the county clerk of the county in which the local agency's principal office is located, along with any required payment to the Department of Fish and Wildlife, and with the Office of Planning and Research and to transmit a copy of the notice to the county clerk of the counties in which the project is located. Requires the notice and the copies of the notice to be available to for public inspection. Relates to challenges.	06/10/2015 - In SENATE. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL QUALITY.
<u>AB 453</u> Salas (D)	Groundwater: Semitropic Water Storage District		Authorizes, until a groundwater sustainability plan is adopted, a local agency that has adopted a groundwater management plan to impose fees on the extraction of groundwater from a groundwater basin to fund costs of groundwater management and to collect	04/04/2016 - Re-referred to SENATE Committee on NATURAL RESOURCES AND WATER.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			groundwater extraction information, as long as a groundwater management plan adopted before a specified date, is in effect. Authorizes the Semitropic Water Storage District to impose fees and collect groundwater extraction information.	
<u>AB 501</u> Levine (D)	Resources: Delta Research		Relates to the Sacramento-San Joaquin Delta Reform Act of 2009. Requires a person conducting State-funded Delta Research to take specified actions with regard to the sharing of the primary data, metadata, and other supporting materials created or gathered in the course of that research. Relates to ineligibility. Relates to researcher State funding eligibility requirements. Provides conditions for Delta research grants. Relates to the provision of consistent procedural and technical requirements.	02/04/2016 - To SENATE Committee on NATURAL RESOURCES AND WATER.
<u>AB 577</u> Bonilla (D)	Biomethane: Grant Program		Requires the development and implementation of a grant program to award grants for projects that produce biomethane, that build or develop collection and purification technology or infrastructure, or that upgrade or expand existing biomethane facilities. Authorizes moneys in the Greenhouse Gas Reduction Fund to be used to fund grants awarded under the program.	09/11/2015 - Re-referred to SENATE Committee on RULES.
<u>AB 590</u> Dahle (R)	Greenhouse Gas Reduction Fund		Provides that moneys in the Greenhouse Gas Reduction Fund account may be made available for expenditure by the State Energy Resources Conservation and Development Commission for maintaining the current level of biomass power generation or geothermal energy generation in the State and revitalizing currently idle facilities in strategically located regions. Establishes requirements for an applicant to receive available funding for a facility's eligible electrical generation.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 615</u> Rendon (D)	Office of Sustainable Water Solutions: Assistance		Amends existing law that establishes the Office of Sustainable Water Solutions to promote permanent and sustainable drinking water and wastewater treatment solutions to ensure the effective and efficient provision of safe, clean, affordable, and reliable	06/18/2015 - To SENATE Committee on ENVIRONMENTAL QUALITY.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			drinking water and wastewater treatment services and authorizes the office to provide technical assistance to disadvantaged communities and small drinking water systems and wastewater systems. Specifies the technical assistance that may be provided.	
<u>AB 647</u> Eggman (D)	Beneficial Use: Storing of Water Underground		Declares that the diversion of water to underground storage constitutes a beneficial use of water if the water so stored is thereafter applied to the beneficial purposes for which the appropriation for storage was made, or if the water is so stored consistent with a sustainable groundwater management plan, statutory authority to conduct groundwater recharge, or a judicial degree and is for specified purposes. Requires applying for a permit or petition for a change. Requires including specified conditions.	06/30/2015 - In SENATE. Read second time and amended. Re-referred to Committee on NATURAL RESOURCES AND WATER.
<u>AB 723</u> Rendon (D)	Rental Property: Plumbing Fixtures: Replacement		Requires the lease or rental agreement of a single-family residential real property or any portion of a multifamily residential real property or commercial real property that is entered into, renewed, or amended, be accompanied by a disclosure stating the property owner's responsibility to replace all noncompliant plumbing fixtures with water-conserving plumbing fixtures.	07/16/2015 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 935</u> Salas (D)	Water Projects		Requires, upon appropriation by the Legislature, the Department of Water Resources to provide funding for certain projects, provided that certain conditions are met.	09/10/2015 - In SENATE. From third reading. To Inactive File.
<u>AB 937</u> Salas (D)	Groundwater Plan/Assistance: Disadvantaged Communities		Requires the Department of Water Resources to provide technical assistance to disadvantaged communities so that they may participate in groundwater planning, including planning for regional groundwater banking, with any county or other local agency.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 938</u> Rodriguez (D)	Sustainable Groundwater Management Act: Basins		Amends the Sustainable Groundwater Management Act. Authorizes a watermaster or local agency administering an adjudicated basin to elect that the basin be subject to the provisions	03/09/2016 - In SENATE. Read second time and amended. Re-referred to Committee on NATURAL

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			of the Act. Authorizes a court with jurisdiction over the basin to issue and order to set a hearing to determine if the basin shall be subject to the Act. Requires written notice to the Department of Water Resources that the basin is subject to the Act. Requires the notice to be posted on the Department's Web site.	RESOURCES AND WATER.
<u>AB 954</u> Mathis (R)	Water and Wastewater Loan and Grant Pilot Program		Creates the Water and Wastewater Loan and Grant Program. Require the State Water Resources Control Board to establish a pilot program to provide low-interest loans and grants to local agencies for grants to eligible individual homeowners for purposes relating to drinking water and wastewater treatment. Creates a related fund for use under the program. Transfers a specified amount of funds from the General Fund to the fund.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 1030</u> Ridley-Thomas S (D)	Global Warming Solutions Act of 2006: Greenhouse Gas		Amends existing law that relates to the Greenhouse Gas Reduction Fund. Requires priority be given to projects involving hiring that support the targeted training and hiring of workers from disadvantaged communities for career-track jobs.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 1144</u> Rendon (D)	Renewables Portfolio Standard Program: Credits		Provides that renewable energy credits may be used to meet certain portfolio content requirements if the credits are earned by electricity that is generated by an entity that would be excluded from the definition of an electrical corporation by operation of the exclusions for entities employing landfill or digester gas technology that meets certain requirements, including that the electricity is used at a wastewater treatment facility. Prohibits certain marketing claims.	08/17/2015 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 1173</u> Williams (D)	Water Equipment: Backflow Prevention Devices Testing		Requires, if a local health officer does not maintain a program for certificate of backflow prevention device testers, the testing and maintenance of such device be performed by a person who has received a California-specific certification for such devices from one of the specified entities or a similar certification provider deemed acceptable by the State Water Resources Control Board.	07/14/2015 - In SENATE Committee on ENVIRONMENTAL QUALITY: Not heard.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 1201</u> Salas (D)	Delta: Predation by Nonnative Species	Support	Requires the State Department of Fish and Wildlife to develop a science-based plan that addresses predation by nonnative species upon species of fish listed pursuant to the State Endangered Species Act that reside all or a portion of their lives in the Sacramento-San Joaquin Delta and that considers predation reduction for all Chinook salmon and other native species not listed pursuant to the Act. Provides for input from the scientific community, water users and fishing communities.	08/27/2015 - In SENATE Committee on APPROPRIATIONS: Held in committee.
<u>AB 1242</u> Gray (D)	Water Quality and Storage		Provides provisions of law requiring a specified increase in statewide water storage capacity, and updating water strategies and implementation plans. Requires the Water Resources Control Board, in formulating policy for water quality control and adopting or approving a water quality control plan for the Sacramento-San Joaquin Delta, to take into consideration any applicable groundwater sustainability plan or alternative and available information on impacts of groundwater use and beneficial uses of water.	09/02/2015 - Re-referred to SENATE Committee on RULES.
<u>AB 1463</u> Gatto (D)	Onsite Treated Water		Requires the State Water Resources Control Board, in consultation with the Department of Public Health, the Building Standards Commission, and stakeholders, to establish water quality standards and distribution, monitoring, and reporting requirements for onsite water recycling systems prior to authorizing the use of onsite treated water in internal plumbing of residential and commercial buildings. Requires onsite treated water to be considered the same as recycled water that is produced on site.	09/04/2015 - In SENATE. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL QUALITY.
<u>AB 1550</u> Gomez (D)	Greenhouse Gases: Investment Plan: Communities		Relates to greenhouse gases and investments in communities. Requires the Greenhouse Investment Fund plan to allocate a minimum percentage of the available moneys in the Greenhouse Gas Reduction Fund to projects located within disadvantaged communities and a separate and an additional unspecified	04/11/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			percentage to projects that benefit low-income households, with a fair share of the moneys targeting households with incomes below a percentage of the federal poverty level.	
<u>AB 1586</u> Mathis (R)	Environmental Quality Act: Temperance Flat Reservoir		Prohibits the court, in an action or proceeding alleging a violation of the California Environmental Quality Act, from staying or enjoining the construction or operation of the Temperance Flat Reservoir unless the court makes certain findings.	04/04/2016 - In ASSEMBLY Committee on NATURAL RESOURCES: Reconsideration granted.
<u>AB 1587</u> Mathis (R)	Groundwater		Requires, in implementing competitive grants under the Water Quality, Supply, and Infrastructure Improvement Act of 2014, for projects that develop and implement groundwater planning requirements, special consideration be given to those projects that would create groundwater recharge basins in areas of fallow farmland. Appropriates a specified amount of funding from the proceeds of the Act for the purposes of the grant program.	04/27/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
<u>AB 1588</u> Mathis (R)	Water and Wastewater Loan and Grant Program		Requires the State Water Resources Control Board to establish a program to provide funding to counties to award low-interest loans and grants to eligible applicants for specified purposes relating to drinking water and wastewater treatment. Authorizes a county to apply for such funds. Creates the Water and Wastewater Loan and Grant Fund and provides the moneys in this fund are available to the Board to administer and implement the program. Transfers funds from the General Fund to the loan and grant fund.	04/06/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
<u>AB 1589</u> Mathis (R)	Environmental Quality Act: Exemption:Drought Mitigation		Exempts from the requirements of the California Environmental Quality Act, for the duration of a state of emergency proclaimed by the Governor due to drought conditions, certain projects that are undertaken, carried out, or approved by a public agency to mitigate those drought conditions.	04/04/2016 - In ASSEMBLY Committee on NATURAL RESOURCES: Reconsideration granted.
<u>AB 1590</u> Mathis (R)	State Water Resources Control Board:		Requires that additional members be appointed to the State Water Resources Control Board by the Legislature. Requires that	03/10/2016 - In ASSEMBLY. Read second time and amended. Re-referred

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
	Appointments		vacancies be immediately filled by the appointing power.	to Committee on WATER, PARKS AND WILDLIFE.
<u>AB 1647</u> Waldron (R)	Environmental Quality: Water Storage Facilities		Exempts from the Environmental Quality Act a project to expand the storage capacity of an existing surface water storage facility, or to replace an existing surface water storage facility, that is owned and operated by a public entity if that public entity adopts, by resolution, findings and declarations that the project meets specified criteria.	04/04/2016 - In ASSEMBLY Committee on NATURAL RESOURCES: Not heard.
<u>AB 1649</u> Salas (D)	State Water Policy: Storage: Joint Powers Authorities		Requires the Department of Water Resources to develop a State water policy giving priority to the formation of joint powers authorities to address critical surface water storage needs and to funding of surface water projects. Provides that specified projects will meet statewide goals and provide specified public benefits to the greatest extent.	04/27/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
<u>AB 1694</u> Lackey (R)	Grant Program for School Drinking Water		Requires the State Water Resources Control Board to establish a grant program for grants to public elementary and secondary schools to improve access to, and the quality of drinking water. Specifies various types of projects for which the grants could be awarded. Provides the priority for such grants. Requires the establishment of grant application procedures. Appropriates funds therefor. Provides such funds would supplement not supplant other state funds apportioned to these local agencies.	03/31/2016 - Re-referred to ASSEMBLY Committees on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS and EDUCATION.
<u>AB 1704</u> Dodd (D)	Water Rights		Requires the registrant to provide a copy of the registrant's registration form to the Department of Fish and Wildlife and agree to general conditions. Requires the State Water Resources Control Board to consult with the Department of Fish and Wildlife in establishing these general conditions and make compliance with certain Fish and Game Code requirements applicable to the diversion of water one of those conditions. Requires general conditions for small irrigation use. Imposes certain fees.	04/27/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 1713</u> Eggman (D)	Sacramento-San Joaquin Delta: Peripheral Canal	Oppose	Prohibits the construction of a peripheral canal in the Sacramento-San Joaquin Delta unless expressly authorized by an initiative voted on by the voters of California, and requires the Legislative Analyst's Office to complete a prescribed economic feasibility analysis prior to a vote authorizing the construction of a peripheral canal.	04/27/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
<u>AB 1738</u> McCarty (D)	Building Standards: Dark Graywater		Defines dark graywater as a specified wastewater that comes from kitchen sinks and dishwashers. Requires the Department of Housing and Community Development, at the next triennial building standards rulemaking cycle, to develop and submit for approval building standards for the construction, installation, and alteration of dark graywater systems for indoor and outdoor uses.	04/20/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.
<u>AB 1749</u> Mathis (R)	Environmental Quality Act: Exemption: Recycled Water		Amends the California Environmental Quality Act which exempts projects that provide for the expansion of recycled water pipeline and directly related infrastructure within existing rights of way, and directly related groundwater replenishment, if the project does not affect wetlands or sensitive habitat where construction impacts are mitigated and undertaken to mitigate drought conditions for which an emergency was proclaimed. Exempts construction of recycled water treatment facilities and pipelines.	05/03/2016 - From ASSEMBLY Committee on NATURAL RESOURCES: Do pass to Committee on APPROPRIATIONS.
<u>AB 1755</u> Dodd (D)	Open and Transparent Water Data Act		Enacts the Open and Transparent Water Data Act. Requires the Department of Water Resources to establish a public benefit corporation that would create and manage a statewide water information accounting system to improve the ability of the State to meet the growing demand for water supply reliability and healthy ecosystems that would integrate existing water data information from multiple databases and a related clearinghouse. Requires the development of related protocols. Creates a related fund.	04/19/2016 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.
<u>AB 1773</u> Oberholte (R)	Local Government Renewable Energy		Amends existing law that authorizes a local governmental entity to receive a bill credit to a designated benefiting account, for	05/05/2016 - In ASSEMBLY. Read second time. To Consent Calendar.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
	Program		electricity exported to the electrical grid by an eligible renewable generating facility. Includes as a local governmental entity for this purpose a joint powers authority.	
<u>AB 1815</u> Alejo (D)	Global Warming Solutions Act of 2006		Requires the Environmental Protection Agency to establish a comprehensive technical assistance program, upon the appropriation of moneys from the Greenhouse Gas Reduction Fund, for eligible applicants assisting eligible communities. Requires the Agency to provide technical assistance to communities based on a specified priority. Requires the Department of Finance to include in a specified investment plan an allocation to the Agency for the technical assistance program.	05/02/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 1842</u> Levine (D)	Water: Pollution: Fines		Imposes a civil penalty for each gallon or pound of polluting material discharged. Requires that the civil penalty be reduced for every gallon or pound of the illegally discharged material that is recovered and properly disposed of by the responsible party. Prohibits a person from being subject to multiple civil penalties for the same act or failure to act.	04/27/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 1866</u> Wilk (R)	High-Speed Rail Bond Proceeds: Water Projects		Provides that no further bonds shall be sold for high-speed rail purposes pursuant to the Safe, Reliable High-Speed Passenger Train Bond Act for the 21st Century, except as specifically provided with respect to an existing appropriation for high-speed rail purposes for early improvement projects. Requires redirection of the unspent proceeds received from outstanding bonds issued for other high-speed rail purposes to fund capital expenditures for water projects.	04/11/2016 - In ASSEMBLY Committee on TRANSPORTATION: Reconsideration granted.
<u>AB 1871</u> Waldron (R)	Coastal Resources: Development: Water Supply Projects		Limits the growth-inducing impacts the Coastal Commission may consider in its review of a coastal development permit for a water supply project.	03/18/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on NATURAL RESOURCES.
<u>AB 1882</u>	Oil and Gas: Groundwater		Requires the Division of Oil, Gas, and Geothermal Resources to	04/20/2016 - In ASSEMBLY

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
Williams (D)	Monitoring		provide an opportunity and the information necessary for the State Water Resources Control Board and the appropriate regional water quality control board to review, comment on, and propose additional requirements for Class II underground injection well projects.	Committee on APPROPRIATIONS: To Suspend File.
<u>AB 1925</u> Chang (R)	Desalination: Statewide Goal		Requires the State Department of Water Resources to establish a goal of a specific number of acre-feet of drinking water to be desalinated per year by a specified year and a greater number of acre-feet by a later year, as part of a comprehensive water plan that fully evaluates other, specified options.	05/04/2016 - In ASSEMBLY Committee on APPROPRIATIONS: Not heard.
<u>AB 1928</u> Campos (D)	Water Efficiency Landscape Irrigation Equipment		Postpones the date by which the Resources Conservation and Development Commission is to adopt the performance standards and labeling requirements for landscape irrigation equipment prohibit the sale of that equipment unless it meets the performance standards and labeling requirements.	04/27/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
<u>AB 1986</u> Wilk (R)	Water Resources: Permit to Appropriate: Application		Requires, if the State Water Resources Control Board has not rendered a final determination on an application for a permit to appropriate water within a specified time period from the date the application to appropriate water was filed, the Board to issue a notice and provide an opportunity for protests before rendering a final determination.	04/27/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspend File.
<u>AB 1989</u> Jones (R)	Water and Greenhouse Gas Emissions Reduction		Requires the State Water Resources Control Board to develop and implement a grant and low-interest loan program for water projects that result in the net reduction of water-related greenhouse gas emissions.	03/30/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2022</u> Gordon (D)	Advanced Purified Demonstration Water	Support	Authorizes the operator of an advanced purified demonstration water facility to cause the advanced purified demonstration water to be bottled and distributed as samples for educational purposes and to promote water recycling. Prohibits the advanced purified	05/05/2016 - To SENATE Committee on ENVIRONMENTAL QUALITY.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			demonstration water in each bottle from exceeding a specified amount. Prohibits the water from being distributed unless it meets or is superior to all federal and state drinking water standards. Requires a recycling program for distributed bottles.	
<u>AB 2040</u> Melendez (R)	Outdoor Water Efficiency Act of 2016: Tax Credits		Allows, under the Personal Income Tax Law, a credit for a percentage of the amount paid or incurred by a qualified taxpayer for water-efficiency improvements on qualified real property in the state. Requires the qualified taxpayer to obtain and retain a certification of such improvements from the appropriate regional or local water agency after completion of the improvements and to provide a copy of this certification to the Franchise Tax Board upon request.	04/06/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on REVENUE AND TAXATION.
<u>AB 2076</u> Garcia (D)	Water and Energy Use Efficiency: Breweries		Requires the Department of Water Resources to develop water and energy use efficiency certification guidelines for the production of beer that includes certification seals. Requires the Department of Alcoholic Beverage Control to consult in label design and approval for the use of a seal on a beer bottle. Provides the procedures for the application of certification of a brewery. Requires the submission of a certification fee.	04/11/2016 - Re-referred to ASSEMBLY Committees on WATER, PARKS AND WILDLIFE and GOVERNMENTAL ORGANIZATION.
<u>AB 2099</u> Stone (D)	Safe Drinking Water Benefit		Requires the State Department of Social Services to convene a workgroup to develop recommendations for delivering a water benefit to supplement that purchase of drinking water for low-income households with inadequate access to safe drinking water. Requires a plan for identification of eligible households and the delivery of the benefit to those households. Requires the submission of a report with the recommendations to specified entities.	04/14/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2139</u> Williams (D)	Ocean Protection Council: Ocean Acidification		Requires the Ocean Protection Council to facilitate research and compile data on the causes and effects of ocean acidification and, to adopt recommendations for further legislative and executive actions	05/04/2016 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			to address ocean acidification.	
<u>AB 2257</u> Maienschein (R)	Local Agency Meeting: Agenda: Online Posting		Amends the Ralph M. Brown Act, which enables the legislative body of a local agency to call both regular and special meetings. Requires an online posting of an agenda by a local agency to have a prominent direct link to the current agenda itself. Requires the link to be on the local agency's Internet Web site homepage, not in contextual menu on the homepage. Requires the agenda to be posted in an open format meeting specified requirements, including the agenda is platform independent and machine readable.	04/25/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2292</u> Gordon (D)	Global Warming Solutions Act: Disadvantaged Communities		Requires the State Environmental Protection Agency to update the State Communities Environmental Health Screening Tool that identifies disadvantaged communities regarding the monitoring and regulation of sources of emissions of greenhouse gases, when it comes to investment opportunities in the multiyear investment plan for moneys in the Greenhouse Gas Reduction Fund.	04/14/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2304</u> Levine (D)	State Water Market Exchange	Seek Amendments	Establishes the State Water Market Exchange which requires the market exchange to create a centralized water market platform on its Internet Web site that provides ready access to information about water available for transfer or exchange. Requires the submission of certain data and information to the market exchange and the payment of an administrative fee to the exchange. Requires the development of specified procedures by the exchange.	04/12/2016 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.
<u>AB 2389</u> Ridley-Thomas S (D)	Special Districts: District-Based Elections		Relates to special districts, district-based elections and reapportionment. Authorizes a governing body of a special district, to require, by resolution, that the election of the members of its governing body be elected using district-based elections without being required to submit the resolution to the voters for approval. Requires the resolution to include a declaration that the change in the method of election is being made in furtherance of the purposes of the California Voting Rights Act of 2001.	05/04/2016 - From ASSEMBLY Committee on LOCAL GOVERNMENT: Do pass as amended.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 2438</u> Waldron (R)	Environmental Quality Act		Relates to the Environmental Quality Act (CEQA). Exempts from CEQA a project for the construction and installation of a new pipeline or the maintenance, repair, restoration, reconditioning, relocation, replacement, removal, or demolition of an existing pipeline for the distribution of recycled water within a public street, highway, or right-of-way. Requires a public hearing.	04/21/2016 - In ASSEMBLY. Read second time. To third reading.
<u>AB 2444</u> Garcia E (D)	Water, Climate, Coastal Protection and Outdoor Access		Enacts the California Parks, Water, Climate, and Coastal Protection and Outdoor Access for All Act of 2016 which would authorize the issuance of bonds in a specified amount pursuant to the State General Obligation Bond Law to finance a water, climate, and coastal protection and outdoor access for all program.	04/26/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2446</u> Gordon (D)	State Water Resources Control Board: Judicial Review		Updates provisions regarding an aggrieved party to petition the superior court for a writ of mandate for review of a decision or order issued by the State Water Resources Control Board. Provides that a decision or order under the Safe Drinking Water Act by the Board is not subject to court review if no aggrieved party petitions for such writ within a specified time period after a service of a copy of the order or decision issued by the Board.	04/19/2016 - From ASSEMBLY Committee on JUDICIARY: Do pass to Committee on APPROPRIATIONS.
<u>AB 2456</u> Cooley (D)	Public Employee Retirement Benefits: Prefunding		Requires the Board of Administration of the Public Employee's Retirement System to develop, establish, and administer the State Employer's Pension Prefunding Trust Program in order to encourage State and local public employers that provide a defined benefit pension plan to their employees to effectively manage their pension contributions.	03/17/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on PUBLIC EMPLOYEES, RETIREMENT AND SOCIAL SECURITY.
<u>AB 2468</u> Hadley (R)	Public Employees' Retirement System		Authorizes a public agency that has contracted with the Board of Administration of PERS to offer an alternative formula from that required by the California Public Employees Pension Reform Act to be applicable to certain miscellaneous, nonsafety employees, if specified contingencies are satisfied. Requires that such employees	04/12/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on PUBLIC EMPLOYEES, RETIREMENT AND SOCIAL SECURITY.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			who are not new members, that were employed by a public employer that did not contract with PERS until a specified date, be covered by a default benefit formula.	
<u>AB 2480</u> Bloom (D)	Source Watersheds: Financing		Requires the State Water Resources Control Board to develop investment plans that prioritize actions for restoration and conservation to improve watershed function in the watershed that flow into the Shasta Reservoir and the Oroville Reservoir.	04/12/2016 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.
<u>AB 2488</u> Dababneh (D)	Protected Species: Stickleback: Possession	Support	Permits the Department of Fish and Wildlife to authorize, under the State Endangered Species Act, the take of unarmored threespine stickleback attributable to the periodic dewatering, inspection, maintenance, or repair of the Metropolitan Water District of Southern California's Foothill Feeder water supply facility from Castaic Dam to the Joseph Jensen Treatment Plant in the County of Los Angeles, if certain conditions are satisfied.	05/05/2016 - In ASSEMBLY. Read third time. Passed ASSEMBLY. *****To SENATE.
<u>AB 2550</u> Patterson (R)	Instream Flow Curtailments and Compensation		Requires the State Water Resources Control Board to financially compensate a person who is unable to divert the full amount of water authorized under his or her permit or license due to a board-issued instream flow curtailment, and a person who is required to file a statement of diversion and use is unable to divert the same amount of water in the succeeding year due to a board-issued instream flow curtailment.	03/08/2016 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<u>AB 2551</u> Gallagher (R)	Contract Procurement: Surface Storage Projects		Allows a local agency to use the construction management at-risk, design-build, or design-build operate method of delivery on a surface storage project. Requires such contracts to be awarded on the best value basis or to the lowest responsible bidder. Establishes a procurement process for these contracts. Provides reasons which would prohibit a contracting entity from being prequalified or short-listed.	04/27/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2578</u>	Environmental Quality		Exempts from the requirements of the California Environmental	03/18/2016 - In ASSEMBLY. Read

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
Bigelow (R)	Act: Exemptions: Water Service		Quality Act, a project within a public street or highway or other public right-of-way for the maintenance, repair, restoration, reconditioning, relocation, replacement, removal or demolition of an existing water distribution pipeline to address water leakage. Exempts activities undertaken by a local agency in response to a drought to acquire water supplies, extend service, or provide water for drinking and sanitation.	second time and amended. Re-referred to Committee on NATURAL RESOURCES.
<u>AB 2583</u> Frazier (D)	Sacramento-San Joaquin Delta Reform Act of 2009	Oppose	Relates to the Sacramento-San Joaquin Delta Reform Act of 2009, the Delta Stewardship Council, the Delta Plan and the California Water Fix. Provides that the new Delta water conveyance infrastructure is interdependent parts of a system. Amends the point of diversion to a point on the Sacramento River. Prohibits construction of a new Delta conveyance facility until contracts are signed by contractors who will receive the water that commit them to pay costs and to mitigate facility property taxes.	04/19/2016 - In ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Failed passage.
<u>AB 2594</u> Gordon (D)	Stormwater Resources: Use of Captured Water		Authorizes a public entity that captures stormwater, in accordance with a stormwater resource plan, before the water reaches a natural channel to use the captured stormwater.	04/19/2016 - From ASSEMBLY Committee on WATER, PARKS AND WILDLIFE: Do pass to Committee on APPROPRIATIONS.
<u>AB 2601</u> Eggman (D)	Building Standard: Residential Property: Graywater		Requires the Department of Housing and Community Development to adopt and submit to Building Standards Commission for approval amendments to the building standards adopted pursuant to these provisions that require that all new single-family and duplex residential dwelling units include specified components to allow the separate discharge of graywater for direct irrigation.	03/10/2016 - To ASSEMBLY Committee on HOUSING AND COMMUNITY DEVELOPMENT.
<u>AB 2617</u> Mayes (R)	Water Efficiency Measures		Requires the Energy Commission to develop and solicit comments on a proposed report, in consultation with certain subject matter experts to issue a final report that contains the projected benefits of recommended voluntary water efficiency measures and an analysis of any unintended adverse environmental impacts.	04/14/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>AB 2801</u> Gallagher (R)	Local Government: Fees and Charges: Protest		Requires a local agency to keep written protests securely stored and sealed until a public hearing. Prohibits an agency from requiring such protest to include property identification other than street address unless there is not a street address, and from requiring such protest to be submitted on an agency form. Requires the agency maintain such protests for a minimum time period following the date of the hearing to consider the protests.	05/04/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>AB 2890</u> Env Safety & Toxic Material Cmt	Drinking Water and Wastewater Operator Certification		Requires the State Water Resources Control Board to appoint an advisory committee to examine and certify people to operate water treatment plants and water distribution systems, and to review all proposed regulations and make recommendations to the Board. Relates to water treatment operator-in-training. Revises procedures for the suspension or revocation of a valid operator license. Authorizes certificate reciprocity. Provides certificate application fraud civil liability.	04/28/2016 - In ASSEMBLY. Read second time. To third reading.
<u>AB 2910</u> Local Government Cmt	Local Government: Organization: Omnibus Bill		Revises provisions of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 to remove references to a public agency's current service area and instead include references to the public agency's jurisdictional boundaries. Provides that a purpose of a local agency formation commission is to encourage government services efficiency. Relates to commission membership. Relates to agency reorganization. Relates to uncollected revenues and taxes upon disincorporation.	05/05/2016 - In ASSEMBLY. Read third time. Passed ASSEMBLY. *****To SENATE.
<u>ACA 8</u> Bloom (D)	Local Government Financing: Water Facilities: Voters		Proposes an amendment to the Constitution to create an exception to a limit for a rate imposed by a city, county, city and county, or special district to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of wastewater treatment facilities and related infrastructure, potable water producing facilities and related infrastructure, nonpotable water producing facilities and related infrastructure, and stormwater treatment facilities and infrastructure.	02/18/2016 - INTRODUCED.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 7</u> Wolk (D)	Housing: Water Meters; Multi-unit Structures		Requires a landlord to make submeter disclosures to a tenant prior to executing a rental agreement. Relates to tenant billing procedures and requirements. Authorizes building standards that require the installation of water submeters in multiunit residential buildings. Provides structure exemptions. Relates to landlord requirements. Relates to the use of meters or submeters in new mixed-use residential and commercial structures as a condition for service. Requires licensed contractors do the installation.	09/08/2015 - In ASSEMBLY. Motion to reconsider.
<u>SB 20</u> Pavley (D)	State Water Resiliency Investment Act		Creates the State Water Resiliency Investment Fund. Provides that moneys in the Fund are available for the purpose of providing a more dependable water supply in the State. Creates various accounts within the Fund for prescribed purposes.	08/26/2015 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on WATER, PARKS AND WILDLIFE.
<u>SB 32</u> Pavley (D)	Global Warming Solutions Act of 2006		Requires the State Air Resources Board to approve a specified statewide greenhouse gas emission limits that are the equivalent to a specified percentage below the 1990 level to be achieved by 2030. Revises current provisions of existing law regarding the implementation of the next update of a greenhouse gas scoping plan under existing law. Requires reports regarding reaching these limits.	09/10/2015 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on NATURAL RESOURCES.
<u>SB 122</u> Jackson (D)	Environmental Quality Act: Record of Proceedings		Amends the Environmental Quality Act. Relates to a database for the collection, storage, retrieval, and dissemination of environmental documents, notices of exemption, notices of preparation, notices of determination, and notices of completion provided to the office that shall be available online to the public through the internet. Provides for the phase-in of electronic documents. Requires the lead agency to submit to the State Clearinghouse a sufficient number of environmental documents for review.	08/27/2015 - In ASSEMBLY Committee on APPROPRIATIONS: Not heard.
<u>SB 163</u>	Wastewater Treatment:	Oppose	Declares the discharge of treated wastewater from ocean outfalls is	09/08/2015 - Re-referred to

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
Hertzberg (D)	Recycled Water		a waste and unreasonable use of water in light of certain conditions. Requires such facility to achieve a specified percentage of reuse of the actual annual flow for beneficial purposes. Prohibits such discharge except as backup discharge. Provides procedures for related exemption requests. Requires a prescribed plan to meet these provisions.	ASSEMBLY Committee on RULES.
SB 223 Galgiani (D)	Division of Boating and Waterways: Oversight Committee		Requires the Division of Boating and Waterways to establish an advisory and oversight committee to evaluate and monitor the activities of the Division relating to the management and control or eradication of invasive aquatic plants. Provides the expertise of members of the committee. Requires the committee to meet a specified amount of times per year and to communicate any findings or recommendations to the Division.	08/19/2015 - In ASSEMBLY Committee on APPROPRIATIONS: To Suspense File.;08/27/2015 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
SB 248 Pavley (D)	Oil and Gas		Provides for an inspection program for all activities regulated pursuant to provisions concerning drilling, operation, maintenance, and abandonment of oil and gas wells and certain tanks and facilities. Requires inspections to be reported and posted, and the recording of information in a well history, including fluid injection, chemical composition, and waste disposal injection. Provides for shutdown. Requires updating related regulations. Requires notification and clearance of chemical injection.	08/27/2015 - In ASSEMBLY Committee on APPROPRIATIONS: Not heard.
SB 286 Hertzberg (D)	Electricity: Direct Transactions		Requires the Public Utilities Commission to adopt and implement a schedule that implements a specified phase-in period for expanding direct transactions for individual retail nonresidential end-use customers over a maximum time period, raising the allowable limit of kilowatthours that can be supplied by other electrical corporation's distribution service territory to that corporation's share of the gigawatthours. Requires such customers to be responsible for their share of the costs of specified programs.	03/01/2016 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
SB 471	Water, Energy, Reduction		Includes reduction of greenhouse emissions associated with water	08/27/2015 - In ASSEMBLY

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
Pavley (D)	of Greenhouse Gas Emissions		treatment among the investments that are eligible for funding from the Greenhouse Gas Reduction Fund. Requires the State Water Resources Control Board to establish a grant and loan program for water projects that result in the net reduction of water-related greenhouse gas emissions.	Committee on APPROPRIATIONS: Held in committee.
<u>SB 551</u> Wolk (D)	State Water Policy: Water and Energy Efficiency	Seek Amendments	Declares the policy of the state that water use and water treatment shall operate in a manner that is as energy efficient as is feasible and energy use and generation shall operate in a manner that is as water efficient as is feasible. Requires all relevant state agencies to consider this state policy when revising, or establishing policies, regulations, and grant criteria when pertinent to these uses of water and energy.	08/27/2015 - In ASSEMBLY Committee on APPROPRIATIONS: Held in committee.
<u>SB 552</u> Wolk (D)	Public Water Systems: Disadvantaged Communities		Requires the State Water Resources Control Board to hold at least one initial public meeting prior to ordering the consolidate or extension of public water system service and to obtain the consent of any domestic well owner. Provides any affected resident and domestic well owner within the service area who does not consent is ineligible for any future water-related grant funding. Requires the Board to compensate certain water systems. Prohibits a charge increase for certain customers.	02/26/2015 - 07/09/2015 - Re-referred to ASSEMBLY Committee on RULES.
<u>SB 554</u> Wolk (D)	Delta Levee Maintenance		Relates to the maintenance or improvement of project or nonproject levees in the Sacramento-San Joaquin Delta. Declares legislative intent to reimburse up to a certain percent of costs incurred in any year for the maintenance or improvement of levees in excess of a specified sum per mile of levee and authorizes a specified board to advance funds in an amount that does not exceed a certain percent of the estimated state share to an eligible local agency.	04/28/2016 - To ASSEMBLY Committee on WATER, PARKS AND WILDLIFE.
<u>SB 814</u> Hill (D)	Drought: Excessive Water Use: Urban Retail Water Supply	Support Amendments	Requires each urban retail water supplier to establish a method to identify and restrict excessive water use. Authorizes the establishment of a rate structure that penalizes such excessive water	05/03/2016 - In SENATE. Read second time. To third reading.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			users. Authorizes an excessive water use ordinance, rule, or tariff condition. Makes a violation thereof an infraction with specified monetary penalties.	
<u>SB 885</u> Wolk (D)	Construction Contracts: Indemnity	Oppose	Specifies, for construction contracts, that a design professional only the has the duty to defend claims that arise out of, or pertain or relate to, negligence, recklessness, or willful misconduct of the design professional. Provides that a design professional would not have a duty to defend claims or lawsuits against any other person or entity arising from a construction project, except that person or entity's reasonable defense costs arising out of the design professional's degree of fault.	05/03/2016 - From SENATE Committee on JUDICIARY: Do pass as amended.
<u>SB 919</u> Hertzberg (D)	Water Supply: Creation or Augmentation of Local Water		Requires the Public Utilities Commission to address the oversupply of renewable energy resources through a tariff or other economic incentive for electricity purchased by customers operating facilities that create or augment local water supplies to reduce the cost of electricity to those facilities.	05/03/2016 - In SENATE. Read second time. To third reading.
<u>SB 970</u> Leyva (D)	Greenhouse Gas Reduction Fund: Grants: Recyclables		Requires the Department of Resources Recycling and Recovery, in awarding a grant under the grant program under the Greenhouse Gas Reduction Fund for financial assistance to reduce such gas emissions, to consider the amount of greenhouse gas emission reductions that may result from the project and the amount of organic material that may be diverted from landfills as a result of the project.	04/25/2016 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>SB 974</u> Governance and Finance Cmt	Local Government: Omnibus	Support	Amends existing law regarding local government to include a county recorder storing survey records, fees for copies of military discharges, notary public commissioning, local financial reporting, city financial condition reporting, investment of local sinking fund moneys, public hearings under the Subdivision Map Act, local safety land use elements, the redevelopment and reuse of Fort Ord, sewage services and facilities fees, use of design-build, vehicle	05/02/2016 - To ASSEMBLY Committee on LOCAL GOVERNMENT.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			license fees, and income tax collection.	
<u>SB 995</u> Pavley (D)	Well Standards		Requires the Department of Water Resources to update well standards for certain types of wells based on existing knowledge. Establishes an advisory panel to identify critical gaps in existing knowledge about the best practices for well construction, alteration, maintenance, and destruction for these wells.	04/20/2016 - From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
<u>SB 1026</u> Nielsen (R)	Lake or Streambed Alteration Agreements		Relates to lake or streambed alteration agreement. Limits the diversions and obstructions governed by alteration agreement requirements to the diversions and obstructions that alter the bed, channel, or bank of a river, stream or lake. Exempts routine maintenance and repair of facilities for instream agricultural diversions.	04/12/2016 - In SENATE Committee on NATURAL RESOURCES AND WATER: Failed passage.
<u>SB 1043</u> Allen (D)	Biogas and Biomethane		Requires the State Air Resources Board to consider and adopt policies to significantly increase the sustainable production and use of biogas. Requires the Board, to ensure the production and use of renewable gas provides direct environmental benefits and identify barriers to the rapid development and use of biogas and potential sources of funding. Revises the definition of biogas and biomethane for pipeline integrity and safety purposes.	04/25/2016 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>SB 1173</u> Hertzberg (D)	Plumbing Fixtures: CalConserve Water Use Efficiency		Requires for commercial property the replacement of any noncompliant fixture or fitting in specified additions, alterations, and improvements to such property and the replacement of any noncompliant plumbing fixture or fitting in all such property in accordance with a specified schedule based on floor space. Provides related definitions. Authorizes county offices of education and school district boards to receive moneys from the CalConserve Water Use Efficiency Fund for efficiency projects.	03/30/2016 - In SENATE. Read second time and amended. Re-referred to Committee on TRANSPORTATION AND HOUSING.
<u>SB 1213</u> Wieckowski	Renewable Energy: Biosolids: Matching Grants		Requires the Energy Resources Conservation Commission to develop and implement the Biosolids to Clean Energy Grant	05/02/2016 - In SENATE Committee on APPROPRIATIONS: To Suspense File.

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
(D)			Program to provide matching funds to local wastewater agencies for biosolids to clean energy capital projects. Appropriates a specified amount of funds annually to the Commission for purposes of the program.	
<u>SB 1233</u> McGuire (D)	Joint Powers Authority: Water Bill Savings Act		Enacts the Water Bill Savings Act. Authorizes a joint powers authority to provide funding for a customer of a local agency or its publicly owned utility to acquire, install, or repair water efficiency improvement on the customer's property served by the local agency or its publicly owned utility. Requires the customer to repay the authority through an efficiency charge on the customer's water bill to be established and collected by the local agency or its publicly owned utility on behalf of the authority.	05/04/2016 - In SENATE. Read second time and amended. To third reading.
<u>SB 1260</u> Allen (D)	Stormwater: Municipalities: Online Resource Center		Requires the State Water Resources Control Board to establish an online resource center that addresses measures available for municipalities to comply with municipal stormwater permit requirements. Authorizes the inclusion of certain information.	04/20/2016 - From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
<u>SB 1262</u> Pavley (D)	Water Supply Planning		Requires a city or county that determines a project is subject to the California Environmental Quality Act to identify any water system whose service area includes the project site and any water system adjacent to the project site. Requires additional assessment information if the water is not drinking water quality. Provides that hauled water or groundwater from a probationary basin are not sources of water for the purposes of an assessment. Revises the definition of sufficient water supply.	04/27/2016 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>SB 1263</u> Wieckowski (D)	Public Water System: Permits		Relates to public water systems permits. Prohibit an application for a permit for a new public water system from being deemed complete unless the applicant has submitted a preliminary technical report to the state board. Allows the state board to impose technical, financial, or managerial requirements on the permit.	05/03/2016 - In SENATE. Read second time. To third reading.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
<u>SB 1317</u> Wolk (D)	Conditional Use Permit: Groundwater Extraction	Oppose Unless Amended	Requires a city or county overlying a basin designated as a high- or medium- priority basin to establish a process for the issuance of conditional use permits for the development of a groundwater extraction facility in order to prevent a new groundwater extraction facility from contributing to or creating an undesirable result. Requires a conditional use permit to develop such facility. Provides a city or county does not need a process for the issuance of such permit, under specified conditions.	04/26/2016 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>SB 1318</u> Wolk (D)	Local Government: Drinking Water and Wastewater Service		Extends a prohibition in existing law the prohibits a local agency formation commission from approving a specified annexation of land to a qualified special district. Prohibits such commission from approving a sphere of influence unless it results in improved service to a disadvantaged community. Relates to required processes regarding safe drinking water or adequate wastewater treatment in disadvantaged communities.	04/20/2016 - From SENATE Committee on ENVIRONMENTAL QUALITY: Do pass to Committee on APPROPRIATIONS.
<u>SB 1340</u> Wolk (D)	Water Conservation in Landscaping Act		Adds to the model water efficient landscape ordinance a permit requirement for the installation or replacement of specified automatic irrigation systems, or the expansion of the same specified automatic irrigation system to increase the irrigated area by a specified percentage or more, for a landscape project. Allows the governing body of a local agency to adopt an ordinance prescribing fees for filing an application for the permit, subject to the restrictions.	04/13/2016 - In SENATE. Read second time. To third reading.
<u>SB 1383</u> Lara (D)	Short-Lived Climate Pollutants		Requires the State Air Resources Board to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a specified reduction in methane, hydro-fluorocarbon gases, and anthropogenic black carbon below 2013 levels by 2030.	05/02/2016 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
<u>SB 1415</u> Bates (R)	Environmental Quality Act: Local Water Projects		Amends the Environmental Quality Act which requires a lead agency to call a scoping meeting for transportation-related projects	04/21/2016 - Re-referred to SENATE Committee on APPROPRIATIONS.

IRWD 2016 LEGISLATIVE MATRIX

Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
			and projects of statewide, regional, or areawide significance to require that lead agency to call a scoping meeting to receive public comments for local projects for stormwater or dry weather runoff capture and reuse, water recycling, or wastewater treatment to improve water quality.	
<u>SB 1425</u> Pavley (D)	Water Energy Nexus Registry		Requires the State Air Resources Board to develop a registry of greenhouse gas emission resulting from the water-energy nexus using the best available data including specified actions of a former registry as they relate to the water-energy nexus.	05/02/2016 - In SENATE Committee on APPROPRIATIONS: To Suspense File.
<u>SB 1440</u> Cannella (R)	Water Supply and Infrastructure Improvement		Requires a lead agency, in certifying the environmental impact report and in granting approvals for certain water storage projects funded, in whole or in part, by Proposition I, to comply with specified procedures. Authorizes the lead agency to concurrently prepare the record of proceedings for the project. Requires the Judicial Council to adopt a rule of court to establish procedures applicable to actions or proceedings seeking judicial review.	03/10/2016 - To SENATE Committees on ENVIRONMENTAL QUALITY and JUDICIARY.
<u>SB 1456</u> Galgiani (D)	Safe Drinking Water State Revolving Fund Law		Amends an existing law which establishes the Safe Drinking Water State Revolving Fund. Authorizes certain costs to be funded by loans or other repayable financing, grants, principal forgiveness, or a combination of grants and loans or other financial assistance, regardless of whether a public water system is a community public water system or a not-for-profit noncommunity public water system. Limits the principal forgiveness to capital improvements serving specified severely disadvantaged communities.	04/27/2016 - In SENATE. Read second time and amended. Re-referred to Committee on APPROPRIATIONS.
<u>HR 2689</u> Walters (R)	Eligible Water Resources Projects	Support	Clarifies the scope of eligible water resources projects under the Water Resources Development Act of 1986 and the Water Resources Reform and Development Act of 2014.	06/10/2015 - In HOUSE Committee on TRANSPORTATION & INFRASTRUCTURE: Referred to Subcommittee on WATER RESOURCES AND ENVIRONMENT.
<u>HR 4615</u>	Water Department Gross	Support	Amends the Internal Revenue Code of 1986 to exclude from gross	02/25/2016 - To HOUSE Committee on

IRWD 2016 LEGISLATIVE MATRIX
Updated 05/09/2016

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
Huffman (D)	Income Exclusion		income amounts received from a water department for water conservation efficiency measures and water runoff management improvements.	WAYS AND MEANS.
<u>S 2533</u> Feinstein (D)	Water Supplies for California and Drought Resiliency		Provides short-term water supplies to drought-stricken California, provides for long-term investments in drought resiliency throughout the Western United States.	02/10/2016 - To SENATE Committee on ENERGY AND NATURAL RESOURCES.

Exhibit “B”

2016 Legislative Update Report Links to Bill Texts

Bill Number/Version Date	Link to Bill Text
AB 1755 (Dodd), as amended April 5, 2016	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1755
AB 2304 (Levine), as introduced.	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB2304
SB 163 (Hertzberg), as amended September 3, 2015	http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB163
SB 970 (Leyva), as amended April 25, 2016	http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201520160SB970

EXHIBIT “C”
Water Foundation’s Proposal Related to Water and Sewer Rates

3/31/16

Proposed Amendments to Proposition 218 Omnibus Implementation Act

Amendment 1. Amend Section 53750 of the Government Code to read:

53750. For purposes of Article XIII C and Article XIII D of the California Constitution and this article:

(a) “Agency” means any local government as defined in subdivision (b) of Section 1 of Article XIII C of the California Constitution.

(b) “Assessment” means any levy or charge by an agency upon real property that is based upon the special benefit conferred upon the real property by a public improvement or service, that is imposed to pay the capital cost of the public improvement, the maintenance and operation expenses of the public improvement, or the cost of the service being provided. “Assessment” includes, but is not limited to, “special assessment,” “benefit assessment,” “maintenance assessment,” and “special assessment tax.”

(c) “District” means an area that is determined by an agency to contain all of the parcels that will receive a special benefit from a proposed public improvement or service.

(d) “Drainage system” means any system of public improvements that is intended to provide for erosion control, for landslide abatement, or for other types of water drainage.

(e) “Extended,” when applied to an existing tax or fee or charge, means a decision by an agency to extend the stated effective period for the tax or fee or charge, including, but not limited to, amendment or removal of a sunset provision or expiration date.

(f) “Flood control” means any system of public improvements that is intended to protect property from overflow by water.

(g) “Identified parcel” means a parcel of real property that an agency has identified as having a special benefit conferred upon it and upon which a proposed assessment is to be imposed, or a parcel of real property upon which a proposed property-related fee or charge is proposed to be imposed.

(h) (1) “Increased,” when applied to a tax, assessment, or property-related fee or charge, means a decision by an agency that does either of the following:

(A) Increases any applicable rate used to calculate the tax, assessment, fee, or charge.

(B) Revises the methodology by which the tax, assessment, fee, or charge is calculated, if that revision results in an increased amount being levied on any person or parcel.

(2) A tax, fee, or charge is not deemed to be "increased" by an agency action that does either or both of the following:

(A) Adjusts the amount of a tax, fee, or charge in accordance with a schedule of adjustments, including a clearly defined formula for inflation adjustment that was adopted by the agency prior to November 6, 1996.

(B) Implements or collects a previously approved tax, fee, or charge, so long as the rate is not increased beyond the level previously approved by the agency, and the methodology previously approved by the agency is not revised so as to result in an increase in the amount being levied on any person or parcel.

(3) A tax, assessment, fee, or charge is not deemed to be "increased" in the case in which the actual payments from a person or property are higher than would have resulted when the agency approved the tax, assessment, fee, or charge, if those higher payments are attributable to events other than an increased rate or revised methodology, such as a change in the density, intensity, or nature of the use of land.

(i) "Notice by mail" means any notice required by Article XIII C or XIII D of the California Constitution that is accomplished through a mailing, postage prepaid, deposited in the United States Postal Service and is deemed given when so deposited. Notice by mail may be included in any other mailing to the record owner that otherwise complies with Article XIII C or XIII D of the California Constitution and this article, including, but not limited to, the mailing of a bill for the collection of an assessment or a property-related fee or charge.

(j) "Proportional cost of the service attributable to the parcel," when applied to a fee or charge for water or sewer service, means the share of the total cost of providing water or sewer service to users within the service area reasonably attributable to the parcel. The total cost of providing water or sewer service includes all costs of acquiring water and water rights, costs of collecting, conveying, treating, and managing water and wastewater, costs of satisfying all regulatory requirements lawfully imposed on water and sewer service providers, and costs of providing communitywide water service in an equitable manner, including the cost of lifeline water rates.

~~(j)~~(k) "Record owner" means the owner of a parcel whose name and address appears on the last equalized secured property tax assessment roll, or in the case of any public entity, the State of California, or the United States, means the representative of that public entity at the address of that entity known to the agency.

(l) "Sewer service" means services provided by all real estate, fixtures, and personal property owned, controlled, operated, or managed in connection with or to facilitate sewage collection, treatment, or disposition for sanitary or drainage purposes, including any and all lateral and connecting sewers, interceptors, trunk and outfall lines and sanitary sewage treatment or disposal plants or works, and any and all drains, conduits, and outlets for surface or storm waters, and any and all other works, property or structures necessary

1 or convenient for the collection or disposal of sewage, industrial waste, or surface or storm
2 waters. "Sewer system" shall not include a sewer system which merely collects sewage on
3 the property of a single owner.

4 ~~(k)(m)~~ "Registered professional engineer" means an engineer registered pursuant to the
5 Professional Engineers Act (Chapter 7 (commencing with Section 6700) of Division 3 of the
6 Business and Professions Code).

7 ~~(l)(n)~~ "Vector control" means any system of public improvements or services that is
8 intended to provide for the surveillance, prevention, abatement, and control of vectors as
9 defined in subdivision (k) of Section 2002 of the Health and Safety Code and a pest as
10 defined in Section 5006 of the Food and Agricultural Code.

11 ~~(m)(o)~~ "Water service" means services provided by any system of public improvements
12 intended to provide for the production, storage, supply, treatment, or distribution of water
13 from any source.

14
15
16 **Amendment 2.** Amend Section 53755 of the Government Code, to read:

17 53755. (a) (1) The notice required by paragraph (1) of subdivision (a) of Section 6 of
18 Article XIII D of the California Constitution of a proposed increase of an existing fee or
19 charge for a property-related service being provided to a parcel may be given by including
20 it in the agency's regular billing statement for the fee or charge or by any other mailing by
21 the agency to the address to which the agency customarily mails the billing statement for
22 the fee or charge.

23 (2) The notice required by paragraph (1) of subdivision (a) of Section 6 of Article XIII D of
24 the California Constitution of a proposed new fee or charge may be given in the manner
25 authorized for notice of an increase of a fee or charge if the agency is currently providing an
26 existing property-related service to the address.

27 (3) If the agency desires to preserve any authority it may have to record or enforce a lien
28 on the parcel to which service is provided, the agency shall also mail notice to the
29 recordowner's address shown on the last equalized assessment roll if that address is
30 different than the billing or service address.

31 (b) One written protest per parcel, filed by an owner or tenant of the parcel, shall be
32 counted in calculating a majority protest to a proposed new or increased fee or charge
33 subject to the requirements of Section 6 of Article XIII D of the California Constitution.

34 (c) One vote per parcel, filed by an owner or tenant of the parcel, shall be counted in
35 determining whether a proposed fee or charge is approved by a majority vote pursuant to
36 subdivision (c) of Section 6 of Article XIII D of the California Constitution.

37 ~~(e)(d)~~ Any agency that bills, collects, and remits a fee or charge on behalf of another agency
38 may provide the notice required by Section 6 of Article XIII D of the California Constitution
39 on behalf of the other agency.

Amendment 3. Add Section 53756.5 to the Government Code, to read:

53756.5. (a) An agency with authority to levy a property-related fee or charge for any purpose may also levy a regulatory fee or charge for that purpose. If the agency determines to levy a regulatory fee or charge pursuant to this section, it shall levy a property related fee or charge for the identified purpose at a rate or pursuant to a schedule of rates sufficient to and with the primary purpose of funding provision of the service at a service level sufficient to support the reasonable use of the property, as determined by the agency. The levy of the property related fee or charge shall satisfy all of the requirements for a property related fee or charge set out in Article 13D, Section 6, of the California Constitution, including that the amount of the fee or charge shall be proportional to the cost of providing the service to the parcel.

(b) The agency may additionally levy a separate and distinct fee or charge for the service for which the property-related fee or charge is levied to achieve an identified regulatory purpose, primarily by creating price signals to encourage or discourage specific service consumption patterns or other related behavior. Allowable regulatory purposes include but are not limited to:

(1) To deter excess consumption of a service, such as domestic water service, as determined by the local agency.

(2) To encourage adoption of technologies supporting more efficient use of the service.

(3) To comply with goals of avoiding waste and unreasonable use of water pursuant to Article X, Section 2, of the California Constitution.

(c) A regulatory fee or charge may raise revenue as an incident to its regulatory purpose, and any revenue produced shall be used only to pay the costs of providing the service or for lowering the rate or rate structure of the associated property related fee. A regulatory fee or charge meeting the requirements of this subsection shall not be construed to exceed the reasonable costs to the local agency of providing water service.

(d) Consideration and adoption of a property-related and an associated regulatory fee or charge shall comply with the notice, hearing, protest, and election requirements, if any, required by Article 13D, Section 6, of the California Constitution. However, the requirements of subdivision (b)(3) of Section 6 shall not apply to any regulatory fee or charge levied pursuant to this section.

(e) Nothing in this section shall be construed to require that any local agency adopt a regulatory fee or take other measures to create incentives to alter water use practices.

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[DISCUSSION DRAFT]114TH CONGRESS
2D SESSION**H. R. _____**

To establish the Santa Ana Mountains to Sea National Monument consisting of nationally significant natural and cultural resources of the historic Santa Ana Mountains, Cleveland National Forest, and other lands in Orange County, California, to provide for conservation, collaborative stewardship, and public use and enjoyment of these resources, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. ROYCE introduced the following bill; which was referred to the Committee
on _____

A BILL

To establish the Santa Ana Mountains to Sea National Monument consisting of nationally significant natural and cultural resources of the historic Santa Ana Mountains, Cleveland National Forest, and other lands in Orange County, California, to provide for conservation, collaborative stewardship, and public use and enjoyment of these resources, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

2 (a) **SHORT TITLE.**—This Act may be cited as the
3 “Santa Ana Mountains to Sea National Monument Estab-
4 lishment Act”.

5 (b) **TABLE OF CONTENTS.**—The table of contents of
6 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Establishment of Santa Ana Mountains to Sea National Monument.
- Sec. 4. Management of the Monument.
- Sec. 5. Monument plan.
- Sec. 6. Acquisition of land.
- Sec. 7. Advisory Committee.
- Sec. 8. Clarification of Effect of Act.
- Sec. 9. Definitions.

7 **SEC. 2. FINDINGS.**

8 The Congress makes the following findings:

9 (1) In the heart of densely populated southern
10 California lies a magnificent over 100,000 acre net-
11 work of permanently preserved land and open space,
12 38,000 acres of which were designated in 2006 as a
13 National Natural Landmark by the Department of
14 the Interior and as California’s first Natural Land-
15 mark in 2008 for the land’s exceptional biological
16 and geological attributes.

17 (2) The Cleveland National Forest, established
18 in 1908 by President Theodore Roosevelt and named
19 for President Grover Cleveland, is the southernmost
20 national forest in California. The west-facing slope
21 of the northern and central Santa Ana Mountains

1 are dominant features within this landscape, includ-
2 ing elevations ranging from approximately 1,200 feet
3 at the mouth of Silverado Canyon to over 5,600 feet
4 at Santiago Peak.

5 (3) The National Forest is an important habi-
6 tat link to surrounding regional wildlife preserves.
7 Chaparral and coastal sage scrub habitats are char-
8 acteristic of the local landscape. The area contains
9 a number of oak woodlands and grassy meadows.
10 Certain creeks have been designated as critical habi-
11 tat for one or more threatened or endangered spe-
12 cies, including southern steelhead (*Oncorhynchus*
13 *mykiss*), speckled dace (*Rhinichthys osculus*), the
14 southwestern pond turtle (*Clemmys marmorata*
15 *pallida*), and southwestern arroyo toad (*Bufo*
16 *californicus*). Other endangered, threatened and sen-
17 sitive species in this habitat include California
18 gnatcatcher (*Polioptila californica*), California spot-
19 ted owl (*Strix occidentalis*), and least Bell's vireo
20 (*Vireo bellii pusillus*). Chiquito Basin, a Special In-
21 terest Area in the upland portion of the Santa Ana
22 Mountains, has a number of endemic and rare
23 plants, including San Miguel savory (*Satureja*
24 *chandleri*) and Fish's milkwort (*Polygala cornuta*
25 *var. fishiae*).

1 (4) Historic and prehistoric sites can be found
2 in several of the canyons. Plant materials tradition-
3 ally used by Native Americans thrive in several loca-
4 tions.

5 (5) The Cleveland National Forest is the
6 wildland backdrop for millions of Orange County
7 residents, whose communities are minutes away
8 from this part of the National Forest System. The
9 Santa Ana Mountains are an important day-use area
10 for Orange County, offering open-space links to sur-
11 rounding communities, and providing opportunities
12 for challenge, solitude, and contemplation close to
13 urban populations, as well as exceptional trail-based
14 and riparian recreation.

15 (6) Since 1866, when the Rancho San Joaquin,
16 Rancho Lomas de Santiago, and Rancho Santiago
17 Santa Ana were combined by James Irvine and his
18 partners to establish the Irvine Ranch, its history
19 has reflected the rich tradition of California agri-
20 culture and the bounty made possible by industrious
21 settlers, fertile land, and abundant sunshine.

22 (7) Owing to the continuing stewardship of The
23 Irvine Company since its founding in 1864, along
24 with the extraordinary efforts of a wide variety of
25 government, private, nonprofit, and other partners,

1 more than half of the original Irvine Ranch has been
2 permanently protected and shall remain undeveloped
3 in perpetuity.

4 (8) The historic Irvine Ranch, along with por-
5 tions of the Trabuco Ranger District of the Cleve-
6 land National Forest and wilderness parks and pre-
7 serves owned by the County of Orange and other
8 local governments, comprise a 156-square mile
9 swath of preserved land and natural open space ex-
10 tending from the crest of the coastal mountains to
11 the Pacific Ocean.

12 (9) The open space of the historic Irvine Ranch
13 and adjacent areas of the California Floristic Prov-
14 ince are home to a wide array of threatened and en-
15 dangered plant and animal species found nowhere
16 else, and many of these lands were the setting of the
17 first Natural Community Conservation Planning
18 Agreement in 1996, which protected the California
19 gnatcatcher and a large list of protected species
20 while allowing responsible, well-considered develop-
21 ment.

22 (10) Designation of open space within the
23 boundary of the historic Irvine Ranch and a sur-
24 rounding landscape of other connected protected
25 open space as a National Monument would perma-

1 nently protect the unique biological, cultural, geo-
2 logical, and historic values of the area for present
3 and future generations, while enhancing opportuni-
4 ties for collaborative stewardship, scientific research,
5 public education, and continued recreation on,
6 among other things, the 22-mile Mountains to Sea
7 National Recreational Trail.

8 (11) Reaches of the Mountains to Sea National
9 Recreational Trail within the boundary of the Monu-
10 ment will be managed consistent with the commit-
11 ments of that designation and the Monument Plan.

12 (12) There is a great need nationwide to estab-
13 lish, facilitate, and support new institutional models
14 of collaborative management and stewardship of na-
15 tionally significant landscapes that do not rely en-
16 tirely on Federal land ownership or funding.

17 **SEC. 3. ESTABLISHMENT OF SANTA ANA MOUNTAINS TO**
18 **SEA NATIONAL MONUMENT.**

19 (a) ESTABLISHMENT.—The approximately 100,000
20 acres of land owned or controlled by the Federal, State,
21 or local government depicted on the Map as
22 _____ are hereby established as the “Santa
23 Ana Mountains to Sea National Monument”. The Sec-
24 retary may make minor adjustments to the boundary of
25 the Monument.

1 (b) PURPOSES.—The purposes of the Monument are
2 to—

3 (1) preserve and protect the nationally signifi-
4 cant biological, cultural, recreational, geological, edu-
5 cational, historic, scenic, and scientific values of fea-
6 tures and lands within its boundaries;

7 (2) secure the opportunity for present and fu-
8 ture generations to experience and enjoy the mag-
9 nificent flora and fauna, wildlife, land forms, and
10 natural and cultural resources of the Monument;

11 (3) provide access and opportunities for envi-
12 ronmental education, exploration, and scientific re-
13 search;

14 (4) foster and support collaborative stewardship
15 across ownership boundaries toward a common vi-
16 sion of the highest standards of conservation and
17 recreation;

18 (5) establish, facilitate, and support new insti-
19 tutional models of collaborative management and
20 stewardship of nationally significant landscapes that
21 do not rely entirely on Federal land ownership or
22 funding; and

23 (6) inspire public support for land conservation
24 and stewardship in one of the most densely popu-
25 lated regions of the United States.

1 (c) MAP; LEGAL DESCRIPTIONS.—

2 (1) LEGAL DESCRIPTION.—As soon as prac-
3 ticable after the date of the enactment of this Act,
4 the Secretary shall submit legal descriptions of the
5 Monument, as generally depicted on the Map, to—

6 (A) the Committee on Natural Resources
7 of the House of Representatives; and

8 (B) the Committee on Energy and Natural
9 Resources of the Senate.

10 (2) CORRECTIONS.—The Map and legal descrip-
11 tions of the Monument shall have the same force
12 and effect as if included in this Act, except that the
13 Secretary may correct clerical and typographical er-
14 rors in the Map and legal descriptions.

15 (3) AVAILABILITY OF MAP.—The Map, updated
16 as necessary to reflect any boundary changes to the
17 Monument, shall be on file and available for public
18 inspection in the appropriate offices of the Forest
19 Service and the Office of the County Clerk of Or-
20 ange County, California.

21 **SEC. 4. MANAGEMENT OF THE MONUMENT.**

22 (a) INTERIM MANAGEMENT.—Pending completion of
23 the Monument Plan, the Federal and other non-private
24 land owners shall manage lands within the Monument in

1 accordance with then-current authority, including the
2 Cleveland National Forest Management Plan.

3 (b) IN GENERAL.—The Monument shall be adminis-
4 tered in accordance with the Monument Plan and other
5 applicable laws.

6 (c) COLLABORATIVE MANAGEMENT.—The Secretary
7 shall collaboratively manage, along with non-Federal pub-
8 lic entities, the non-private land within the exterior bound-
9 aries of the Monument to protect the resources of the
10 Monument, subject to valid existing rights.

11 (d) COOPERATIVE AGREEMENTS; GENERAL AUTHOR-
12 ITY.—To better implement the Monument Plan and com-
13 ply with existing authorities applicable to the Monument,
14 the Secretary may enter into cooperative agreements and
15 otherwise foster interagency cooperation, including the
16 transfer of funds from the Secretary to participating enti-
17 ties and administer the Monument.

18 **SEC. 5. MONUMENT PLAN.**

19 (a) ADMINISTRATOR.—The Secretary, in consultation
20 with the Advisory Committee, shall appoint a Forest Serv-
21 ice employee as Administrator. The Administrator shall
22 assist with the development and implementation of the
23 Monument Plan and shall serve in this capacity at the
24 pleasure of the Secretary.

25 (b) DEVELOPMENT AND SUBMISSION.—

1 (1) DEVELOPMENT OF PLAN.—The Secretary,
2 in consultation with the Administrator, the Advisory
3 Committee, and interested private property owners
4 and holders of valid existing rights within the Monu-
5 ment, shall develop a Monument Plan for the con-
6 servation, protection, and administration of the
7 Monument, in accordance with the National Envi-
8 ronmental Policy Act of 1969 (42 U.S.C. 4321 et
9 seq.) and other applicable laws.

10 (2) SUBMISSION OF PLAN.—Not later than 3
11 full fiscal years after the date of the enactment of
12 this Act, the Secretary shall—

13 (A) submit the completed Monument Plan
14 to—

15 (i) the Committee on Natural Re-
16 sources of the House of Representatives;
17 and

18 (ii) the Committee on Energy and
19 Natural Resources of the Senate; and

20 (B) make the completed Monument Plan
21 available to the public.

22 (c) REQUIREMENTS FOR PLAN.—The Secretary shall
23 ensure that the provisions of the Monument Plan comply
24 with the following requirements:

1 (1) GENERAL CRITERIA FOR USES.—Only allow
2 uses of the Monument that—

3 (A) further the purposes of the Monument;

4 (B) are consistent with legal protection in-
5 struments on the land, including conservation
6 easements, grant deeds, the National Forest
7 Management Act of 1976, or the Central Coast-
8 al Orange County Natural Community Con-
9 servation Plan/Habitat Conservation Plan;

10 (C) are included in cooperative agreements
11 entered into with the owners of land within the
12 Monument which, in the judgment of the Advi-
13 sory Committee, are consistent with the Monu-
14 ment Plan; and

15 (D) are required by this Act to be allowed.

16 (2) INTERACTION WITH PLANS AND RIGHTS.—

17 Incorporate or be consistent with existing conserva-
18 tion easements, grant deeds, approved resource
19 plans, the approved Cleveland National Forest Man-
20 agement Plan, and the Orange County Central
21 Coastal Natural Community Conservation Plan/
22 Habitat Conservation Plan (and activities antici-
23 pated by that plan), and permits and its Planned
24 Activities. To the extent possible while still com-
25 plying or being consistent with such easements,

1 deeds, plans, and permits, and its Planned Activi-
2 ties, the Monument Plan shall also include provi-
3 sions to—

4 (A) address regional fire management
5 planning and coordination between the Chief of
6 the Forest Service, the State, and other fire
7 management authorities and organizations in
8 the County;

9 (B) assess the need for and eventual estab-
10 lishment of a visitor center or other visitor fa-
11 cilities such as trails to serve the Monument, in-
12 cluding identifying opportunities for education
13 and engagement of the public in stewardship of
14 the land and in study and enjoyment of the
15 unique natural, cultural and historical elements
16 of the Monument;

17 (C) provide for continued collaborative
18 stewardship of the Monument among land-
19 owners and managers including the State,
20 County, local government, and private and not-
21 for-profit organizations;

22 (D) provide for continued active involve-
23 ment of the non-private land owners in the
24 Monument, respecting their authority as to land
25 use and related matters within their purview;

(E) reflect the necessity of incorporating applicable provisions of existing approved management plans, resource plans, conservation easements, or other cooperative agreements pertaining to land in the Monument, and allow additional lands in the Monument boundary to be covered by the Orange County Central Coastal Natural Community Conservation Plan and permit; and

(F) provide for the operation, maintenance, upgrade, repair, relocation, replacement, and construction of, access for utility-company vehicles, infrastructure facilities, and rights-of-way in the Monument.

(3) OVERFLIGHTS.—

(A) PROHIBITED.—Except as provided by subparagraph (B), prohibit nonemergency overflights below 250 meters and nonemergency and commercial aircraft landings in the Monument.

(B) EXCEPTIONS.—No matter whether an aircraft can be seen or heard in the Monument, allow overflights or landings of such aircraft in the Monument as follows:

(i) For management purposes.

1 (ii) Overflights of military and com-
2 mercial.

3 (iii) For the operation, maintenance,
4 upgrade, repair, relocation, replacement,
5 and construction of, access for utility-com-
6 pany vehicles, infrastructure facilities, and
7 rights-of-way in the Monument, but only to
8 the extent such overflights and landings
9 were allowed before the date of the enact-
10 ment of this Act.

11 (iv) As otherwise approved by the Sec-
12 retary.

13 (4) MOTORIZED VEHICLES.—

14 (A) IN GENERAL.—Except as provided by
15 subparagraph (B), allow use of motorized vehi-
16 cles in the Monument only on roads and trails
17 specifically designated for use by motorized ve-
18 hicles.

19 (B) EXCEPTIONS.—Allow use of motorized
20 vehicles in the Monument as necessary or ap-
21 propriate—

22 (i) for administrative purposes;

23 (ii) for the operation, maintenance,
24 upgrade, repair, relocation, replacement,
25 and construction of, access for utility-com-

1 pany vehicles, infrastructure facilities, and
2 rights-of-way in the Monument, but only to
3 the extent the use of motorized vehicles
4 were allowed for those purposes before the
5 date of the enactment of this Act; and

6 (iii) to respond to an emergency.

7 (5) ACCESS TO PRIVATE LAND.—Ensure that
8 reasonable access is given to each owner of private
9 land in the exterior boundary of the Monument in
10 accordance with applicable Federal law to ensure the
11 reasonable use and enjoyment of the land by the
12 owner.

13 **SEC. 6. ACQUISITION OF LAND.**

14 (a) IN GENERAL.—The Secretary is authorized to ac-
15 quire for inclusion in the Monument any non-Federal land
16 or interests in land within the boundary of the Monument
17 only by—

18 (1) donation;

19 (2) exchange with a willing party; or

20 (3) purchase from a willing seller for fair mar-
21 ket value.

22 (b) INCORPORATION OF AFTER-ACQUIRED LAND AND
23 INTERESTS IN LAND.—Land or interest in land within the
24 exterior boundaries of the Monument that is acquired by
25 the United States or any non-Federal public entity for the

1 Monument shall be added to and administered as part of
2 the Monument.

3 **SEC. 7. ADVISORY COMMITTEE.**

4 (a) **ESTABLISHMENT.**—The Secretary shall establish
5 a permanent advisory committee for the Monument.

6 (b) **DUTIES.**—The duties of the Advisory Committee
7 shall be to—

8 (1) advise the Secretary and Administrator with
9 respect to the preparation and implementation of the
10 Monument Plan;

11 (2) encourage and facilitate ongoing, collabora-
12 tive, multiowner stewardship of the Monument;
13 and

14 (3) otherwise represent the public interest and
15 non-Federal owners and managers of non-private
16 land in the Monument.

17 (c) **MEMBERSHIP.**—To the extent practicable, the
18 Advisory Committee shall include the following members,
19 to be appointed by the Secretary:

20 (1) A representative with expertise in applied
21 natural science and research nominated by the Uni-
22 versity of California at Irvine.

23 (2) A representative of the California Natural
24 Resources Agency, who shall represent State agen-
25 cies including the California Department of Fish and

1 Wildlife and the California Department of Parks and
2 Recreation.

3 (3) A representative of the County.

4 (4) A representative of each of the Cities (other
5 than the County).

6 (5) A representative of the Irvine Ranch Water
7 District.

8 (6) A representative of the nonprofit Irvine
9 Ranch Conservancy representing managers of non-
10 Federal non-private lands in the Monument.

11 (7) A representative of an investor-owned elec-
12 tric utility primarily serving and owning infrastruc-
13 ture facilities within the areas identified on the Map.

14 (8) A representative of the Orange County Fire
15 Authority or other fire service agency in the vicinity
16 of the Monument.

17 (9) A representative of an organization dedi-
18 cated to compatible passive recreation and environ-
19 mental conservation.

20 (10) A representative of the non-profit coordi-
21 nating organization for the Orange County Central
22 Coastal NCCP.

23 (d) TERMS.—

24 (1) IN GENERAL.—In appointing members
25 under subsection (c), the Secretary shall appoint one

1 primary member and one alternate member who
2 meet the qualifications described in each of the para-
3 graphs in that subsection.

4 (2) VACANCY.—

5 (A) PRIMARY MEMBER.—A vacancy on the
6 Advisory Committee with respect to a primary
7 member shall be filled by the applicable alter-
8 nate member, who shall then be the primary
9 member.

10 (B) ALTERNATE MEMBER.—The Secretary
11 shall appoint new alternate members in the
12 event of a vacancy with respect to an alternate
13 member of the Advisory Committee.

14 (3) TERM OF MEMBERS.—

15 (A) IN GENERAL.—The term of a member
16 of the Advisory Committee shall be three years.
17 At the pleasure of the Secretary, members may
18 serve up to 10 terms for a total of 30 years.

19 (B) SUCCESSORS.—Notwithstanding the
20 expiration of a three-year term of a member of
21 the Advisory Committee, a member may con-
22 tinue to serve on the Advisory Committee
23 until—

24 (i) the member is reappointed by the
25 Secretary; or

1 (ii) a successor is appointed.

2 (4) TERM OF ALTERNATE MEMBER.—An alter-
3 nate member appointed to fill a vacancy of the Advi-
4 sory Committee—

5 (A) shall serve for the remainder of the
6 term for which the predecessor was appointed;
7 and

8 (B) may be nominated for a subsequent
9 term.

10 (e) QUORUM.—A quorum of the Advisory Committee
11 shall consist of a majority of the primary members.

12 (f) CHAIRPERSON AND PROCEDURES.—The Advisory
13 Committee shall elect a chairperson and establish such
14 rules and procedures as it deems necessary or desirable.

15 (g) SERVICE WITHOUT COMPENSATION.—Members
16 of the Advisory Committee shall serve without pay for
17 their service as members.

18 (h) TERMINATION.—Members of the Advisory Com-
19 mittee shall serve at the pleasure of the Secretary.

20 (i) FEDERAL ADVISORY COMMITTEE ACT.—The Fed-
21 eral Advisory Committee Act (5 U.S.C. App.) shall not
22 apply to the Advisory Committee established by this Act.

23 **SEC. 8. CLARIFICATION OF EFFECT OF ACT.**

24 (a) EFFECT ON ADJACENT LAND.—

1 (1) IN GENERAL.—Nothing in this Act creates
2 or is intended to create any protective perimeter or
3 buffer zone around the Monument.

4 (2) ACTIVITIES OUTSIDE MONUMENT.—The
5 fact that an activity or use on land outside the
6 Monument can be seen or heard in the Monument
7 shall not preclude the activity or use outside the
8 boundary of the Monument.

9 (3) NO ADDITIONAL REGULATION.—Nothing in
10 this Act authorizes additional regulation of activities
11 on land outside the boundary of the Monument.

12 (b) AIR AND WATER QUALITY.—Nothing in this Act
13 affects the standards governing air or water quality out-
14 side the boundary of the Monument, or is intended to do
15 so.

16 (c) STATE AND LOCAL JURISDICTION.—Nothing in
17 this Act alters, modifies, or diminishes any right, responsi-
18 bility, power, authority, jurisdiction, or entitlement of the
19 State, any political subdivision thereof, or any local agency
20 under existing Federal, State, and local law (including
21 regulations).

22 (d) WATER RIGHTS.—Nothing in this Act shall con-
23 stitute or be construed to constitute either an express or
24 implied reservation by the United States of any water or
25 water rights or affect any water rights existing on the date

1 of the enactment of this Act, including any water rights
2 held by the United States.

3 (e) INFRASTRUCTURE FACILITIES AND RIGHTS-OF-
4 WAY.—Nothing in this Act shall—

5 (1) affect the existence, use, operation, mainte-
6 nance (including vegetation control), repair, con-
7 struction, reconfiguration, expansion, inspection, re-
8 newal, reconstruction, alteration, addition, reloca-
9 tion, improvement, funding, removal, or replacement
10 of any infrastructure facility or appurtenant right-
11 of-way in or adjacent to the Monument;

12 (2) affect necessary or efficient access to any
13 infrastructure facility or right-of-way in or adjacent
14 to the Monument;

15 (3) preclude the establishment of new infra-
16 structure facilities or rights-of-way (including
17 instream sites, routes, and areas) in the Monument
18 if such facilities are otherwise lawful and necessary
19 for public health and safety, transportation, elec-
20 tricity supply, telecommunications, water service,
21 wastewater service, or other utility services;

22 (4) expand, restrict, or otherwise affect the au-
23 thority, access, or use of any entity whose responsi-
24 bility is to maintain utilities such as water, waste-
25 water, electrical, or communications infrastructure.

1 (f) FISH AND WILDLIFE.—Nothing in this Act shall
2 be construed as—

3 (1) affecting the authority, jurisdiction, or re-
4 sponsibility of the State to manage, control, or regu-
5 late fish and resident wildlife under State law or
6 regulations, including the regulation of hunting, fish-
7 ing, trapping, and recreational shooting on land
8 managed by the Forest Service; or

9 (2) limiting access for hunting, fishing, trap-
10 ping, or recreational shooting, though such activities
11 may be prohibited by the landowners in the Monu-
12 ment in their respective jurisdictions.

13 (g) GRAZING.—Nothing in this Act modifies any valid
14 grazing allotment in effect on the date of the enactment
15 of this Act for lands in the Monument.

16 (h) PAYMENT OF EXPENSES.—

17 (1) IN GENERAL.—Except as otherwise pro-
18 vided in this subsection, nothing in this Act shall be
19 construed to all for the expenditure of Federal funds
20 to pay the costs of managing or maintaining non-
21 Federal.

22 (2) CROSS-BOUNDARY FUNCTIONS.—Federal
23 funds may be expended to support management
24 functions that are common to adjacent Federal and

1 non-private lands, such as invasive species control
2 and fire management.

3 (3) CAPITAL IMPROVEMENTS.—The Secretary,
4 in consultation with the Advisory Committee, may
5 expend Federal funds for capital improvements in
6 the Monument, no matter where situated, such as a
7 visitor center, parking access, or other types of fa-
8 cilities. These capital improvements may be funded,
9 built, staffed, or maintained, in whole or in part, by
10 volunteers and non-private landowners, as appro-
11 priate.

12 (4) COOPERATIVE MANAGEMENT.—The Sec-
13 retary may provide to the State, County, or local
14 government goods and services to be used in the co-
15 operative management of the land in the Monument.
16 Use of donated funds, in-kind contributions, and
17 services shall conform to the purposes for which the
18 Monument is established.

19 (i) PRIVATE LAND EXCLUSION.—Privately owned
20 land within the boundaries depicted on the Map shall be
21 excluded from the Monument.

22 (j) EXISTING AUTHORITY.—Nothing in this Act di-
23 minishes existing authority applicable to Federal land
24 within the Monument.

1 (k) EFFECT ON OTHER LAND-USE PLANS.—Nothing
2 in this Act shall be deemed to modify a duly approved
3 land-use plan of the Forest Service, including the Cleve-
4 land National Forest Land Management Plan.

5 **SEC. 9. DEFINITIONS.**

6 In this Act:

7 (1) ADMINISTRATOR.—The term “Adminis-
8 trator” means the Forest Service employee des-
9 ignated under this Act as responsible for assisting
10 with the development and implementation of the
11 Monument Plan in consultation with the Advisory
12 Committee.

13 (2) ADVISORY COMMITTEE.—The term “Advi-
14 sory Committee” means the committee established
15 under this Act.

16 (3) COUNTY.—The term “County” means Or-
17 ange County, California.

18 (4) LOCAL GOVERNMENT.—The term “local
19 government” means:

20 (A) The City of Irvine, California.

21 (B) The City of Newport Beach, Cali-
22 fornia.

23 (C) The City of Laguna Beach, California.

24 (D) The County.

1 (E) Subordinate agencies of the entities
2 listed in subparagraphs (A) through (D).

3 (5) MAP.—The term “Map” means the map en-
4 titled “_____” and dated _____.

5 (6) MONUMENT.—The term “Monument”
6 means the Santa Ana Mountains to Sea National
7 Monument established by this Act.

8 (7) MONUMENT PLAN.—The term “Monument
9 Plan” means the plan for the Monument developed
10 under this Act.

11 (8) PLANNED ACTIVITIES.—The term “Planned
12 Activities” means any and all permitted activities de-
13 scribed in the Central/Coastal Natural Community
14 Conservation Plan/Habitat Conservation Plan.

15 (9) SECRETARY.—The term “Secretary” means
16 the Secretary of Agriculture.

17 (10) STATE.—The term “State” means the
18 State of California.

19 (11) INFRASTRUCTURE FACILITY.—The term
20 “infrastructure facility” means all public, quasi-pub-
21 lic, and utility service facilities and structures, in-
22 cluding—

23 (A) roads, landfills, and flood control facili-
24 ties;

1 (B) any and all existing and future electric
2 generation facilities owned by a regulated elec-
3 tric utility, including electric storage facilities,
4 overhead and underground electrical supply
5 transport systems and communication systems
6 consisting of electric substations, electric and
7 telecommunication lines, poles and towers made
8 of various materials, “H” frame structures, guy
9 wires and anchors, crossarms, wires, under-
10 ground conduits, cables, vaults, manholes,
11 handholes, above-ground enclosures, markers
12 and concrete pads and other fixtures, appli-
13 ances and communication circuits, and other
14 fixtures, appliances and appurtenances con-
15 nected therewith necessary or efficient for the
16 construction, operation, regulation, control,
17 grounding, and maintenance of electric genera-
18 tion, storage, lines and communication circuits,
19 for the purpose of transmitting intelligence and
20 generating, storing, distributing, regulating,
21 and controlling electric energy to be used for
22 light, heat, power, communication, and other
23 purposes; and

24 (C) any and all existing and future water
25 and wastewater facilities and infrastructure, in-

1 cluding pipelines, storage facilities, storage res-
2 ervoirs, pump stations, manholes, vaults, treat-
3 ment facilities, system valves, telemetry equip-
4 ment, turn outs, and all other appurtenances
5 connected therewith necessary or convenient for
6 the construction, operation, regulation, control,
7 distribution, and maintenance of a water and
8 wastewater system and its associated services.