AGENDA IRVINE RANCH WATER DISTRICT WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE MEETING THURSDAY, FEBRUARY 6, 2025

This meeting will be held in-person at the District's headquarters located at 15600 Sand Canyon Avenue, Irvine, California. The meeting will also be broadcasted via Webex for those wanting to observe the meeting virtually.

To observe this meeting virtually, please join online using the link and information below:

Via Webex: https://irwd.webex.com/irwd/j.php?MTID=maba6b8ba7a24000ecf9dc4e976015c41

Meeting Number (Access Code): 2485 941 0547

Meeting Password: nMcgdP3Ed23

As courtesy to the other participants, please mute your phone when you are not speaking.

PLEASE NOTE: Participants joining the meeting will be placed into the Webex lobby when the Committee enters closed session. Participants who remain in the "lobby" will automatically be returned to the open session of the Committee once the closed session has concluded. Participants who join the meeting while the Committee is in closed session will receive a notice that the meeting has been locked. They will be able to join the meeting once the closed session has concluded.

CALL TO ORDER 1:30 p.m.

<u>ATTENDANCE</u>	Acting Committee Chair: Dan Feron Alternate Member: John Withers	1S
<u>ALSO PRESENT</u>	Paul CookNeveen AdlyWendy ChambersChristine ComptonJohn FabrisLouis Bronstein	Paul WeghorstKevin BurtonFiona SanchezJim ColstonAmy McNulty

PUBLIC COMMENT NOTICE

If you wish to address the Committee on any item, please submit a request to speak via the "chat" feature available when joining the meeting virtually. Remarks are limited to three minutes per speaker on each subject. Public comments are limited to three minutes per speaker on each subject. You may also submit a public comment in advance of the meeting by emailing <u>comments@irwd.com</u> before 8:00 a.m. on Thursday, February 6, 2025.

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; and determine which items may be approved without discussion.

PRESENTATIONS

4. <u>YARDTOPIA PREVIEW – COMPTON</u>

Recommendation: Receive and file.

INFORMATION

5. <u>FISCAL YEAR 2023-24 ANNUAL WATER LOSS AUDIT RESULTS –</u> <u>MROCZEK / MCNULTY / SANCHEZ / WEGHORST</u>

Recommendation: Receive and file.

6. <u>MAKING CONSERVATION A CALIFORNIA WAY OF LIFE</u> <u>IMPLEMENTATION PLAN AND FISCAL YEAR 2024 RESULTS –</u> <u>MCNULTY / SANCHEZ / WEGHORST</u>

Recommendation: Receive and file.

ACTION

7. <u>LEGISLATIVE AND REGULATORY UPDATE – COMPTON</u>

Recommendation: That the Board adopt "support" positions on AB 259 (Rubio) and SB 72 (Caballero), and an "oppose" position on AB 269 (Bennett).

8. <u>WATER SUPPLY ASSESSMENT AND WATER SUPPLY VERIFICATION</u> FOR THE VISTA POINT PROJECT –AKIYOSHI / SANCHEZ / WEGHORST

Recommendation: That the Board approve the Water Supply Assessment and contingent upon approval of the Water Supply Assessment, approve the Water Supply Verification for the Vista Point Project.

ACTION (continued)

9. <u>WATER EFFICIENCY TACTICAL INCENTIVE BUDGET INCREASE –</u> <u>SEESANGRIT / MCNULTY / SANCHEZ / WEGHORST</u>

Recommendation: That the Board authorize an increase to the FY 2024-25 Operating Budget for tactical incentives in the amount of \$496,000 from over-allocation revenues and authorize the General Manager to allocate the funding to the FY 2024-25 rebate programs administered through the Water Conservation Participation Agreement Between MWDOC and IRWD; and to execute addenda to the agreement as may be necessary to allocate funds to specific programs and modify device incentive levels based on customer participation rates and regional program funding levels.

OTHER BUSINESS

- 10. Directors' Comments
- 11. 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 electronically via the Webex meeting noted. Upon request, the District will provide for written agenda materials in appropriate alternative formats, and reasonable disability-related modification or accommodation to enable individuals with disabilities to participate in and provide comments at public meetings. Please submit a request, including your name, phone number and/or email address, and a description of the modification, accommodation, or alternative format requested at least two days before the meeting. Requests should be emailed to comments@irwd.com. Requests made by mail must be received at least two days before the meeting. Requests will be granted whenever possible and resolved in favor of accessibility.

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February 6, 2025 Prepared by: M. Mroczek / A. McNulty Submitted by: F. Sanchez / P. Weghorst Approved by: Paul A. Cook

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

FISCAL YEAR 2023-24 ANNUAL WATER LOSS AUDIT RESULTS

SUMMARY:

Each year, urban retail water suppliers are required to submit a validated Water Loss Audit Report to the California Department of Water Resources (DWR). The State Water Resources Control Board will use information from the reports as baseline data to determine each supplier's water loss performance. At the meeting, staff will present an overview of the State's water loss performance standards and IRWD's Fiscal Year (FY) 2023-24 validated Water Loss Audit results.

BACKGROUND:

In 2023, IRWD prepared its first Water Loss Control Plan to describe the District's activities related to water loss reporting, loss control programs, and to capture the baseline water balance data that was used by the State Board to determine IRWD's water loss standard. The suite of water loss control programs described in the plan minimize leakage from IRWD's distribution system, limit water theft, ensure accuracy in customer billing, and demonstrate IRWD's commitment to responsible resource management. The positive impact of the District's water loss control programs and access to high quality data are evident in IRWD's Water Loss Audit results for FY 2023-24. IRWD audit results consistently report low levels of water loss.

Water Loss Performance Standards:

Enacted in 2015, California Senate Bill 555 requires each urban retail water supplier to submit a third-party validated Water Loss Audit Report to DWR and the State Board for use in adopting water loss performance standards. In October 2022, the State Board adopted new water loss performance standards. Data from the 2017, 2018, 2019, and 2020 Water Loss Audit Reports submitted to DWR serve as baseline data to establish each supplier's water loss performance standard. Supplier compliance will be measured on a three-year rolling average basis. Compliance with IRWD's water loss standard of 20 gallons per connection per day (gpcd) begins in 2028 and will be based on the average of the FY 2025 through FY 2027 audit results.

Water Loss Audit Results:

Staff recently prepared and submitted IRWD's validated FY 2023-24 Water Loss Audit Report to DWR. This report was prepared by a multi-disciplinary team of IRWD staff utilizing the audit procedures outlined in the American Water Works Association M36 Water Audits and Loss Control Programs manual and associated software and was validated by a third-party certified water loss audit data validator.

Water Resources Policy and Communications Committee: Fiscal Year 2023-24 Annual Water Loss Audit Results February 6, 2025 Page 2

The M36 procedures call for estimating total water losses that are comprised of two categories: Real Losses and Apparent Losses. Real Losses include leaks, line breaks, and overflows that occur anywhere in the distribution system upstream of customer meters. Total Real Losses have increased to 15.1 gpcd compared with 10.7 gpcd in the previous year but are still well below IRWD's water loss standard of 20.0 gpcd. Apparent Losses include unauthorized use of water, metering inaccuracies, and systematic data handling errors. Total Apparent Losses have decreased slightly to 5.0 gpcd compared with 5.2 gpcd in the previous year and are below IRWD's apparent loss standard of 6.4 gpcd.

An overview of water loss performance indicators is provided as Exhibit "A". IRWD's Water Loss Audit Report summary for FY 2023-24 is provided as Exhibit "B". The corresponding third-party validation certificate is provided as Exhibit "C". At the meeting, staff will present a summary of the results of IRWD's Water Loss Audit Report for FY 2023-24. The draft presentation is provided as Exhibit "D".

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Overview of Water Loss Audit Performance Indicators Exhibit "B" – Summary of IRWD's FY 2023-24 Water Loss Audit Report Exhibit "C" – IRWD Data Validation Certificate for FY 2023-24 Exhibit "D" – FY 2023-24 Water Loss Audit Presentation

Exhibit "A"

Overview of Water Loss Audit Performance Indicators

The water loss audit provides a basic water balance and several performance indicators for the reporting period. These indicators include the Infrastructure Leakage Index (ILI), Real and Apparent Losses as well as a percentage of non-revenue water and a data validity grade. These indicators are explained in more detail below.

Infrastructure Leakage Index:

The Infrastructure Leakage Index is calculated as follows:

Infrastructure Leakage Index = <u>Current Annual Real Losses</u> Unavoidable Annual Real Losses

A perfect ILI score is 1.00 indicating a very tight potable water distribution system with loss volumes that are equal to the Unavoidable Annual Real Losses. These unavoidable losses are calculated for each system and represent a minimum level of leakage expected based on the size of system, pressure and number of connections.

Real and Apparent Losses and Non-Revenue Water:

Two metrics are used to report on real loss. One is total current annual Real Losses, which varies based on the size of the utility and other factors. The second metric is gallons per connection per day, which helps to normalize the results. Apparent Loss is reported as a total volume and on a per connection per day basis. Non-revenue water includes both Real and Apparent Losses. It is represented as a percentage of the total potable supply and as a percentage of the total operating costs.

Data Validity Grade:

All data that are entered into the AWWA Water Loss Audit report software are evaluated and assigned a Data Validity Grade. The Data Validity Grade is a measure of audit data accuracy and ranges from zero to 100, with a score of 100 representing the highest level achievable. The scale does not represent 100 being the best because there are measures that would improve a utility's Data Validity Grade but may not actually save water, may not be cost-effective or simply may not be appropriate for the utility.

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Exhibit "B"

Summary of IRWD's FY 2023-24 Water Loss Audit Report

	AWWA Free Water Audit Software:	FWAS v6.0
	Worksheet	American Water Works Association.
	We tay Availy Day and Fare Index Daysch We tay District	
	Audit Year: 2024 Jul 01 2023 - Jun 30 2024 Fiscal	
	Click 'n' to add notes To edit water system info: go to start page	
	To access definitions, click the input name All volumes to be entered as: ACRE-FEET PER YEAR	
	Water Supplied Error Adjustments	
	water supplied choose entry option:	
WI	Volume from Own Sources: n g 7 40,144.332 Acre-tt/Yr n g 8 Volume 57.820 acre-tt/yr Water Imported: n g 7 13,650.645 Acre-ft/Yr n g 10 volume acre-ft/yr	over-registration VOSEA WIEA
WE	Water Exported: n g 7 874.455 Acre-ft/Yr n g 3 volume acre-ft/yr	WEEA
	WATER SUPPLIED: 52,862.703 Acre-ft/Yr	
	AUTHORIZED CONSUMPTION	
BMAC	Billed Metered: n g 9 49,549.400 Acre-ft/Yr	
BUAC UMAC	Billed Unmetered: n g v/a 0.000 Acre-tVYr Unbilled Metered: n g 4 4462 777 Acre-fV/r choose entry option:	
UUAC	Unbilled Unmetered: n 9 8 18.132 Acre-ft/Yr custom 18.132 acre-ft/yr	
	AUTHORIZED CONSUMPTION: 50,030.309 Acre-ft/Yr	
	WATER LOSSES 2,832.394 Acre-ft/Yr	
	Apparent Losses	
SDHE	Default option selected for Systematic Data Handling Errors, with automatic data grading of 3 Systematic Data Handling Errors: n g 3 123 874 Acre-ft/Yr 0,25% default	
CMI	Customer Metering Inaccuracies: n 9 7 453.910 Accentry volume 453.910 accent/vr	under-registration
UC	Unauthorized Consumption: n g 3 123.874 Acre-ft/Yr 0.25% default	U
	Default option selected for Unauthorized Consumption, with automatic data grading of 3	
	Apparent Losses. 701.007 Actenuti	
	Real Losses	
	Real Losses: 2,130.737 Acre-ft/Yr	
	WATER LOSSES: 2,832.394 Acre-ft/Yr	
	NON-REVENUE WATER	
	NON-REVENUE WATER: 3,313.303 Acre-ft/Yr	
	SYSTEM DATA	
Lm	Length of mains: n g 10 1,973.1 miles (including fire hydrant lead lengths)	
Nc	Number of service connections: n g 10 125,867 (active and inactive)	
Lp	Are customer meters typically located at the curbstop/property line? Yes	
	Average length of customer service line has been set to zero and a data grading of 10 has been applied	
AOP	Average Operating Pressure: n g 10 88.3 psi	
	COST DATA	
CRUC	Customer Retail Unit Charge: n. g. 7 \$2.96 \$(400 cubic feet (ccf) Total Annual Operating Cost	
VPC	Variable Production Cost: n g 9 \$1,258.00 \$/acre-ft \$49,836,703	\$/yr (optional input)
	WATER AUDIT DATA VALIDITY TIER:	
	*** The Water Audit Data Validity Score is in Tier IV (71-90). See Dashboard tab for additional outputs. ***	
	A weighted scale for the components of supply, consumption and water loss is included in the calculation of the Water Audit Data Validity Score	
	PRIORITY AREAS FOR ATTENTION TO IMPROVE DATA VALIDITY: KEY PERFORMANCE INDICATOR TARGETS:	
	Based on the information provided, audit reliability can be most improved by addressing the following components: OPTIONAL: If targets exist for the operational performance indi	cators, they can be input below:
	1: Volume from Own Sources (VOS) Unit Total Losses:	gal/conn/day
	2: Unauthorized Consumption (UC) Unit Apparent Losses:	gal/conn/day
	3: Systematic Data Handling Errors (SDHE)	gal/conn/day
	If entered above by user, targets will display on KPI gauges	(see Dashboard)



Table 1 Source: AWWA Water Loss Control Committee Report (2020) ¹ , with naming conventions updated 2020 AWWA Water Audit Method – Water Audit Outputs and Key Performance Indicators: Uses and Limitations									
			Suitable Purposes					Principal	
Туре	Indicator	Description	Assessment	Bench- Marking	Target- Setting	Planning	Tracking	Uses and Limitations	Users
Attribute	Apparent Loss Volume	Calculated by Free Water Audit Software	~				~	Assess loss level	Utility, Regulators
	Apparent Loss Cost	Calculated by Free Water Audit Software	~				~	Assess cost loss level	Utility, Regulators
	Real Loss Volume	Calculated by Free Water Audit Software	~				~	Assess loss level	Utility, Regulators
	Real Loss Cost	Calculated by Free Water Audit Software	~				~	Assess loss cost level	Utility, Regulators
	Unavoidable Annual Real Loss (UARL)	Calculated by Free Water Audit Software	✓				~	Reveal theoretical technical low level of leakage	Utility, Regulators
Volume	Unit Apparent Losses (vol/conn/day)	Strong and understandable indicator for multiple users.	~	~	~	~	~	Used for performance tracking and target-setting	Utility, Regulators
	Unit Real Losses ^a (vol/conn/day)	Strong and understandable indicator for multiple users.	~	~	~	~	✓	Used for performance tracking and target-setting	Utility, Regulators, Policy Makers
	Unit Real Losses [®] (vol/pipeline length/ day)	Strong and understandable indicator for use by utilities with low connection density.	✓	✓	~	~	~	Data collection and assessment of systems with "low" connection density	Utility, Regulators, Policy Makers
	Unit Total Losses (vol/conn/day) New KPI	Strong and understandable indicator, suitable for high-level performance measurement.	<i>√</i>				~	High level indicator for trending analysis. Not appropriate for target-setting or benchmarking	Utilities, Customers
	Infrastructure Leakage Index (ILI)	Robust, specialized ratio KPI; can be influenced by pressure and connection density.	~	~			~	Benchmarking after pressure management is implemented	Utilities
Value	Apparent Loss Cost Rate (value/conn/year) New KPI	Indicators with sufficient technical rigor. Provide the unit financial value of each type of loss, which is useful for planning and	~			✓	√	Data collection and assessment on AWWA indicators or contextual	Utilities, Regulators, Customers
	Real Loss Cost Rate (value/conn/year) New KPI	assessment of cost efficiency of water loss reduction and control interventions and programs.	✓ 			✓	✓ 	parameters to use in conjunction with Loss Cost Rates	Utilities, Regulators, Customers
Validity	Data Validity Tier (DVT)	Strong indicator of water loss audit data quality, if data has been validated. Tier provides guidance on priority areas of activity.	✓	~		~	~	Assess caliber of data inputs of the water audit	Regulators, Utilities

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	Certified Validation Report Template, Part A: Provided by Validator
	Audit Information
	Water System Name: Irvine Ranch Water District
	Public Water System Identification (PWSID) ¹ : CA3010092
	¹ List only 1 PWSID, which should match the PWSID on the FWAS Instructions Tab. For Special cases where multiple water systems are connected with permanent two-way interties, list those additional PWSIDs in the Notes below and describe the water distribution system(s) configuration.
	PWSID and Special Water System Configuration Notes (Provided to Validator by Water System):
	Audit Period Start Date: 7/1/2023 Water System Representatives
	Validation Date: 10/10/2024 Mike
	Mroczek,
<i>S</i>	Enrique
Ř	Christopher
Ĕ	Smithson,
2	Gus Barreto,
5	Bryan Clinton
ב	
	Sufficient Supporting Documents Provided: Yes
ō	Validation Findings & Confirmation Statement
Ť	
N	Key Audit Metrics:
Ľ	Data Validity Score: 77 Data Tier IV (71- Real Loss: 15.1 gal/conn/day or gal/mile/day
a	Non-revenue water as percent of cost of operating system: 8.40% Validity 90 Apparent Loss: 5 gal/conn/day
Š	
	Certification Statement by Validator:
	This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.
	All recommendations on volume derivation and Data Validity Yes
	Grades were incorporated into the water audit:
	If not, rejected recommendations are included here:
	Validator Information
	Water Audit Validator Name: Kim Manago
	CA-NV AWWA WAV Certification Expiration Date: 9/11/2027 Qualifications: Water Audit Validator Certificate issued by the CA-NV Section of the AWWA

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Exhibit "D"



AGENDA

- 1. What is water loss?
- 2. Background
- 3. Reporting Timeline
- 4. IRWD Water Loss Audit Results







BACKGROUND

- Water suppliers are required to submit a validated Water Loss Audit Report to the California Department of Water Resources (DWR) annually.
- State Water Loss Standard (SB 555)
 - IRWD's water loss standards:
 - Real Loss: 20 gallons per connection per day
 - Apparent Loss: 6.4 gallons per connection per day
 - Based on average of the 2017 2020 audits
- Compliance begins 2028
 - Three-year average from 2025, 2026 and 2027 audits

Irvine Ranch Water District



Indicator	Baseline Average	Fiscal Year 2022-23	Fiscal Year 2023-24	
Unavoidable Annual Real Loss	2,508 AF	2,785 AF	2925 AF	
- per connection per day	19.2 gal	19.9 gal	20.7 gal	
Total Real Loss	2,595 AF	1,502 AF	2131 AF	
- per connection per day	20 gal	10.7 gal	15.1 gal	
Apparent Loss	826 AF	733 AF	702 AF	
- per connection per day	6.4 gal	5.2 gal	5.0 gal	
Non-Revenue Water by Volume of Supply	7.3%	5.6%	6.3%	
Non-Revenue Water by Operating Cost	12.7%	7.6%	8.3%	
Data Validity Grade	78	76	77	



February 6, 2025 Prepared by: A. McNulty Submitted by: F. Sanchez / P. Weghorst Approved by: Paul A. Cook

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

MAKING CONSERVATION A CALIFORNIA WAY OF LIFE IMPLEMENTATION PLAN AND FISCAL YEAR 2024 RESULTS

SUMMARY:

In 2024, the State Water Resources Control Board adopted the Making Conservation a California Way of Life regulation. The regulation requires each urban water supplier to comply with an Urban Water Use Objective and to implement performance measures for commercial, industrial, and institutional (CII) customers. Staff has developed a Making Conservation a California Way of Life Implementation Plan (Implementation Plan) to guide IRWD's compliance with the regulation. At the Committee meeting, staff will present the plan and reporting results for Fiscal Year (FY) 2023-24.

BACKGROUND:

In 2018, the California Legislature passed Assembly Bill 1668 and Senate Bill 606. The legislation directed the State Board to adopt water efficiency standards for urban water suppliers. In 2024, the State Board adopted the Making Conservation a California Way of Life regulation (Conservation Regulation) that established a unique Urban Water Use Objective for each urban retail water supplier. The regulation also requires each water supplier to implement performance measures for CII customers.

Staff has prepared the Implementation Plan, provided as Exhibit "A", to provide a roadmap to compliance with the Conservation Regulation. This plan includes regulation related reporting results for FY 2023-24. Both the plan and the results are described below.

Implementation Plan:

The Implementation plan identifies the specific components of the Conservation Regulation that apply to IRWD and the strategy to addressing each component. The plan is organized beginning with the Urban Water Use Objective and then defines each applicable standard and explains how each is calculated. Each section includes an *Assessment and Compliance Strategy* that provides an assessment of the current compliance status and the available tools and programs that will support meeting the water efficiency standards over time. The plan also describes each CII performance measure, the requirements, effective dates and IRWD's progress and approach to compliance. The Implementation Plan concludes with the master schedule of effective dates and results of IRWD's first annual report for Fiscal Year 2023-24.

Water Resources Policy and Communications Committee: Making Conservation a California Way of Life Implementation Plan and Fiscal Year 2024 Results February 6, 2025 Page 2

Reporting Results for Fiscal Year 2023-24:

Starting on January 1, 2025, each urban retail water supplier is required to submit annual reports to the State Board consistent with the requirements of the Conservation Regulation. Compliance is required beginning January 1, 2027, and is to be measured based on the various standards and CII performance measures that are in effect for the reporting period. In December 2024, staff prepared and submitted to the State Board IRWD's annual report for FY 2023-24. The Implementation Plan concludes with the master schedule of effective dates and results of the first annual report for Fiscal Year 2023-24.

At the meeting, staff will present an overview of the Implementation Plan and IRWD's FY 2023-24 reporting results. The draft presentation is provided as Exhibit "B".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Making Conservation a California Way of Life Implementation Plan Exhibit "B" – Presentation on Making Conservation a California Way of Life Implementation Exhibit "A"

A

MAKING CONSERVATION A CALIFORNIA WAY OF LIFE IMPLEMENTATION PLAN

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Glossary

BMP: Best Management Practices: strategies or programs implemented to achieve water efficiency goals.

BTI: Bilingual Training Institute. A consultant service IRWD partners with to provide landscape professionals with the necessary knowledge to solve problems with the irrigation systems they maintain as well as water management practices in the field.

CalWEP: California Water Efficiency Partnership: an organization supporting water suppliers in implementing standards for efficiency through resources, training, and advocacy.

CII: Commercial, Industrial, and Institutional (public) customer sectors.

PM: Commercial, Industrial, and Institutional Performance Measures, tasks required by the state to improve water efficiency in CII sectors.

CLIIP: Commercial Landscape Irrigation Improvement Program, an IRWD incentive to promote efficient irrigation practices for commercial landscapes. Provides rebate for 50% of customer cost of flow sensors, master valves and hydrometers up to \$2,000 per meter cap.

DIM: Dedicated Irrigation Meters, water meters used exclusively for irrigation, separating outdoor water use from indoor consumption.

DWR: Department of Water Resources

ET: Evapotranspiration, the sum of water lost through evaporation and plant transpiration. The sum of daily values for the reporting period are used in the calculation for outdoor water budgets.

GPCD: Gallons per Capita per Day, a measure for water usage per person used to account for changes in population.

Irrigable Irrigated (II): Land that is capable of being irrigated and actively receiving water for landscaping, agriculture, or other uses. Included in the residential and DIM outdoor standard calculations.

Irrigable not Irrigated (INI): Landscape area that is capable of being irrigated but is not actively irrigated. Excluded from the residential outdoor standard calculations. Water suppliers meeting certain criteria are eligible to include up to 20% of INI in their outdoor budget calculations.

LAM: Landscape Area Measurement, the size of irrigated landscape used to calculate the outdoor water use standards.

LEF: Landscape Efficiency Factor, a calculated value based on crop coefficients and irrigation efficiencies representing the water need of various landscapes. Lower LEFs indicate more efficient landscape water use while higher LEFs indicate a greater demand for water.

Log-A-Leak: An IRWD program to encourage users to report and repair any leaks or adjust excessive watering to save water. Leaks are geo-located using ESRI Survey 123 functionality and the location is cross-referenced with IRWD's Meter to Parcel data to identify the customer associated with the area that has the leak.

MTP: Meter to Parcel, an IRWD initiative to map and link all irrigated areas to their respective water meters for greater landscape area measurement accuracy.

MWELO: Model Water Efficient Landscape Ordinance, a California regulation requiring efficient irrigation and landscaping for new developments.

MUM: Mixed-Use Meter, a water meter measuring both indoor and outdoor use for a property.

NAICS: North American Industry Classification System, a standard used to classify business establishments by economic activities.

QWEL: Qualified Water Efficient Landscaper, a professional certification program that provides training on water-efficient landscape design and irrigation maintenance to reduce outdoor water use.

SLAs: Special Landscape Areas, areas with unique landscaping needs, such as those with agriculture, pools or using recycled water.

UWO: Urban Water Objective, the target for water use efficiency that urban water suppliers must meet every year, as defined by state regulations.

WBICs: Weather Based Irrigation Controllers, smart irrigation devices that adjust watering schedules based on real-time weather data.

Making Conservation a California Way of Life Implementation Plan

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Background

California experiences reoccurring droughts which necessitate diverse strategies to ensure there are adequate water supplies to sustain industry, agriculture and urban use. The Irvine Ranch Water District (IRWD or District) is a leader in water use efficiency and has one of the lowest water usage volumes per capita in the state. State policy requires all California urban water suppliers to implement and report on conservation and water use efficiency. In 2018 the California Legislature

passed Assembly Bill (AB) 1668 and Senate Bill (SB) 606. The legislation directed the State Water Resources Control Board (State Board) to adopt water efficiency standards for residential and landscape use and performance measures for commercial, industrial, and institutional (CII) water use. In 2024 the State Board adopted the Making Conservation a California Way of Life regulation (Regulation) that established a unique urban water use objective (UWO) or water budget for each urban retail water supplier and performance measures for CII customers.



Annual reporting on the regulation was required beginning January 1, 2025. Compliance is required beginning January 1, 2027, and is measured based on the various standards and CII performance measures that are in effect for the reporting period. The standards and performance measures have various effective dates over the course of the next fifteen years and based on which compliance options water suppliers choose.

The District developed this Making Conservation a Way of Life Implementation Plan (Implementation Plan) to outline its strategy to ensure compliance with the regulation. The portions of the regulation that impact IRWD are addressed. Portions of the regulation that do not pertain to IRWD or that IRWD does not intend to pursue are not included. The Implementation Plan addresses the two components of the regulation, the UWO and CII Performance Measures and is organized beginning with the UWO followed by a definition of each applicable standard and explains how each is calculated. Each section includes an *Assessment and Compliance Strategy* that provides an assessment of the current compliance status and the available tools and programs that will support meeting the water efficiency standards over time. The Implementation Plan also describes each CII Performance Measure, the requirements, effective dates and IRWD's progress and approach to compliance and concludes with the master schedule of effective dates and results of the first annual report for Fiscal Year 2023-24.

Urban Water Objective

The regulation requires urban water suppliers to comply with an UWO that is calculated annually. The calculation is based on local characteristics and standards for residential indoor and outdoor use, outdoor use from dedicated irrigation meters (DIM), water loss, and a bonus incentive for potable reuse. The standards for indoor and outdoor use decrease over the implementation period between 2025 and 2040.



Beginning in 2026, the State Board may issue conservation orders to suppliers that are not in compliance and beginning in 2027 the State Board may impose administrative civil liabilities for non-compliance with the UWO. The regulation also includes a "no-back-sliding" provision that requires that each supplier's UWO does not exceed their 20 x 2020 water efficiency target (SB X7-7) which required urban water suppliers to reduce water use by 20% from a 2010 baseline by the year 2020The UWO required by the regulation must be below the urban water supplier's SB X7-7 target. If the UWO is higher than the SB X7-7 target then it is capped at the SB X7-7 target.

This Implementation Plan addresses each standard, its data sources and relevant programs that address water use associated with that standard. While compliance with the UWO is measured against the total of all water use standards and not against the individual component standards, this approach enables the District to identify which standards are met easily and areas that may benefit from additional water use efficiency programs.

Residential Indoor Water Use Standard

The residential indoor standards were established by SB 1157. The indoor water use standard applies a GPCD volume to the total population of the service area for each reporting year. The indoor standard decreases from 55 GPCD prior to 2025 to 42 GPCD effective January1, 2030, as shown in Table 1. The legislation required the Department of Water Resources to conduct studies to quantify the benefits and impacts of the lowered standards on water and wastewater facilities. Those studies are underway and staff is actively participating in two DWR Technical Advisory Panels and a Policy Group. DWR is required to submit a report to the legislature in 2028 with its findings and any recommendations to modify the indoor standards.

Effective Date	Standard (GPCD)
Until January 1, 2025	55
January 1, 2025	47
January 1, 2030	42

Calculation



Compliance Assessment and Strategy

Since 1991 IRWD has had customer water budgets in effect and has incrementally reduced the indoor portion from the original budget of 75 gallons per person per day to the current volume of 50 gallons per person per day. Changes to IRWD's indoor budget were based on residential water use patterns and supported by findings from the California Single Family Water Use Efficiency Study¹ published in 2011 and an IRWD specific Multi-Family Water Use Efficiency² Study from 2008. In 2019 IRWD conducted a Future Water Efficiency Potential Study³ which confirmed that the indoor usage in older homes has reached a maximum reasonable efficiency level based on the current plumbing fixture flow rates as a shown in Figure 1.





Source: Future Potential Water Efficiency Study, 2019

¹ California Single Family Water Use Efficiency Study, prepared for DWR by Aquacraft Inc. Water Engineering and Management, June 2011

² Analysis of Water Use Patterns in Multi-Family Residences, prepared for IRWD by Aquacraft Inc. Water Engineering and Management, October 2008

³ Future Potential Water Efficiency Study, prepared for IRWD by EKI Consultants, December 2019

These studies demonstrate the effectiveness of IRWD's budget-based rates combined with robust water efficiency programs that result in sustained water use reduction. Residential indoor GPCD will likely continue to decrease through the natural replacement of remaining inefficient plumbing fixtures. To maintain efficient residential indoor use, the District may consider implementing new programs or ramp up the ongoing programs shown in Table 2.

Table 2: Indoor Residential Programs

Budget-Based Rates
On-Site Surveys
Toilet Rebates (regional program)
Leak Repair Assistance Program
Online Resources
Workshops
Customer Water Use Reports
Outreach Articles
Source: Water Efficiency Implementation Plan, Fiscal Year 2023-2.

Residential Outdoor Water Use Standard

The outdoor standards are based on a landscape efficiency factor (LEF), which adjusts down from a 100% factor needed to irrigate cool season turf. The LEFs for residential landscapes vary for different types of landscapes and dates of construction. Landscapes installed before 2018 have an initial LEF of 0.8, which is reduced to 0.63 in 2035 and then to 0.55 in 2040. Landscapes installed after 2018 are defined as newly constructed and assumed to be more efficient, so have the LEF fixed at 0.55. Landscapes irrigated with recycled water are defined as special landscape areas (SLA) and have an LEF of 1.0, since recycled water is a sustainable, drought-proof supply. Other SLAs include areas dedicated to growing edible plants and trees, swimming pools and spas because they have a higher demand for water. The schedule of LEFs for the residential landscape types is shown in Table 3. IRWD's current outdoor budgets for potable and recycled water is also provided for comparison.

Landscape Type	Effective Date	Applicable LEF	IRWD Water Budget Adjustment Factor
Residential Landscape Area	July 1, 2023	0.80	0.75
Residential Landscape Area	July 1, 2035	0.63	0.75
Residential Landscape Area	July 1, 2040	0.55	0.75
Newly Constructed Residential Landscapes	January 1, 2025	0.55	0.75
Residential Special Landscape Area	January 1, 2025	1.00	0.75
Recycled Landscape Area	January 1, 2025	1.00	0.87

Table 3: Residential Landscape Area Landscape Efficiency Factor Schedule

Source: State Board, Water Efficiency Standards for Residential Landscapes, Section 972, (2025)

Calculation

The LEF for each landscape type is multiplied by the applicable reference evapotranspiration (ET) data for the water supplier's service area minus effective precipitation for the reporting period and then multiplied by the size of the irrigated area. The size of the irrigated area has a significant impact on the outdoor budget and it is therefore important for water suppliers to ensure the accuracy of their residential landscape area measurement data (LAM).



Alternative Landscape Area Measurement Data

The regulation allows for use of alternative data if it is equivalent to or superior to that provided by DWR. IRWD has superior LAM data from its Meter to Parcel project (MTP). IRWD's aerial imagery is more recent and at a higher resolution than DWR's data and was matched with water meter locations to verify that the meters are in fact serving residential properties. The IRWD data was obtained using field verification of all dedicated irrigation meters (DIMs), parcel data, and aerial imagery overlaid with a land use classification layer to identify various plant material, pools, and impervious surfaces. These land use classifications were then used to assign the landscape area to categories developed by DWR of Irrigable Irrigated (II) or Irrigable Not Irrigated (INI). Only II landscape areas are included in calculating IRWD's residential outdoor standard. A comparison of DWR and IRWD LAM data was reviewed with DWR in December 2024. Per the regulation, DWR approved the approach and use of IRWD's alternative data for the next five years.

Compliance Assessment and Strategy

IRWD adopted a water budget-based rate structure in 1991 and over time has reduced the outdoor budget from 100% of reference ET to 0.75 for potable and 0.87 for recycled water. The reductions were supported by findings from the California Single Family Water Use Efficiency Study (2011). The study demonstrated that the combined effect of the budget-based rates and robust water efficiency education and programs result in sustained outdoor water use reduction.

IRWD's water efficiency educational programs such as the Shed Show, focus on outdoor water use and motivate customers to transform old irrigation systems and turf-centric landscaping into more efficient and climatesustainable landscapes. Residential outdoor use will likely continue to decrease through new construction which tends to have smaller areas and is required to install more efficient landscapes. To maintain efficient residential outdoor use, the District may consider implementing new programs or ramp up the ongoing programs shown in Table 4.



Table 4: Residential Landscape Programs

On-Site Surveys		
Turf Removal Rebate Incentive		
Weather-Based Irrigation Controllers Incentive		
Spray-to-Drip Incentive		
Rotating Sprinkler Nozzles Rebate		
Sprinkler Repair Program		
Pressure Regulating Sprinkler Spray Bodies Rebate		
Mulch Madness		
Educational Workshops		
Customer Water Use Reports		
Demonstration Gardens		
California Native Plant Program		
The Shed Show		
Log-a-Leak		
Sustainable Landscape Guidebook		

Source: Water Efficiency Implementation Plan, Fiscal Year 2023-25

Commercial Outdoor Use Standard

The outdoor irrigation standards for dedicated irrigation meters (DIMs) are based on the water requirements for maintaining different commercial landscape types. Newly constructed landscapes have a lower LEF than older landscapes because they are required to be designed to be more water efficient. SLAs such as agriculture, swimming pools and spas, have a higher LEF because they have a higher demand for water. Areas irrigated with recycled water, a sustainable, drought-proof supply, also have a higher LEF of 1.0. The LEFs for existing landscape areas decrease over time as shown in Table 5.

Landscape Type	Effective Date	Applicable Standard
All Landscape Areas	July 1, 2023	Equal to actual deliveries
Dedicated Irrigation Meter (DIM)	July 1, 2028	0.80
Dedicated Irrigation Meter (DIM)	July 1, 2035	0.63
Dedicated Irrigation Meter (DIM)	July 1, 2040	0.45
Newly Constructed DIMs	July 1, 2028	0.45
Special Landscape Area	July 1, 2028	1.00

Table 5: Effective Standards for Landscape Areas and Dedicated Irrigation Meters

Source: State Board, Water Efficiency Standards for Dedicated Irrigation Meters, Section 969 (2025).

Calculation

The LEF for each DIM landscape type is calculated with the reference ET data minus effective precipitation for the reporting period and then multiplied by the size of the irrigated area. The size of the irrigated area has a significant impact on the outdoor budget and it is therefore important for water suppliers to ensure the accuracy of their DIM area measurements.



Compliance Assessment and Strategy

Nearly 85% of all commercial and community landscapes within IRWD's service area are irrigated with recycled water. IRWD's LAM data ensures that IRWD receives the full benefit for recycled water because it links the irrigated landscape area, the customer type and water type of either potable or recycled to the meter and actual water use. This distinction makes a tremendous difference to IRWD's outdoor portion of the UWO because of the higher LEF of 1.0 for recycled water landscapes and the prevalence of recycled water use within IRWD's service area. IRWD will engage in any policies that attempt to decrease the recycled water LEF of 1.0 because it would significantly reduce IRWD's UWO.

DWR has not provided DIM LAM data but is expected to in the future. However, as described in the Alternative LAM Data section of the Residential Outdoor Water Use Standards, IRWD's LAM data has been approved as an alternative data source for Residential LAM and will also be used for future DIM reporting. Staff will update DIM LAM data annually to ensure appropriate application of the LEFs to calculate the maximum outdoor water budget for IRWD's UWO. As the LEF for landscapes using potable water decreases overtime, the District may develop new programs or ramp up the ongoing outdoor programs shown in Table 6 to further decrease outdoor water use.



Table 6: Commercial Landscape Programs

On-Site Surveys				
Turf Removal Rebate Incentive				
Spray-to-Drip Incentive				
Rotating Sprinkler Nozzles Incentive				
Commercial Sprinkler Repair Program				
Commercial Landscape Irrigation Improvement				
Irrigation Efficiency Monitoring App				
Homeowner Association and Property Manager Outreach				
Weather-Based Irrigation Controller Incentive				
Qualified Water Efficiency Landscaper Training				
Source: Water Efficiency Implementation Plan, Fiscal Year 2023-25				

Water Loss Standard

The water loss portion of the UWO is a calculated volume based on the District's Real Water Loss Standard developed by the State Board as required by SB 555. IRWD's real loss standard of 20 gallons per connection per day is derived from the average of IRWD's 2017 through 2020 water loss audits. The standard is multiplied by the number of days in the reporting year to calculate this portion of the UWO. New service connections will increase the total volume of water for this portion of the UWO each year.

Calculation



Compliance Assessment and Strategy

Annual water loss audit reporting is required through a separate process and compliance is covered by a separate regulation established by SB 555. Details on IRWD's compliance strategy for the water loss regulation and associated programs are described in the District's Water Loss Control Plan.

Bonus Incentive

The bonus incentive for potable reuse provides additional budget to the UWO to incentivize investments in potable reuse projects. IRWD is eligible for a bonus incentive because its supply sources include the Orange County Groundwater Basin (basin) which is augmented by potable reuse water through the Ground Water Replenishment System. The bonus incentive is determined using a complex calculation to account for multiple supply sources and customer water uses.

Calculation

The calculation applies the ratio of the basin's total potable reuse to total production to determine the percentage of potable reuse. This percentage is applied to IRWD's production volume to determine IRWD's potable reuse bonus incentive. The maximum available volume is capped at 15% of the sum of eligible deliveries, which are the potable uses included in the UWO. Eligible deliveries include real loss, single-family, multi-family, and potable use from dedicated irrigation meters.



Compliance Assessment and Strategy

Since the majority of IRWD's potable supply comes from the basin, it is likely that eligible water deliveries will reach the 15% cap of each year and provide IRWD with the maximum budget for the bonus incentive.

CII Performance Measures and Additional Requirements

In addition to compliance with the calculated UWO, IRWD must also implement CII Performance Measures (PMs). The PMs were developed by the State Board to address water use associated with the business community. CII water use efficiency is difficult to assess and quantify due to shared or multiple meters supplying businesses, diverse industries, production rates, equipment and many other unique factors for which water suppliers do not collect data. The performance measures primarily focus on identification of the types of CII customers and implementation of Best Management Practices which consist of offering various types of resources and programs to the CII customer sector. The list of performance measures applicable to IRWD and the compliance schedule for each is provided in Table 7.

PM Task	Action	Compliance Date
1	Identify Disclosable Buildings & Provide Usage Data	January 1, 2025
2	Classification of CII Accounts	July 1, 2027
3	Identify Top CII Users	June 2025
4	Design and Implement BMPs for Top CII Users	June 30, 2039
5	Identify CII Mixed-use Meters (MUMs) with Large Landscapes	July 1, 2027
6	In-lieu Technology and BMPs for MUMs with Large Landscapes	July 1, 2039

Table 7:	CII	Performance	Measures	Implement	ation Schedule
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Source: Adapted from CalWEP Framework Cut Sheet

IRWD's approach to compliance with this portion of the regulation is described in the sections below. Due to IRWD's budget-based rates and well-established water efficiency programs, IRWD is ahead of schedule for compliance with the PMs.

PM1: Disclosable Buildings

As defined by the California Energy Commission (CEC), Disclosable Buildings are buildings with (1) more than 50,000 square feet of gross floor area (all square footage within the exterior walls of the building) and (2) either no residential units or more than 17 residential units. The owners of disclosable buildings are required to submit monthly energy use data annually to the CEC via the Energy Star Portfolio Manager web portal:

PM1 requires all urban water suppliers, upon request by building owners or owner's agents, to provide monthly water use data for at least the previous 12 months. Suppliers may choose to use the Energy Star Portfolio Manager Data Exchange Service which requires direct upload of customer data to their Energy Star Portfolio Manager account or use the template provided by Energy Star Portfolio Manager or provide data in a format compatible with the template. IRWD's Water Insight online customer portal provides water use data and is available for all CII customers and satisfies this requirement.

PM2: CII Account Classification

Water suppliers are required to classify their CII customers according to the broad classification categories used by the <u>US Environmental Protection Agency's ENERGYSTAR Portfolio</u> <u>Manager</u> tool starting in mid-2027. The District will build on previous classification efforts using the North American Industry Classification System (NAICS) code for each metered account and link it to its corresponding Energy Star Portfolio Manager category. Staff has created a crosswalk from the NAICS codes to the Energy Star classifications. This data was updated in IRWD's billing system for all existing CII accounts in late 2024. New accounts will be assigned classifications on a semi-annual basis which aligns with the CII customer water budget setting process.

Staff will continue to evaluate optimal data sources in addition to the NAICS codes to accomplish this task and will consider the following as potential data sources to satisfy this requirement:

- City business license databases
- Industrial waste discharge permits
- Solid waste companies
- Google maps & street view
- Parcel data
- Customer name indicators

PM3: High Volume Users

The regulation requires identification of high-volume CII water customers using one of three methods. IRWD will use the first option although it has the earliest deadline; IRWD has the data available and the capabilities to easily purse this method. Annual usage data for CII customers will be ranked to identify existing CII water users at or above the 97.5th percentile for CII water use and existing CII water users at or above the supplier's 80th percentile for CII water use by June 30, 2025.

PM4: Best Management Practices for High Volume Users

This task requires water suppliers to design resources and implement water efficiency programs from five categories of CII Best Management Practices (BMPs) shown in Table 8. Two BMPs from each category must be offered to the top 97.5th percentile of CII users and one BMP from each category must be offered to the top 80th percentile of CII users. IRWD has water budgets for all CII customers, offers numerous rebate and incentive programs, educational workshops, and one-on-one assistance. IRWD's programs are offered to all CII customers which satisfies this requirement. A detailed list of the required BMPs and the IRWD programs that satisfy each, is provided as Appendix A.
Table 8: Categories of CII Best Management Practices

BMP Category
1. Outreach, Technical Assistance, and Education
2. Incentives
3. Landscape
4. Collaboration and Coordination
5. Operational

PM5: Mixed-Use Meters

Mixed-use meters are CII meters that provide water for indoor and outdoor use. The regulation addresses CII mixed-use meters (MUMs) by requiring the installation of DIMs on MUM sites that irrigate more than half of an acre or by implementing an In-lieu technology. By June 30, 2027, the District must identify all CII mixed use meters with landscapes greater than a half an acre, and by June 30, 2029, identify which of these customers may be exceeding the outdoor budget. IRWD has already satisfied this requirement and identified 153 mixed-use CII accounts with landscape areas greater than 0.5 acres.

PM6: Mixed-Use Meter Large Landscapes

CII MUMs that irrigate more than half of an acre are required to have a DIM installed or an inlieu technology implemented. Water budget-based rate structures qualify as an in-lieu technology and will be relied upon for the District's compliance with this requirement. In addition to the in-lieu technology, three BMPs must be offered to the large landscape MUM customer group. All these landscapes have a water budget and are eligible to participate in all IRWD's water efficiency programs thereby satisfying this requirement.

Reporting and Compliance Schedule

Reporting on the regulation started in 2025 and supplier water use is expected to be within the UWO in 2026. The State Board may issue conservation orders beginning in 2026 and may impose administrative civil liability fines beginning in 2027 for suppliers that are not in compliance with their UWOs. IRWD submitted its first report in December 2024. Actual water use was 16 percent lower than the UWO and the District has completed the required PM tasks and BMPs. The results of the 2025 report for Fiscal Year 2023-24 are provided in Appendix B.

Since the various standards decrease over time, compliance is based on the applicable standards that are in effect for each reporting year. Compliance is assessed based on the total UWO, and not on each individual component. Table 9 shows the reporting and compliance schedule for the various requirements and highlights the changing standards, effective dates for the CII Performance Measures and BMP implementation. Staff will periodically review and update this Implementation Plan to ensure continued compliance with the standards and other changes that may result from future policies.

Category	Standard/Task	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Reporting	N/A	PM1	PM3		PMs 2, 5, 6		DIMs										PM4
Compliance	N/A																
Desidential Indeen	47 gpcd																
Kesidentiai Indoor	42 gpcd																
	0.8																
	0.63																
Residential Outdoor	0.55																
	1.00 SLA																
	0.55 New Construction																
	CII Landscape Equal to Actual Deliveries																
	0.8 & DIM LAM																
CII Landscape	0.63																
1	0.45																
	1.00 SLA																
	0.45 New Construction																
	1. Disclosable Buildings																
	2. Account Classification																
	3. Identify High Volume																
DM Tasks	4. Best Management															┝╌┰╼┥	
r Ivi Tasks	Practices																
	5. Identify Mixed-Use																
	Meters																
	6. Address Mixed-Use																
	Meter Large Landscapes																

Table 9: Reporting and Compliance Schedule

Appendix A

Category	Best Management Practice	IRWD Program
1. Outreach, Technical	a. Direct contacts via site visits or phone calls	CII outreach via phone calls, emails, and site visits
Assistance, and	b. Informative or educational bill inserts	Pipelines and Bill Inserts
Education	c. Conducting workshop or developing training videos	H2O for HOAs
	d. Webpage portals to access information, tools, and rebates	IRWD Website, WaterInsight, Landscape Management Online Tool
	e. Cost-effectiveness analysis tools	Water Savings Incentive Program Technical Assistance
	f. Commercials or advertisements	
	g. Grass roots marketing	
	h. Community based social marketing	
	i. Other CII-best management practices derived from additional innovation and technology advancement that can be taken by suppliers, subject to Board approval	Log-A-Leak online leak reporting tool
2. Incentive	a. Rebates and cost-sharing for replacing inefficient fixtures, equipment, irrigation systems or landscapes with water efficient ones	Regional Rebate Programs, WaterStar Rebates, Commercial Landscape Irrigation Improvement Program, Sprinkler Repair Program
	b. Certification or branding programs that recognize customers as water efficient	WaterStar Recognition Program
	c. Incentives for technologies that enable customers to identify, measure, and analyze indoor and outdoor water use	Pay For Performance Program
	d. Other CII-best management practices derived from additional innovation and technology advancement that can be taken by suppliers, subject to Board approval	
3. Landscape	a. Landscape and irrigation management practices to promote improved water use efficiency	IRWD website: Watering Guide, ET Weather Center Outdoor Budget Data

	b. Irrigation system inspections, audits, or surveys	Irrigation surveys/audits; Sprinkler Repair Program
	c. Training or guidance on irrigation scheduling and maintenance	Workshops, Bilingual Training Institute, Qualified Water Efficient Landscaper Training
	d. New development landscape inspection, workshops, and training	
	e. Programs to remove turf and replace it with climate-ready vegetation	Turf Replacement Rebate
	f. Programs to decrease urban heat and reduce turf water use by planting trees	Tree Rebate
	g. Programs to install green infrastructure such as swales or rain gardens that offset irrigation needs	Turf Replacement Rebate
	h. Other CII-best management practices derived from additional innovation and technology advancement that can be used by suppliers, subject to Board approval	Landscape Management Online Tool
4. Collaboration and coordination	a. Coordination with "green" building certification or recognition programs to promote water use efficiency	Water Star Business Recognition Program, Cool Irvine, Irvine Green Business Council
	b. Coordination with land use authorities to check new landscapes design and implementation	Coordination with local cities on MWELO requirements, recycled water irrigation system inspections
	c. Collaboration with non-governmental organizations on outreach and education	CalWEP, CA Native Plant Society, Home Depot
	d. Collaboration with municipal arborists and tree planting organizations to expand and maintain urban forests	Shade Tree Partnership
	e. Collaboration with stormwater agencies to install green infrastructure such as swales or rain gardens to also offset irrigation needs	OC Stormwater, Turf Rebate Requirements
	f. Other CII-best management practices derived from additional innovation and technology advancement that can be taken by suppliers, subject to Board approval	Pilot Programs

5. Operational	a. Infrastructure changes (for example, smart meter replacement programs)	Advanced Metering Infrastructure and Static Meter Feasibility Study (2024)
	b. Billing or data collection procedures (for example, data tracking, analysis, and reporting improvements)	Customer budgets, abnormal fireline usage, meter performance monitoring and malfunctioning meter identification and replacement
	c. Other operational best management practices to facilitate CII best management practices program implementation and evaluation	Customer water budgets
	d. Other CII best management practices derived from additional innovation and technology advancement that can be taken by suppliers, subject to Board approval.	

Appendix B

Report submitted December 30, 2024

Water Use Component	Actual Water Use (Acre-Feet)	Urban Water Use Objective (Acre-Feet)	Result
Residential Water Use, Indoor & Outdoor	31,570	35,357	89%
Outdoor Landscapes with DIMs*	23,963	23,963	100%
System Water Loss	2,131	2,820	76%
Bonus Incentive	N/A	6,214	
Final Comparison of Actual Water Use to Objective	57,664	68,354	84%

*DIM Objective is equal to actual usage until 2028 when the DIM requirements become effective.



Irvine Ranch Water District

MAKING CONSERVATION A CALIFORNIA WAY OF LIFE IMPLEMENTATION

FEBRUARY 6, 2025 WATER RESOURCES, POLICY AND COMMUNICATIONS COMMITTEE MEETING

OVERVIEW

- Conservation as a California Way of Life Implementation Plan
- Water Use Objective
 - Water Efficiency Standards
- IRWD Strategies
 - Landscape Area Measurements
 - Commercial, Industrial and Institutional (CII) Performance Measures
- Results for FY 2023-24
- Next Steps







CONSERVATION AS A CALIFORNIA WAY OF LIFE REGULATION

Beginning in 2025, each **January 1** all urban retail water suppliers will have to submit an **Annual Water Use Report** to the State Water Board in which they:

- 1) Calculate the previous fiscal year's Water Use Objective
- 2) Report actual water use

Irvine Ranch Water District

3) Document implementation of CII performance measures



CONSERVATION AS A CALIFORNIA WAY OF LIFE IMPLEMENTATION PLAN

- Identifies and describes relevant components of the Objective & CII Performance Measures
- Describes IRWD's compliance strategy to address:
 - · Decreasing water use standards
 - Landscape area measurements
 - CII Performance Measures
- · Includes a master schedule of:
 - Changing standards
 - CII Performance Measure effective dates
- Results for Fiscal year 2023-24











Estab	DENTIAL INI	DOOR STANDA	RDS Hertzberg)		
	Effective Dates	Residential Indoor Standard Gallons per Capita per Day (GPCD)	IRWD Indoor Budget		
	Through 2024	55			
	2025 through 2029	47	55		
	2030 onwards	42		INDOOR	







Description	Residential	Dedicated Irrigation Meters	IRWD Water Budget
2025 – 2035 Landscape Efficiency Factor (LEF)	0.8	0.8	0.75
2035 -2040 LEF	0.63	0.63	0.75
2040 LEF	0.55	0.45	0.75
New Construction	0.55	0.45	0.75
Special Landscape Areas (pools, sports parks etc.)	1.0	1.0	0.75 / 0.87
Recycled Water	1.0	1.0	0.87
Reduction to ET Factors for Effective Precipitation (rainfall)	LEF reduced for ef	fective precipitation.	No reduction







IRWD STRATEGY: USE ALTERNATIVE LANDSCAPE AREA DATA

IRWD METER TO PARCEL PROJECT



Land Use Cover Classification	DWR Residential LAM (acres)	IRWD Residential LAM (acres)	Difference (acres)	Difference (%)
Irrigated	4,323.2	3,046.7	1,277	30%
Irrigable Not Irrigated	125.3	229.6	(104)	-83%
Pools	61.6	89.4	(28)	-45%
Horse Corrals	23.0	23.9	(1)	-4%
Residential Agricultural	29.6	0.2	29	99%
Total Irrigated LAM	4,437	3,160	1,277	29%





CII PERFORMANCE MEASURES

PM Task	Action	Compliance Date
1	Identify Disclosable Buildings & Provide Usage Data	January 1, 2025
2	Classification of CII Accounts	July 1, 2027
3	Identify Top CII Users	June 2025
4	Design and Implement BMPs for Top CII Users	June 30, 2039
5	Identify CII Mixed-use Meters (MUMs) with Large Landscapes	July 1, 2027
6	In-lieu Technology and BMPs for MUMs with Large Landscapes	July 1, 2039
Irvine Ranch		

PM1 STRATEGY: IDENTIFYING DISCLOSABLE BUILDINGS

Performance Measure	Requirement	IRWD Implementation			
Disclosable Building Identification	 By January 1, 2025: Identify all disclosable buildings. Buildings over 50,000 square feet, and either no residential units or 17+ residential units. 	~			
Water Use Data to Disclosable Buildings	 Upon request by owner or agent, provide: Meter serial number Aggregated monthly water use data for prior year Available on IRWD's Water Insight Portal 	~			

PM2 STRATEGY: CLASSIFYING CII ACCOUNTS

Performance Measure	Requirement	IRWD Implementation
CII Classification	By June 2027:Classify all CII water users using Energy Star Portfolio categoriesUpdate annually	80% Complete
Irvine Ranch Water District		22



PM4 STRATE	GY: IMPLEMENTING BEST MANAGEMENT	PRACTICES
Performance Measure	Requirement	IRWD Implementation
Implement BMPs	Offer to all targeted CII customers:	
	1. Outreach, technical assistance and education	
	2. Incentives	
	3. Landscape BMPs	~
	4. Collaboration and Coordination	
	5. Operational practices	
Irvine Ranch Water District		المالي

Performance Measure	Requirement	IRWD Implementation
Mixed Use Meter Landscape Conversions	 By 2027: Identify all Mixed-Use CII customers with landscape areas ≥ 0.5 acres. 	~
Supply water for inde landscape irrigation f	bor use and through a	No whe

PM6 STRATEGY: ADDRESS MIXED-USE METER LANDSCAPE

Performance Measure	Requirement	IRWD Implementation
By June 2039: Conversion to Dedicated Irrigation Meter (DIM)	0.5 acres or greater Or Implement In-Lieu Technologies and three Best Management Practices (BMPs)	~
By June 2039: In-Lieu Technologies	Includes: Water Budget Based Rate Structure	\checkmark
By June 2040: Offer Required BMPs	 Outreach, technical assistance and education programs Irrigation system inspections, audits or surveys Training or guidance on irrigation scheduling and maintenance 	~
Vine Ranch Water District		26



IRWD RESULTS FOR FISCAL YEAR 2023-24

Water Use Component	Actual Water Use (Acre-Feet)	Urban Water Use Objective (Acre-Feet)	Result			
Residential Water Use, Indoor & Outdoor	31,570	35,357	89%			
Outdoor Irrigation with DIMs*	23,963	23,963	100%			
System Water Loss	2,131	2,820	76%			
Bonus Incentive	N/A	6,214				
Final Comparison of Actual Water Use to Objective	57,664	68,354	84%			
*DIM Objective is equal to actual usage until 2028 when the DIM requirements become effective.						





NEXT STEPS – IMPLEMENTATION

- Update Landscape Area Measurement Data
 - New construction
 - Landscape size changes
 - Recycled water conversions
- CII Performance Measures
 - · Classifications for new accounts
 - Continue cost effective programs that satisfy BMPs
 - Advocate for relevant regional programs
- Policy Engagement
- Annual Reporting
 - Compliance required in 2027 and thereafter





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February 6, 2025 Prepared and submitted by: C. Compton Approved by: Paul A. Cook

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

2025 LEGISLATIVE AND REGULATORY UPDATE

SUMMARY:

This report provides an update on the 2025-2026 legislative session, regulatory issues, and IRWD priorities. As legislation and regulations develop, staff will provide updates and recommendations to the Water Resources Policy and Communications Committee and the Board, as appropriate.

Staff recommends the Board consider the following actions / positions:

- *AB 259 (Rubio) Local Agency Teleconference Meetings: "SUPPORT";*
- AB 269 (Bennett) Dam Safety and Climate Resilience Local Assistance: "OPPOSE"
- SB 72 (Caballero) The California Water Plan: Long-Term Supply Targets: "SUPPORT";

BACKGROUND:

The 2025-2026 state legislative session convened on December 5, 2024. New members of the Legislature were sworn into office that day. The Legislature then recessed until January 6, 2025, when reconvened the first year of the 2025-2026 legislative session.

January 24 was the last day for bills to be submitted to the Office of the Legislative Counsel, with the bill introduction deadline this year being February 21, although resolutions and constitutional amendments can be introduced after that date. The first policy committee deadlines are in early May.

A copy of the Legislative Matrix is provided as Exhibit "A". Links to the bills discussed below are included within each discussion, unless a separate exhibit is noted.

State Budget Update:

Governor's 2025-2026 State Budget Proposal:

On January 10, Governor Gavin Newsom presented his proposed California state budget for Fiscal Year 2025-2026 (FY 2025-26), which initially projected a positive fiscal outlook. The proposed budget forecasted an increase of \$16.5 billion in General Fund revenues over the 2024 Budget Act, based on optimistic economic conditions. The Governor's budget message emphasized fiscal prudence, prioritizing funding for critical programs while exercising caution regarding new fiscal commitments to mitigate potential risks.

Less than a week later, the fiscal outlook has changed drastically due to the catastrophic wildfires in Southern California, particularly in Los Angeles County. The fires are now estimated to have caused damage exceeding \$250 billion, surpassing the economic toll of Hurricane Katrina in 2005. In response to the fires, the Governor expanded the scope of the Special Session to include emergency funding for disaster relief and recovery efforts.

Given the scale of the damage, additional budgetary changes are likely until the final budget is adopted in late June, and fiscal uncertainties will persist as the full extent of the economic impact is yet to be fully assessed. Staff will continue to monitor developments and provide updates as new information becomes available.

Proposition 4 Funding:

In November, Proposition 4 was approved by voters, authorizing a bond measure aimed at funding climate-related initiatives to address critical challenges, including wildfires, water accessibility, and climate resilience. The bond measure allocates funds across various key areas, such as Water Resilience and Management, Wildfire and Forest Resilience, Biodiversity Protection and Nature-Based Solutions, and Clean Air and Community Programs.

Initially, it was expected that the bond issuance would be distributed over multiple years, with funds directed toward qualified projects in a phased approach across multiple programs with \$325 million being proposed in the first year of Proposition 4 distributions for the Wildfire and Forest Resilience programs. Due to the wildfires, the funding allocations and specific funding timeline for Proposition 4 proposed in the first distribution are likely to change from what the Governor had proposed. There is a high potential that more wildfire and forest resilience funding is accelerated, and funds for water infrastructure are pushed to another fiscal year.

In response to this evolving situation, staff, alongside the Dam Safety Coalition, are actively engaging in discussions to ensure that Proposition 4 funds are distributed appropriately given the State's needs while still ensuring funding for dam safety and other important climate resiliency efforts are included in the initial distribution.

Staff will continue to provide updates as the funding process progresses and further details become available.

2024 State Legislative Update:

AB 259 (Rubio) Local Agency Teleconference Meetings:

In 2022, Assemblymember Blanca Rubio (AD-48, Baldwin Park) authored AB 2449, which took effect on January 1, 2023. AB 2249 allows local agencies to use alternative Brown Act meeting procedures in the event a board member is absent due to "just cause" or "emergency circumstances." The bill allows board members affected by illness, travel, or emergencies to participate remotely.

Although AB 2449's provisions have been amended since its enactment, its sunset date has remained unchanged, and these "just cause" and "emergency" provisions are set to expire at the end of 2025. AB 259, which is sponsored by the California Special Districts Association (CSDA), would eliminate the sunset.

Since its enactment, IRWD has benefited from AB 2449's "just cause" and "emergency" provisions. Staff recommends the Board adopt a "support" position on AB 259.

AB 269 (Bennett) Dam Safety and Climate Resilience Local Assistance:

AB 269, as introduced by Assemblymember Steve Bennett (AD-38, Ventura), proposes to add a new category of eligible projects to those eligible for funding under the State's Dam Safety and Climate Resilience Local Assistance Program. The Dam Safety and Climate Resilience Local Assistance Program is the program the District and the Dam Safety Coalition were successful in getting established to fund dam safety improvements. AB 269, in addition to dam safety improvement projects, would allow the program to fund dam removal projects.

At the time the Dam Safety and Climate Resilience Local Assistance Program was being created, the inclusion of dam removal projects, as eligible projects, was debated, but that category of projects was left out of the program because there are other funding programs available to fund dam removals projects.

Given that AB 269 would divert limited funding away from dam safety improvement projects, staff recommends that the Board adopt an "oppose" position on AB 269.

SB 72 (Caballero) The California Water Plan: Long-Term Supply Targets:

Senator Anna Caballero (SD-14, Merced) has introduced SB 72. SB 72 would establish long-term water supply targets and call for the Department of Water Resources (DWR) to use those targets in future updates to the California Water Plan. The bill is a reintroduced version of SB 366 (2024), that was authored by Senator Caballero, unanimously pass by both houses of the legislature, and then vetoed by the Governor.

SB 366 was supported by the District along with a broad coalition of water agencies, special districts, and associations, including the California Municipal Utilities Association (CMUA), California Council of Economic and Environmental Balance (CCEEB), and the California State Association of Counties (CSAC).

According to SB 366's veto message, the bill was vetoed by the Governor due to fiscal concerns at the end of the last legislative session. Since then, the coalition has refined the bill's language to reduce costs associated with its implementation should it be enacted.

Staff recommends that the Board adopt a "support" position on SB 72.

Other 2025 State Legislative Updates:

Staff will also provide an oral update to the Board on new developments related to the following:

- Low-income water rate assistance proposals;
- 2025 IRWD sponsored legislation; and
- Other legislative matters of interest to IRWD.

2025 State and Regional Regulatory Update:

The following is a list of state and regional regulations and agency reports staff are monitoring, tracking, or planning to engage in over the next three to 12 months. As the next drafts of the regulations or reports are released for public review and comment, staff will engage, as appropriate. Staff will also provide an oral update on any new developments related to these regulations and other regulations of interest to the District.

The pending regulations and reports actively being tracked include:

- California Natural Resources Agency (CNRA) 30 x 30 California Implementation;
- CNRA's Water Resilience Portfolio Implementation and Resiliency 2.0 Implementation;
- DWR SB 1157 Indoor Water Use Studies;
- State Water Resources Control Board's (State Board) implementation of the Lead and Copper Rule;
- State Board's Safe and Affordable Funding for Equity and Resilience (SAFER) Drinking Water Program;
- State Board's Development of Maximum Contaminant Levels for PFAS;
- South Coast AQMD's Cumulative Impacts from Air Toxics for CEQA Projects;
- South Coast AQMD's Tier 4 Emergency Generator Testing Policy;
- South Coast AQMD's Proposed Rule 317.1 Clean Air Act Nonattainment Fees for 8-Hour Ozone Standards;
- South Coast AQMD's PAR 1146.2 Control of NOx from Large Water Heaters, Small Boilers and Process Heaters; and
- South Coast AQMD's Proposed Rule 1110.4, Emissions from Emergency Generators.

Staff will also provide an update on other regulatory matters of interest to the District.

2025 Federal Legislative and Regulatory Update:

Kern Fan Groundwater Storage Project Outreach:

IRWD's federal advocacy priority in 2025 focuses on seeking federal funding for the South Valley Conveyance and Storage Project and advocating for a reauthorization of the Small Storage Grant Program. Staff will provide an update on those efforts and the District's next steps.

Other Federal Regulatory Updates:

The following is a list of federal regulations and agency reports staff are monitoring, tracking, or planning to engage in over the next three to 12 months. Staff will also provide an oral update on any new developments related to these regulations and other regulations of interest to the District. The pending regulations and reports actively being tracked include:

- U.S. Environmental Protection Agency's (U.S. EPA's) Lead and Copper Rule Improvements; and
- U.S. EPA's Preliminary PFAS Effluent Guidelines Program Plan;

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board adopt "support" positions on AB 259 (Rubio) and SB 72 (Caballero), and an "oppose" position on AB 269 (Bennett).

LIST OF EXHIBITS:

Exhibit "A" – IRWD Legislative Matrix

Note: This page is intentionally left blank.

Exhibit "A"

IRWD 2025 LEGISLATIVE MATRIX

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
CA AB 1 (Connolly (D))	Residential Property Insurance: Wildfire Risk		Requires the Department of Insurance, on specified date to consider whether or not to update its regulations to include additional building hardening measures for property-level mitigation efforts and communitywide wildfire mitigation programs.	12/02/2024: INTRODUCED.
CA AB 5 (Berman (D))	Tallying and Release of Election Results		States the intent of the Legislature to enact legislation that assists counties in the prompt tallying and release of election results.	12/02/2024: INTRODUCED.
CA AB 6 (Ward (D))	Residential Developments: Building Standards: Review		Requires the Department of Housing and Community Development to convene a working group no later than specified date, to research and consider identifying and recommending amendments to state building standards allowing residential developments to be built.	01/21/2025: In ASSEMBLY. Ordered to second reading.
CA AB 12 (Wallis (R))	Low-Carbon Fuel Standard: Regulations		Voids specified amendments to the Low-Carbon Fuel Standard regulations adopted by the State Air Resources Board on specified date.	12/02/2024: INTRODUCED.
CA AB 21 (DeMaio (R))	Taxpayer Protection Act of 2025		Relates to the Taxpayer Protection Act of 2025.	12/02/2024: INTRODUCED.
CA AB 23 (DeMaio (R))	The Cost of Living Reduction Act of 2025		Declares the intent of the Legislature to enact subsequent legislation to reduce the cost of living in California by undertaking specified activities, including, among other things, by suspending all state taxes and fees on gasoline and electric and gas utilities and by requiring the Little Hoover Commission to provide a report on methods to reduce the cost of living in other areas.	12/02/2024: INTRODUCED.
CA AB 24 (DeMaio (R))	Balanced Budget Accountability Act of 2025		Declares the intent of the Legislature to enact a constitutional amendment that would achieve cost savings for the state and that	12/02/2024: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
				-
			would balance the budget by cutting then capping the total annual labor costs in the state budget, requiring state government agencies to competitively source or contract out services, and requiring that both the state budget as a whole and any new program fees be approved by a 2/3 vote of the Legislature.	
CA AB 30 (Alvarez (D))	State Air Resources Board: Gasoline Specifications		Requires the State Air Resources Board to complete a rulemaking on or before July 1, 2025, to adopt specifications for blends of gasoline containing 10.5% to 15% ethanol by volume for use as a transportation fuel. Provides that if the state board does not complete the rulemaking on or before that date, the bill would require that blends of gasoline containing 10.5% to 15% ethanol by volume be treated as approved by the state board and would authorize them to be sold in the state as transportation fuel.	12/02/2024: INTRODUCED.
CA AB 34 (Patterson J (R))	Air Pollution: Regulations: Consumer Costs: Review		Prohibits the State Air Resources Board from adopting any standard, regulation, or rule until the Legislative Analyst has analyzed the cost to the consumer of the proposed standard, regulation, or rule and submitted its analysis to the Legislature.	12/02/2024: INTRODUCED.
CA AB 35 (Alvarez (D))	California Environmental Quality Act: Clean Hydrogen		Provides for limited CEQA review of an application for a discretionary permit or authorization for a clean hydrogen transportation project by requiring the application to be reviewed through a clean hydrogen environmental assessment, unless otherwise requested by the applicant.	12/02/2024: INTRODUCED.
CA AB 39 (Zbur (D))	General Plans: Local Electrification Planning Act		Deems a General plan adopted pursuant to specified provisions as a regional plan for specified purposes. Applies to a city, county, or city and county with a population greater than 75,000 residents.	12/02/2024: INTRODUCED.
CA AB 41 (Macedo (R))	State Air Resources Board: Regulations: Impact Estimate		Require the State Air Resources Board, in consultation with the State Energy Resources Conservation and Development Commission, before adopting or amending a regulation that	12/02/2024: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
			imposes costs on gasoline refiners, distributors, or retailers, to make available to the public, including on its internet website, an estimate of the impact on retail gasoline prices due to the proposed new regulation or the existing regulation and the proposed amendments to that regulation.	
CA AB 43 (Schultz (D))	Wild and Scenic Rivers		Extends, indefinitely, the date by which the Secretary of the Natural Resources Agency is authorized to take the specified actions relating to the addition of rivers or segments of rivers to the state's wild and scenic rivers system.	12/02/2024: INTRODUCED.
CA AB 44 (Schultz (D))	Energy: Electrical Demand Forecasts		States the intent of the Legislature to enact subsequent legislation that would require the State Energy Resources Conservation and Development Commission to develop a set of technical guidance and load modification protocols to enable the state to reduce or modify its electrical demand forecast to improve grid reliability.	12/02/2024: INTRODUCED.
CA AB 52 (Aguiar-Curry (D))	Native American Heritage Commission: Powers and Duties		Makes a nonsubstantive change to existing law which vests the Native American Heritage Commission with specified powers and duties relative to Native American cultural resources.	12/02/2024: INTRODUCED.
CA AB 61 (Pacheco (D))	Electricity and Natural Gas: Legislation		Requests the Public Advocate's Office of the Public Utilities Commission to establish a program to, upon request of the Legislature, analyze legislation that would establish a mandated requirement or program or otherwise affect electrical or gas ratepayers. Requests the office to develop and implement conflict- of-interest provisions that would prohibit a person from participating in an analysis for which the person knows or has reasons to know that the person has a financial interest.	12/02/2024: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
CA AB 62 (McKinnor (D))	Racially Motivated Eminent Domain		States the intent of the Legislature to enact legislation that would assist victims of racially motivated eminent domain in seeking the return of the taken property, other property of equal value, or financial compensation.	12/02/2024: INTRODUCED.
CA AB 66 (Tangipa (R))	Wildfire Prevention: Vegetation Management		Provides that it is the intent of the Legislature to enact subsequent legislation to address wildfires by allowing for more vegetation management within easements.	12/03/2024: INTRODUCED.
CA AB 69 (Calderon (D))	FAIR Plan Policy Renewals		Requires a broker of record to determine if a FAIR Plan policy can be moved to a voluntary market insurance company before the policy is renewed.	12/10/2024: INTRODUCED.
CA AB 70 (Aguiar-Curry (D))	Solid Waste: Pyrolysis		Relates to the Waste Management Act of 1989. Defines pyrolysis as the thermal decomposition of material at elevated temperatures in the absence or near absence of oxygen.	12/11/2024: INTRODUCED.
CA AB 72 (Jackson (D))	Elections: Bengali		Requires elections officials to provide a voter with registration or voting notices, forms, instructions, assistance, or other materials or information relating to the electoral process, including ballots, in Bengali if the voter requests it.	12/12/2024: INTRODUCED.
CA AB 76 (Alvarez (D))	Surplus Land: Exempt Surplus Land: Sectional Planning		Changes specified requirements concerning surplus land so that at least specified percentage of units that are not designated for students, faculty, or staff of an academic institution must be dedicated to lower income households, as specified, and that the land must be developed at an average density of at least 10 units per acre, calculated with respect to the entire sectional planning area and inclusive of housing designated for students, faculty, and staff of an academic institution.	12/16/2024: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
CA AB 82 (Ward (D))	Information Practices Act of 1977: Civil Actions		Makes a nonsubstantive change to the Information Practices Act of 1977, which authorizes an individual to bring an action against an agency under specified conditions, including whenever an agency refuses to comply with an individual's lawful request to inspect certain records.	12/20/2024: INTRODUCED.
CA AB 87 (Boerner (D))	Housing Development: Density Bonuses		States the intent of the Legislature to enact legislation to ensure that Density Bonus Law in its entirety is only applied to residential projects with no portions being used for visitor serving purposes or uses.	01/06/2025: INTRODUCED.
CA AB 93 (Papan (D))	Water Resources: Demands: Artificial Intelligence		Expresses the intent of the Legislature to enact future legislation that would maintain water and energy efficiency to the extent that new technology, including, but not limited to, artificial intelligence, increases the demands on already limited resources.	01/07/2025: INTRODUCED.
CA AB 94 (Bennett (D))	Recall Elections: Successors		Provides that when the local officer is recalled and removed, that officer may not be appointed to fill the vacancy.	01/07/2025: INTRODUCED.
CA AB 99 (Ta (R))	Electrical Corporations: Rates.		Prohibits an electrical corporation from proposing, and the Public Utilities Commission from approving, a rate increase above the rate of inflation, unless the rate increase is approved by a majority of the electrical corporation's customers voting in an election conducted according to specified requirements, and except when the commission determines that the costs underlying the rate increase are directly related to safety enhancements and modernization or to higher commodity or fuel costs.	01/08/2025: INTRODUCED.
CA AB 222 (Bauer-Kahan (D))	Data Centers: Energy Usage Reporting and Modeling		Requires a data center that provides computing resources to a developer for the purpose of developing a covered model, as defined, to estimate the total energy used to develop the covered model and to report that information to the developer. Requires a	01/08/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
			developer, before using the computing resources of a data center to develop a covered model, to inform the data center of the developer's intent to develop a covered model.	
CA AB 226 (Calderon (D))	Insurance		Authorizes the California FAIR Plan Association, if granted prior approval from the commissioner, to request the California Infrastructure and Economic Development Bank to issue bonds, and would authorize the bank to issue those bonds to finance the costs of claims, to increase liquidity and claims-paying capacity of the association, and to refund bonds previously issued for that purpose.	01/09/2025: INTRODUCED.
CA AB 232 (Calderon (D))	Natural Disasters: Catastrophe Savings Accounts		Authorizes a homeowner to establish one catastrophe savings account that, among other things, has the specified purpose of covering the amount of insurance deductibles and other uninsured portions of risks of loss from wildfire, flood, or earthquake. Requires distributions from a catastrophe savings account to be used to cover qualified catastrophe expenses, defined as expenses paid or incurred due to damage to or loss of a homeowner's primary residence caused by a wildfire, flood, or earthquake.	01/13/2025: INTRODUCED.
CA AB 234 (Calderon (D))	California FAIR Plan Association Governing Committee		Requires the Speaker of the Assembly and the Chairperson of the Senate Committee on Rules to serve as nonvoting, ex officio members of the California FAIR Plan Association Governing Committee, and would authorize each to name a designee to serve in their place.	01/13/2025: INTRODUCED.
CA AB 241 (Tangipa (R))	Wildfire and Vegetation Management Voluntary Tax Fund		Allows an individual to designate on their tax return that a specified amount in excess of their tax liability be transferred to the continuously appropriated Wildfire and Vegetation Management Voluntary Tax Contribution Fund, which would be created by this bill. Requires the Franchise Tax Board to revise the tax return form to include a space for the designation of	01/14/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
			contributions to the fund when another voluntary designation is removed from the form or there is space, whichever occurs first.	
CA AB 245 (Gipson (D))	Property Taxation: Disaster Victims		States the intent of the Legislature to enact legislation that would provide meaningful and automatic property tax relief for disaster victims, including fire disasters, in areas of the state proclaimed to be in a state of emergency by the Governor.	01/14/2025: INTRODUCED.
CA AB 253 (Ward (D))	California Residential Private Permitting Review Act		Enacts the California Residential Private Permitting Review Act, which requires a county's or city's building department to prepare a residential building permit fee schedule and post the schedule on the county's or city's internet website, if the county or city prescribes residential building permit fees.	01/15/2025: INTRODUCED.
CA AB 259 (Rubio (D))	Open Meetings: Local Agencies: Teleconferences		Extends, under the Ralph M. Brown Act the alternative teleconferencing procedures indefinitely. Removes a specified date from the act, thereby extending the authorization for a legislative body of a local agency to consider and take action on a request from a member to participate in a meeting remotely due to emergency circumstances, as specified, indefinitely.	01/16/2025: INTRODUCED.
CA AB 261 (Quirk-Silva (D))	Fire Safety: Fire Hazard Severity Zones: Fire Marshal		Authorizes the State Fire Marshal, in periods between the State Fire Marshal's review of areas of the state for recommendations regarding an area's fire hazard severity zone, to confer with entities, including, but not limited to, public agencies, tribes, nonprofit organizations, project applicants, and members of the public, on actions that may impact the degree of fire hazard in an area or the area's recommended fire hazard severity zone designation.	01/16/2025: INTRODUCED.
CA AB 262 (Caloza (D))	California Individual Assistance Act		Enacts the California Individual Assistance Act to establish a grant program to provide financial assistance to local agencies,	01/16/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
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			community-based organizations, and individuals for specified costs related to a disaster, as prescribed. Requires the Director of Emergency Services to allocate from the Disaster Assistance Fund, subject to specified conditions, funds to meet the cost of expenses for those purposes.	
CA AB 263 (Rogers (D))	Scott River: Shasta River: Watersheds		Provides that specified emergency regulations adopted by the State Water Resources Control Board for the Scott River and Shasta River watersheds shall remain in effect until permanent rules establishing and implementing long-term instream flow requirements are adopted for those watersheds.	01/16/2025: INTRODUCED.
CA AB 267 (Macedo (R))	Greenhouse Gas Reduction Fund: High Speed Rail		Suspends the appropriation to the High-Speed Rail Authority for the 2026–27 and 2027–28 fiscal years and would instead require those amounts from moneys collected by the state board to be transferred to the General Fund. Specifies that the transferred amounts shall be available, upon appropriation by the Legislature, to augment funding for water infrastructure and wildfire prevention.	01/17/2025: INTRODUCED.
CA AB 269 (Bennett (D))	Dam Safety and Climate Resilience Local Assistance		Includes the removal of project facilities as additional projects eligible to receive funding under the Dam Safety and Climate Resilience Local Assistance Program.	01/17/2025: INTRODUCED.
CA AB 270 (Petrie-Norris (D))	Office of Emergency Services: Firefighting Activities		Requires the Office of Emergency Services to establish a pilot program to equip the state with the nation's first testbed autonomous firefighting helicopter and the associated configuration, familiarization, and training activities to transition the aircraft into operational use.	01/21/2025: INTRODUCED.
CA AB 272 (Aguiar-Curry (D))	Heavy-Duty Vehicle Inspection and Maintenance Program		Relates to the Heavy-Duty Vehicle Inspection and Maintenance Program. Requires, within 4 years following the full implementation of the program, but not later than February 1,	01/21/2025: INTRODUCED.
Bill No.	Title	IRWD	Summary/Effects	Status
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Author		Position		
			2026, the State Air Resources Board to provide the first of the 2 biennial reports on its internet website.	
CA AB 275 (Petrie-Norris (D))	Office of Emergency Services: Wildfire Response		States the intent of the Legislature to enact legislation to make the SoCal Edison-funded Quick Reaction Force firefighting helitanker program permanent and maintained by the Office of Emergency Services.	01/21/2025: INTRODUCED.
CA AB 286 (Gallagher (R))	Electricity: Mandatory Rate Reduction		Requires the Public Utilities Commission to reduce the kilowatt- per-hour rate for electricity charged to ratepayers by not less than 30%.	01/22/2025: INTRODUCED.
CA AB 287 (Lackey (R))	Elections: Polling Places and Vote Centers		Requires the governing body with jurisdiction over school buildings or other public buildings to instruct the school district or other public administrator to provide the elections official with an adequate amount of space for voting operations and storage of associated supplies. Requires the district administrator to also make accessible parking spaces and parking for assisting voters curbside available, if requested by the elections official.	01/22/2025: INTRODUCED.
CA AB 288 (McKinnor (D))	Public Employment: Labor Relations		Relates to existing law which authorizes an exclusive representative to file a charge of an unfair labor practice with the Public Employment Relations Board alleging a violation of specified provisions only after certain requirements have been met. Deletes the reference to the July 1, 2022, operative date in those provisions.	01/22/2025: INTRODUCED.
CA AB 293 (Bennett (D))	Groundwater Sustainability Agency: Transparency		Requires each groundwater sustainability agency to publish the membership of its board of directors on its internet website, or on the local agency's internet website, as provided. Requires each groundwater sustainability agency to publish a link on its internet website or its local agency's internet website to the location on the Fair Political Practices Commission's internet website where	01/22/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
			the statements of economic interests, filed by the members of the board and executives of the agency, can be viewed.	
CA AB 294 (Gallagher (R))	Recovery from Disaster or Emergency: Funding Priority		Authorizes the Office of Emergency Services to prioritize funding and technical assistance under specified programs, including, but not limited to, for infrastructure and housing recovery projects, in communities that suffered a loss in population and businesses due to a major federal disaster, state of emergency, or local emergency and have unmet recovery needs as a result of a major federal disaster, state of emergency.	01/23/2025: INTRODUCED.
CA AB 295 (Macedo (R))	Environmental Quality Act: Environmental Leadership		Extends the application of the Economic Improvement Through Environmental Leadership Act to water storage projects, water conveyance projects, and groundwater recharge projects that provide public benefits and drought preparedness.	01/23/2025: INTRODUCED.
CA AB 300 (Lackey (R))	Endangered Species: Incidental Take: Wildfire		Authorizes a city, county, city and county, special district, or other local agency to submit to the Department of Fish and Wildlife a wildfire preparedness plan to conduct wildfire preparedness activities on land designated as a fire hazard severity zone that minimizes impacts to wildlife and habitat for candidate, threatened, and endangered species. Requires the wildfire preparedness plan to include, among other things, a brief description of the planned wildfire preparedness activities.	01/23/2025: INTRODUCED.
CA AB 301 (Schiavo (D))	Planning and Zoning: Housing Development Projects		Requires a state department to comply with specified zoning provisions relating to postentitlement phase permits applicable to a local agency. Deems a postentitlement phase permit approved, and all related reviews complete, if a state department fails to meet the time limits for review of an application for that permit. Revises the definition of postentitlement phase permit.	01/23/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
CA AB 303 (Addis (D))	Battery Energy Storage Facilities		Specifies that energy storage systems do not include battery energy storage systems for the above-described purposes. The bill would require the commission to deny applications for a battery energy storage system that are pending as of the effective date of the bill. Prohibits the authorization of a development project that includes a battery energy storage system capable of storing 200 megawatthours or more of energy if the development project is located within 3,200 feet of a specified receptor.	01/23/2025: INTRODUCED.
CA AB 306 (Schultz (D))	Building Regulations: State Building Standards		Prohibits a city or county from making changes to the specified building standards unless a certain condition is met, including that the California Building Standards Commission deems those changes or modifications necessary as emergency standards to protect health and safety.	01/23/2025: INTRODUCED.
CA AB 307 (Petrie-Norris (D))	Safe Drinking Water, Wildfire Prevention, Drought Prep		Requires a specified amount of the Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 to the Department of Forestry and Fire Protection be allocated for purposes of the ALERTCalifornia fire camera mapping system.	01/23/2025: INTRODUCED.
CA AB 311 (McKinnor (D))	Dwelling Units: Persons at Risk of Hness		Reinstates provisions relative to dwellings of persons at risk of homelessness include certain new provisions regarding occupancy. Defines person at risk of homelessness to include any person who is displaced from their residence as a result of a disaster in a disaster-stricken area in which a state of emergency has been proclaimed by the Governor.	01/23/2025: INTRODUCED.
CA AB 317 (Jackson (D))	California First Time Homeowner Dream Act		Exempts from CEQA the new construction of a single-family dwelling that meets specified conditions, including that the project contains one single-family dwelling that is 1,500 square feet or less with no more than 3 bedrooms, the property is	01/24/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
			intended to be sold to a first-time homebuyer, and the lead agency determines that the developer of the project or the property owner provided sufficient legal commitments to meet the requirements of the exemption.	
CA ACA 1 (Valencia (D))	Public Finance		Relates to public finance. Changes the 1.5% required transfer to an undetermined percentage of the estimated amount of General Fund revenues for that fiscal year. Changes the 10% limit on the balance in the Budget Stabilization Account to 20% of the amount of the General Fund proceeds of taxes for the fiscal year estimate, as specified. Specifies that funds transferred under these provisions to the Budget Stabilization Account do not constitute appropriations subject to a specified appropriations limit.	12/02/2024: INTRODUCED.
CA SB 2 (Jones (R))	Low-Carbon Fuel Standard: Regulations		Voids specified amendments to the Low-Carbon Fuel Standard regulations adopted by the State Air Resources Board on November 8, 2024.	12/02/2024: INTRODUCED.
CA SB 3 (Cervantes (D))	Election Results		Expresses the intent of the Legislature to enact legislation to revise the process of reporting election results by county elections officials, and to make modifications to the canvass of the vote.	12/02/2024: INTRODUCED.
CA SB 5 (Cabaldon (D))	Infrastructure Financing Districts		Excludes the taxes levied upon a parcel of land enrolled in or subject to a Williamson Act contract or a farmland security zone contract from the allocation to the infrastructure financing district.	12/02/2024: INTRODUCED.
CA SB 7 (McNerney (D))	Artificial Intelligence.		Declares the intent of the Legislature to enact legislation relating to artificial intelligence.	12/02/2024: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
CA SB 9 (Arreguin (D))	Accessory Dwelling Units		Prohibits a local agency from imposing an owner-occupant requirement for a proposed or existing accessory dwelling unit whether or not the local agency has adopted a local ordinance.	12/02/2024: INTRODUCED.
CA SB 11 (Ashby (D))	Artificial Intelligence Technology		Defines various terms related to artificial intelligence and synthetic content, and would clarify that use of such synthetic content is deemed to be a false personation for purposes of these and other criminal provisions.	12/02/2024: INTRODUCED.
CA SB 18 (Rubio (D))	Food Access		States the intent of the Legislature to enact legislation that would address food affordability issues and expand access to healthy foods in food deserts and areas at risk of becoming food deserts in California.	12/02/2024: INTRODUCED.
CA SB 21 (Durazo (D))	Workforce Development: Poverty-Reducing Labor Standards		Creates the Equity, Climate Resilience, and Quality Jobs Fund in the State Treasury and would require, to the extent permissible under federal law, 1% of all qualified moneys received from the federal government pursuant to any federal jobs act to be transferred into the fund. The bill would make moneys in the fund available upon appropriation to the Workforce Development Board for specified purposes.	12/02/2024: INTRODUCED.
CA SB 31 (McNerney (D))	Water Quality: Water Recycling Facilities: State Policy		Makes a nonsubstantive change to existing law which states the intention of the Legislature that the state undertake all possible steps to encourage development of water recycling facilities so that recycled water may be made available to help meet the growing water requirements of the state.	12/02/2024: INTRODUCED.
CA SB 44 (Umberg (D))	Fish: Annual Provisional Stocking Document		Makes a nonsubstantive change to provisions of existing law which requires the Department of Fish and Wildlife, before January 1 of each year, to make publicly available on the department's internet website a specified annual document that	12/05/2024: INTRODUCED.

Bill No.	Title	IRWD Position	Summary/Effects	Status
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			contains conditional or provisional plans for freshwater fish plants.	
CA SB 45 (Padilla (D))	Recycling: Beverage Containers: Tethered Plastic Caps		Deletes an authorization under the California Beverage Container Recycling and Litter Reduction Act to pay a quality incentive payment of up to specified amount per ton to qualified recyclers for thermoform plastic containers diverted from curbside recycling programs. Requires, as specified, beverage containers, intended for sale in this state, to have a cap that is tethered to the container that prevents the separation of the cap from the container when the cap is removed from the container.	12/12/2024: INTRODUCED.
CA SB 52 (Perez S (D))	Housing Rental Rates and Occupancy Levels: Algorithmic		Makes it unlawful for any person to sell, license, or otherwise provide to a landlord an algorithmic device that advises on rental rates or occupancy levels for residential dwelling units, and would also make it unlawful for a landlord to use an algorithmic device to set rental rates or occupancy levels for residential dwelling units.	12/20/2024: INTRODUCED.
CA SB 53 (Wiener (D))	Artificial Intelligence: Frontier Models		Declares the intent of the Legislature to enact legislation that would establish safeguards for the development of AI frontier models and that would build state capacity for the use of AI, that may include, but is not limited to, the findings of the Joint California Policy Working Group on AI Frontier Models established by the Governor.	01/07/2025: INTRODUCED.
CA SB 57 (Padilla (D))	Data Centers: Rates		Enacts Ratepayer and Technological Innovation Protection Act. Requires the Public Utilities Commission, on or before July 1, 2026, to establish a special rate structure for data centers, as defined, that, among other things, protects residential ratepayers and small businesses and prevents cost shifts to those existing ratepayers and ensures electrical grid investments to serve data centers are fully recovered.	01/08/2025: INTRODUCED.

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
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CA SB 72 (Caballero (D))	The California Water Plan: Long-Term Supply Targets		Revises and recasts certain provisions regarding The California Water Plan to, among other things, require the department to expand the membership of the advisory committee to include tribes, labor, and environmental justice interests. Requires the Department of Water Resources, as part of the 2033 update to the plan, to update the interim planning target for 2050, as provided.	01/15/2025: INTRODUCED.
CA SB 73 (Cervantes (D))	California Environmental Quality Act: Exemptions		Exempts from the California Environmental Quality Act from its requirements certain residential, employment center, and mixed- use development projects meeting specified criteria, including that the project is located in a transit priority area and that the project is undertaken and is consistent with a specific plan for which an environmental impact report has been certified.	01/15/2025: INTRODUCED.
CA SB 74 (Seyarto (R))	Office of Land Use and Climate Innovation		Exempts The California Environmental Quality Act (CEQA) fort completion of an environmental impact report (EIR) on a project that it proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not have that effect, located in a very low vehicle travel area, as defined.	01/15/2025: INTRODUCED.
CA SB 77 (Grove (R))	State Vehicle Fleet: Zero- Emission Vehicles		Requires the Department of General Services to require a supplier of zero-emission vehicles purchased for the state vehicle fleet to certify that the raw materials used in the manufacturing of the zero-emission vehicles, including, but not limited to, cobalt and lithium, come from mining operations that are free of child labor.	01/15/2025: INTRODUCED.
CA SB 79 (Wiener (D))	Planning and zoning: Housing Development: Transit		Declares the intent of the Legislature to enact legislation that would make housing more affordable for California families, reduce greenhouse gas emissions, and enhance public transit systems by, among other things, requiring the upzoning of land	01/15/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
			near rail stations and rapid bus lines to encourage transit-oriented development.	
CA SB 88 (Caballero (D))	Air Resources: Carbon Emissions: Biomass		Requires the State Air Resources Board, on or before January 1, 2027, to finalize the standardized system and historic baseline for Green House Gases. Requires the state board, on or before January 1, 2028, to adopt a method of quantification or a lifecycle model for avoided carbon emissions, including, carbon dioxide, methane, and black carbon, from wildfire from the application of prescribed fire to forest biomass resources and agricultural biomass resources, and to develop a carbon credit protocol.	01/22/2025: INTRODUCED.
CA SB 89 (Weber (D))	Pesticide Use: Glyphosate		States the intent of the Legislature to enact subsequent legislation to restrict the use of pesticides containing glyphosate for nonagricultural purposes.	01/22/2025: INTRODUCED.
CA SB 90 (Seyarto (R))	Safe Drinking Water, Wildfire Prevention, Drought		Includes in the list of eligible projects under Safe Drinking Water, Wildfire Prevention, Drought Preparedness, and Clean Air Bond Act of 2024 grants from the entities for improvements to public evacuation routes in very high and high fire hazard severity zones, mobile rigid dip tanks, as defined, to support firefighting efforts, prepositioned mobile rigid water storage, as defined, and improvements to the response and effectiveness of fire engines and helicopters.	01/22/2025: INTRODUCED.
CA SB 92 (Blakespear (D))	Housing Development: Density Bonuses: Mixed- Use		Revises and recasts the definition of "housing development" for purposes of the Density Bonus Law to instead mean a development project for 5 or more residential units, including mixed-use developments if at least two thirds of the square footage of the mixed-use development is designated for residential use, as specified.	01/22/2025: INTRODUCED.

Bill No.	Title	IRWD	Summary/Effects	Status
Author		Position		
CA SCR 3 (Laird (D))	Safe Drinking Water Act: 50th Anniversary		Commemorates the 50th anniversary of the Safe Drinking Water Act, celebrates the achievements and progress made under this essential law, and expresses its commitment to the continued protection and improvement of California's drinking water resources.	01/22/2025: In SENATE. Ordered to third reading.
US HR 231 (Hageman (R))	Energy and Water Development and Related Agencies		Amends the Energy and Water Development and Related Agencies Appropriations Act, to reauthorize the Colorado River System conservation pilot program.	01/07/2025: To HOUSE Committee on NATURAL RESOURCES.
US HR 331 (Fulcher (R))	Aquifer Recharge Flexibility Clarification Act		Amends the Aquifer Recharge Flexibility Act to clarify a provision relating to conveyances for aquifer recharge purposes.	01/13/2025: To HOUSE Committee on NATURAL RESOURCES.
US HR 337 (Costa (D))	Groundwater Recharge and Water Supply Support Act		Provides technical and financial assistance for groundwater recharge, aquifer storage, and water source substitution projects.	01/13/2025: To HOUSE Committee on NATURAL RESOURCES.
US HR 338 (Costa (D))	Enhanced Surface and Groundwater Storage Act	SUPPORT	Amends the Infrastructure Investment and Jobs Act to increase surface water and groundwater storage.	01/13/2025: To HOUSE Committee on NATURAL RESOURCES.
US HR 471 (Westerman (R))	Fix Our Forests Act		Expedites the National Environmental Policy Act of 1969; improves forest management activities on National Forest System lands, on public lands under the jurisdiction of the Bureau of Land Management, and on Tribal lands to return resilience to overgrown, fire prone forested lands, and for other purposes.	01/23/2025: In HOUSE. Passed HOUSE. ****To SENATE.
US HJR 18 (Palmer (R))	National Primary Drinking Water Regulations		Provides for congressional disapproval under a specified chapter and title, United States Code, of the rule submitted by the Environmental Protection Agency relating to "National Primary Drinking Water Regulations for Lead and Copper: Improvements (LCRI)".	01/13/2025: To HOUSE Committee on ENERGY AND COMMERCE.

Bill No. Author	Title	IRWD Position	Summary/Effects	Status
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February 6, 2025 Prepared by: E. Akiyoshi Submitted by: F. Sanchez / P. Weghorst Approved by: Paul A. Cook

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

WATER SUPPLY ASSESSMENT AND WATER SUPPLY VERIFICATION FOR THE VISTA POINT PROJECT

SUMMARY:

In December 2024, staff received a request from the City of Irvine to prepare a Water Supply Assessment (WSA) and Water Supply Verification (WSV) for the Vista Point Project, located in IRWD's Planning Area 25. Staff prepared the WSA and WSV for the proposed project and recommends Board approval of both documents.

BACKGROUND:

The proposed Vista Point Project in the City of Irvine is designed for the construction of 2,500 new residential dwelling units on approximately 40 acres of the University Research Park area. The project site is located in Planning Area 25, along Academy Way. The project is included in the existing City of Irvine General Plan. A location map of the Vista Point Project is provided as Exhibit "A."

In December, the City of Irvine requested that IRWD prepare both a WSA and WSV for the Vista Point Project consistent with SB 610 and SB 221 that were passed and signed by the Governor of California in 2001. Both laws went into effect in January 2002. Staff has prepared both documents as described below.

Water Supply Assessment:

The WSA for the proposed Vista Point Project was prepared based on information from the most recent IRWD Water Resources Master Plan. The WSA concludes that 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. Estimates for a normal year in 2045 show an increase in IRWD potable water demands of 330 acre-feet per year (AFY) from 84,527 AF at baseline demand to 84,857 AF with the project. In addition, non-potable demand increases by 13 AFY in 2045 from 29,326 AF at baseline to 29,339 AF with the project. This demand is in addition to the existing and planned future uses including, but not limited to, agricultural and manufacturing. The completed WSA is provided as Exhibit "B".

Water Supply Verification:

A WSV has been completed for the proposed project and is provided as Exhibit "C". The data in the WSV is based upon the prepared WSA which contains IRWD's determination that a sufficient water supply is available. SB 221 requires several additional 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 the attached

Water Resources Policy and Communications Committee: Water Supply Assessment and Water Supply Verification for the Vista Point Project February 6, 2025 Page 2

WSV. This information and the IRWD approved WSA reflect 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 within the demands identified by that WSA. In accordance with this procedure, the attached WSV is based on the WSA and on information contained in the WSV.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board approve the Water Supply Assessment and contingent upon approval of the Water Supply Assessment, approve the Water Supply Verification for the Vista Point Project.

LIST OF EXHIBITS:

Exhibit "A" – Vista Point Project Location Map Exhibit "B" – Water Supply Assessment for the Vista Point Project Exhibit "C" – Water Supply Verification for the Vista Point Project Exhibit "A"

Vista Point Project in PA25



Note: This page is intentionally left blank.

Exhibit "B"

IRVINE RANCH WATER DISTRICT ASSESSMENT OF WATER SUPPLY

Water Code §10910 et seq.

To: (Lead Agency)

<u>City of Irvine</u> One Civic Center Plaza Irvine, CA 92623-9575

(Applicant)
The Irvine Company
550 Newport Center Drive
Newport Beach, CA 92660

Project Information

Project Title: Vista Point

\boxtimes	Residential: No. of dwelling units: 2,500 dwelling units (See Exhibit B)
	Shopping center or business: No. of employees N/A Sq. ft. of floor space N/A
	Commercial office: No. of employees Sq. ft. of floor space
	Hotel or motel: No. of rooms
	Industrial, manufacturing or processing: No. of employeesNo. of acres
	Sq. ft. of floor space
	Mixed use (check and complete all above that apply)
	Other:

Assessment of Availability of Water Supply

On ______ 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 \Box was \boxtimes 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

Date

Title

Water Supply Assessment Information

Purpose of Assessment

Irvine Ranch Water District ("IRWD") has been identified by the City 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 City with an assessment of water supply availability ("assessment") for defined types of projects. The Project has been found by the City to be a project requiring an assessment. The City 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 *et seq.* (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 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 (2020 UWMP) was adopted in June 2021.

In addition to the WRMP and the 2020 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 use efficiency 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 temporarily 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 by 7% in the assessment during both "single-dry" and "multiple-dry" years. This increase in estimated demands is considered conservative and is consistent with the Municipal Water District of Orange County's ("MWDOC") 2020 UWMP which assumes increased demands in single-dry and multiple dry years of 6% based on MWDOC's Orange County Reliability Study (MWDOC 2020 UWMP, pg. 7-2). The Metropolitan Water District of Southern California ("MWD") also considers these weather variables in their climate adjustment factors when forecasting demands, as documented in MWD's 2020 UWMP which shows an average increase of 8% for single dry year demands (MWD 2020 UWMP Tables 2-4, 2-5, 2-6) and also documented in their 2020 Integrated Resources Plan - Regional Needs Assessment (2022).

Planning horizon. In accordance with Water Code Section 10910, this assessment reviews demands and supplies covering a 20-year planning horizon. For consistency with IRWD's WRMP, the assessment reviews demands and supplies through the year 2045, which is considered to include build-out or "ultimate development".

Assessment of demands. Water demands are reviewed in this assessment for three development projections (to 2045):

• 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.

• <u>Full WRMP build-out ("full build-out")</u>. 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 in 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; recycled sewage; and supplemental imported water supplied by MWD through the MWDOC. 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 multipledry 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 the majority of all of IRWD's potable supply, and recycled water, groundwater and imported water comprise all of IRWD's nonpotable supply. Groundwater production typically remains constant or may increase 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 2020 Urban Water Management Plan (MWD 2020 UWMP) concludes that MWD has supply capabilities sufficient to meet expected demands from 2025 through 2045 under a single dry year condition and a period of drought lasting five consecutive water years, as well as in a normal water year hydrologic condition. (See also Section 2(b) (1) "IMPORTED SUPPLY -ADDITIONAL INFORMATION," below.) Recycled 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 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 annual demands for the *baseline, with-project* and *full build-out* scenarios projected under the normal year, and the single- and multiple-dry year conditions through the year 2045. (Figures 1, 2 and 3.) IRWD plans to proceed with the implementation of future potable supplies (*under development*), as shown in the Figures, to improve local reliability during dry-year conditions.

• Adequate *currently available* potable water supply capacity is available to meet *peak-flow* (maximum day) demands for all demand projections through the year 2045. (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 2045. (Figures 5, 6, 7 and 8.) IRWD has implemented all planned 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 operational limits on Delta pumping. See "*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's information concerning operational limits on Delta pumping. See "*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, which can provide additional reliability during dry years or emergencies. See "*IRWD*'s *Evaluation of Effect of Reduced MWD Supplies to IRWD,*" below.

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, 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 have an effect on State Water Project ("SWP") operations and supplies. On June 4, 2009, a federal biological opinion imposed rules that further restrict water diversions from the Delta to protect endangered salmon and other endangered fish species. Several proceedings concerning Delta operations were initiated 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 ("BDCP") process were established to identify long-term solutions for the Delta. In addition, State and federal agencies and water user entities are currently engaged in the development of the Delta Conveyance Project (previously California WaterFix), which is aimed at making physical and operational improvements in the Delta necessary to improve south of the Delta SWP water supplies and water quality and protect ecosystem health in the Delta (MWD 2020 UWMP). 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 address uncertainties in expected SWP supplies, in October 2007, MWD prepared its 2007 Integrated Resources Plan ("IRP") Implementation Report, in which MWD estimated that it could see as much as up to a 22% reduction on average of its SWP supplies based on the court order. As part of its ongoing long term planning, in its 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 2010 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. 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. The 2010 IRP Update includes MWD's Adaptive Resource Management Strategy 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.

In January 2016, MWD adopted its 2015 IRP Update. In the 2015 IRP Update, MWD continued its Adaptive Resource 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 that additional actions are needed in investments in conservation, local supplies, the Delta Conveyance Project (previously California WaterFix), and stabilizing Colorado River supplies. Among the supply actions, MWD will continue to work collaboratively with state and federal agencies on the California WaterFix, maximize its storage and transfer approach, and continue to develop and protect local supplies and conservation.

MWD is currently developing its 2020 IRP Update and has completed and adopted a 2020 IRP Regional Needs Assessment which is considered Phase 1 of the 2020 IRP. A One Water Implementation phase will be Phase 2 of the 2020 IRP. The One Water Implementation will take the results and findings of Phase 1 to identify integrated regional solutions. It will include an updated Adaptive Management Strategy, policies, programs and projects to address the findings and mitigate any potential shortages.

IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD: In the MWD 2020 UWMP, MWD states it has supply capability that would be sufficient to meet expected demands from 2025 to 2045 under single dry year and multiple dry year conditions.¹

Based on the prior MWD 2007 IRP Implementation Report and also reported in the MWD 2015 IRP, MWD estimated that it could receive reduction of SWP supplies of up to 22% on average until a long-term solution was implemented. For purposes of ensuring a conservative analysis, IRWD made an evaluation of the effect of the 22% estimated reduction of MWD's SWP supplies on its overall imported supplies. IRWD estimates that 22% reduction of SWP supplies conservatively translates to approximately 16% reduction in all of MWD's imported supplies over the years 2025 through 2045. For this purpose, it is assumed that MWD's total supplies consist only of imported SWP and Colorado deliveries. Based on this estimate, this assessment uses a 16% reduction in MWD supplies available to IRWD for the years 2025 through 2045, 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. (See also the footnote 1).

Per the MWD 2020 UWMP, MWD performs water shortage planning in its Water Surplus and Drought Management ("WSDM") Plan (1988) which guides MWD's planning and operations during both shortage and surplus conditions. Furthermore, MWD developed the Water Supply Allocation Plan ("WSAP") (dated February 2009, updated December 2014) which provides standardized methodology for allocation of MWD's supplies during times of shortage. The WSDM Plan distinguishes between shortages, severe shortages, and extreme shortages.

¹ The MWD 2020 UWMP utilized DWR's 2019 SWP Delivery Capability Report to estimate future SWP supplies for 2025 through 2045. These estimates incorporate the effect of regulatory requirements in accordance with biological opinions and also reflect potential impacts of climate change on SWP operations. Tables A.3-7 of the MWD 2020 UWMP reflect 58% or 1.1 MAF in MWD's expected average year SWP entitlement supplies. This amount is a higher expected average than MWD's 2015 estimate of 984,000 AF. For purposes of a conservative analysis, IRWD has used the 22% reduction in its supplies from MWD as the basis of IRWD's analysis.

These terms have specific meanings relating to MWD's ability to deliver water and the actions it takes. In June 2008, MWD's Board adopted a Water Supply Condition Framework to communicate the urgency of the region's water supply situation and the need for further water conservation to reduce regional demands, MWD uses the WSDM Plan and Framework to determine if a WSAP is recommended.

As an alternative means of analyzing the effect of reduced MWD supplies on IRWD, 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

Figures 1a, 2a, and 3a show IRWD's estimated supplies (average and single and multiple dry years) under a short-term MWD water supply allocation scenario whereby MWD declares a shortage stage under its WSAP, and a cutback is applied to IRWD's actual usage rather than its connected capacity. IRWD's evaluation of reduced MWD supplies to IRWD as shown in Figures 1a, 2a and 3a conservatively analyzes the effect of up to a MWD level 5 Regional Shortage Level. In addition, these Figures do not reflect a reduction in demands, thus representing a more conservative view of IRWD's supply capability. (see "*Recent Actions Related to Drought Conditions"* below)

On April 14, 2015, MWD approved the implementation of its WSAP at a level 3 Regional Shortage Level and an effective 15% reduction in regional deliveries effective July 1, 2015, through June 30, 2016. As a result of IRWD's diversified water supplies, IRWD is reliant on MWD for only 20% of its total supplies. IRWD's evaluation of reduced MWD supplies to IRWD as shown in Figures 1a, 2a and 3a includes MWD's 2015 actions to implement a level 3 Regional Shortage Level and 15% reduction.

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

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 "2021-2022 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, 2007) 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.

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 MWD WSAP.³ IRWD may also convert non-potable water uses to recycled water as a way to conserve potable water. In addition, if needed, resultant net shortage levels can be addressed by demand reduction programs as described in IRWD's updated Water Shortage Contingency Plan adopted in 2021. IRWD's Water Shortage Contingency Plan provides procedures for responding to various levels of supply shortages through a combination of supply augmentation and demand management measures. As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and are used as necessary and appropriate during declared shortage levels.

It can be noted that IRWD's above approach is conservative, in that IRWD evaluates the effect of the 16% reduction through 2045 and shows the effect of current allocation scenarios in all of the five-year increments. However, 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. In 2012, DWR adopted phase 1 of its Climate Action Plan, its department-wide plan for reducing greenhouse gas emissions (GHG). In September 2018, the DWR released phase 2 of its Climate Action Plan, which is DWR's guide to addressing climate change in the programs, projects, and activities over which it has authority. Per this guidance, California's climate policy focuses on reducing GHG emissions, preparing for climate change impacts, and supporting climate-related research to inform policy responses and decision-making processes.

In MWD's 2015 IRP Update, MWD recognizes there is additional risk and uncertainty associated with climate change that may affect future supply and demands. In the 2015 IRP Update, MWD states that it plans to hedge against supply and demand uncertainties by implementing a long-term plan that recognizes the risk and provides resource development to offset the risk. Per the MWD 2020 UWMP, for longer term risks, like climate change, MWD established a Robust Decision Making ("RDM") approach that can show how vulnerable the region's reliability is to the longer-term risks such as climate change and can also establish "signposts" that can be monitored to see when crucial changes may be happening. MWD states in its 2020 UWMP that the RDM analysis was valuable in identifying vulnerabilities to its 2015 IRP approach to long-term reliability and in understanding how climate change would best be incorporated into the 2020 IRP.

Per the MWD 2020 UWMP, MWD continues to incorporate current climate change science into its planning efforts and MWD has made great efforts to implement GHG mitigation programs and policies for its facilities and operations. In 2022, MWD released a Climate Action Plan which complements MWD's IRP planning process and set reduction targets and outlined strategies to reduce emission levels by 2045. In MWD's 2020 IRP Regional Needs Assessment, MWD finds that SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions. In this report, MWD assesses climate

³ IRWD has developed water banking projects ("Water Bank") in Kern County, California and has entered into a 30year water banking partnership with Rosedale-Rio Bravo Water Storage District to operate IRWD's Strand Ranch and Stockdale West portions 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.

vulnerabilities and the need for future projects such as indirect potable reuse, stormwater capture, and expanded storage capacity to mitigate and adapt to these vulnerabilities and ensure future resilience. Specific climate change impacts on 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 (MWD 2020 UWMP) 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 DWR's investments in improvements on the SWP and the long term Delta plan in the MWD 2020 UWMP (pages 3-19 to 3-23). IRWD has also addressed supply interruption planning in its WRMP and 2020 UWMP.

Recent Actions Related to Drought Conditions. In response to 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 included 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 its 2013 potable water use 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 its WSAP at a level 3 Regional Shortage Level and a 15% reduction in regional deliveries effective July 1, 2015, through June 30, 2016. During this period, IRWD continued to implement actions to reduce potable water demands during the drought; however, this did not affect IRWD's long-term supply capability to meet the demands. On April 7, 2017, Governor Brown rescinded the Executive Order.

In California's most recent drought (2021-2023), in July 2021, Governor Newsom called for voluntary 15 percent reduction in potable water use from all urban suppliers. Consistent with the Governor's Executive Order, IRWD implemented Level 2 of its Water Shortage Contingency Plan, although IRWD had no projected shortages in supplies. In March 2023, Governor Newsom rescinded the Executive Order.

As discussed under *"IRWD's Evaluation of Effect of Reduced MWD Supplies to IRWD"* (see above), IRWD has effectively analyzed an imported water supply reduction up to a level 5 Regional Shortage Stage in Figures 1a, 2a, 3a. These Figures, however, 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 Governors' 2015 and 2021 orders, IRWD's conservative supply-sufficiency analysis in Figures 1a, 2a and 3a does not include the ordered reduction in potable demands.

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 "Actions on Delta Pumping" above.

125,000 Future Potable MWD Imported Irvine Desalter 100,000 Baker Water Treatment Plant (native portion) Acre-Feet per Year DRWF/DATS/OPA Supplies Under 75,000 Development Maximum Supply Capability ---- Baseline Demand 50,000 - Demand with Project WRMP Build-out Demand 25,000 0 2025 2030 2035 2040 2045

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

(in acre-feet per year)	2025	2030	2035	2040	2045
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	51,027	51,027	51,027	51,027	51,027
DRWF/DATS/OPA	39,818	39,818	39,818	39,818	39,818
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	2,400	2,400	2,400	2,400	2,400
Baker Water Treatment Plant (native portion)	3,048	3,048	3,048	3,048	3,048
Supplies Under Development					
Future Potable	-	2,800	2,800	2,800	2,800
Maximum Supply Capability	101,911	104,711	104,711	104,711	104,711
Baseline Demand	76,462	81,275	84,106	84,316	84,527
Demand with Project	76,459	81,603	84,434	84,645	84,857
WRMP Build-out Demand	76,459	81,603	84,434	84,645	84,857
Reserve Supply with Project	25,452	23,108	20,277	20,066	19,854

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments.

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

Baker Water Treatment Plant is supplied untreated imported water and native water from Irvine Lake.

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



	2020	2000	2000	2010	2010
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	51,027	51,027	51,027	51,027	51,027
DRWF/DATS/OPA	39,818	39,818	39,818	39,818	39,818
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	2,400	2,400	2,400	2,400	2,400
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	2,800	2,800	2,800	2,800
Maximum Supply Capability	99,863	102,663	102,663	102,663	102,663
Baseline Demand	81,815	86,964	89,993	90,218	90,444
Demand with Project	81,811	87,315	90,344	90,570	90,797
WRMP Build-out Demand	81,811	87,315	90,344	90,570	90,797
Reserve Supply with Project	18,052	15,348	12,319	12,093	11,866

Notes: Supplies identical to Normal-Year based on Metropolitan's 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. Baker Water Treatment Plant is supplied untreated imported water and native water from Irvine Lake.



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

Notes: Supplies identical to Normal-Year based on Metropolitan's 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. Baker Water Treatment Plant is supplied untreated imported water and native water from Irvine Lake.

300 Future Potable MWD Imported C 250 Irvine Desalter Baker Water Treatment cubic feet per second (cfs) Г Plant (native portion) DRWF/DATS/OPA 200 Demand with Project Supplies Under Development 150 --- Baseline Demand Maximum Supply Capability WRMP Build-out 100 Demand 50 0 2025 2035 2030 2040 2045

(in cfs)	2025	2030	2035	2040	2045
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	130.4	130.4	130.4	130.4	130.4
DRWF/DATS/OPA	96.7	96.7	96.7	96.7	96.7
Irvine Desalter	9.7	9.7	9.7	9.7	9.7
Wells 21 & 22	8.6	8.6	8.6	8.6	8.6
Baker Water Treatment Plant (native portion) <u>Supplies Under Development</u>	4.2	4.2	4.2	4.2	4.2
Future Potable	-	3.9	3.9	3.9	3.9
Maximum Supply Capability	249.6	253.4	253.4	253.4	253.4
Baseline Demand	190.1	202.1	209.1	209.6	210.2
Demand with Project	190.1	202.9	209.9	210.4	211.0
WRMP Build-out Demand	190.1	202.9	209.9	210.4	211.0
Reserve Supply with Project	59.5	50.6	43.5	43.0	42.5

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments.

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

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



Note: Downward trend reflects reduction in agricultural use over time. MWD Imported Supplies are shown at 16% reduction off of average connected capacity. By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments.

30,006

25,191

16

29,623

33,197

29,193

33,627

29,266

33,554

29,339

33,481

WRMP Build-out Demand

Reserve Supply with Project

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



(in acre-feet per year)	2025	2030	2035	2040	2045
Current Nonpotable Supplies					
Existing MWRP&LAWRP	34,389	34,389	34,389	34,389	34,389
Future MWRP&LAWRP	-	7,623	7,623	7,623	7,623
MWD Imported (Baker, ILP)	17,347	17,347	17,347	17,347	17,347
Irvine Desalter	3,461	3,461	3,461	3,461	3,461
Native Water	-	-	-	-	-
Maximum Supply Capability	55,197	62,820	62,820	62,820	62,820
Baseline Demand	32,108	31,682	31,222	31,300	31,378
Demand with Project	32,107	31,697	31,236	31,314	31,393
WRMP Build-out Demand	32,107	31,697	31,236	31,314	31,393
Reserve Supply with Project	23,090	31,123	31,584	31,506	31,427

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

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

By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments.

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



(in acre-feet per year)	2025	2030	2035	2040	2045
Current Nonpotable Supplies					
Existing MWRP&LAWRP	34,389	34,389	34,389	34,389	34,389
Future MWRP&LAWRP	-	7,623	7,623	7,623	7,623
MWD Imported (Baker, ILP)	17,347	17,347	17,347	17,347	17,347
Irvine Desalter	3,461	3,461	3,461	3,461	3,461
Native Water	-	-	-	-	-
Maximum Supply Capability	55,197	62,820	62,820	62,820	62,820
Baseline Demand	32,108	31,682	31,222	31,300	31,378
Demand with Project	32,107	31,697	31,236	31,314	31,393
WRMP Build-out Demand	32,107	31,697	31,236	31,314	31,393
Reserve Supply with Project	23,090	31,123	31,584	31,506	31,427

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

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

By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments.

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



(in cfs)	2025	2030	2035	2040	2045
Current Nonpotable Supplies					
Existing MWRP&LAWRP	47.6	47.6	47.6	47.6	47.6
Future MWRP&LAWRP	-	10.5	10.5	10.5	10.5
MWD Imported (Baker, ILP)	111.5	111.5	111.5	111.5	111.5
Irvine Desalter	6.2	6.2	6.2	6.2	6.2
Native Water	-	-	-	-	-
Maximum Supply Capability	165.3	175.8	175.8	175.8	175.8
Baseline Demand	103.6	102.2	100.8	101.0	101.3
Demand with Project	103.6	102.3	100.8	101.1	101.3
WRMP Build-out Demand	103.6	102.3	100.8	101.1	101.3
Reserve Supply with Project	61.7	73.5	75.0	74.8	74.5

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

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125,000 Future Potable MWD Imported Irvine Desalter 100,000 Baker Water Treatment Plant (native portion) Acre-Feet per Year DRWF/DATS/OPA 75,000 Supplies Under Development Maximum Supply Capability ---- Baseline Demand 50,000 – 🗕 – Demand with Project - WRMP Build-out Demand 25,000 0 2025 2030 2035 2040 2045

(in acre-feet per year)	2025	2030	2035	2040	2045
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	38,270	40,222	42,274	44,430	45,323
DRWF/DATS/OPA	39,818	39,818	39,818	39,818	39,818
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	2,400	2,400	2,400	2,400	2,400
Baker Water Treatment Plant (native portion)	3,048	3,048	3,048	3,048	3,048
Supplies Under Development					
Future Potable	-	2,800	2,800	2,800	2,800
Maximum Supply Capability	89,154	93,906	95,958	98,114	99,007
Baseline Demand	76,462	81,275	84,106	84,316	84,527
Demand with Project	76,459	81,603	84,434	84,645	84,857
WRMP Build-out Demand	76,459	81,603	84,434	84,645	84,857
Reserve Supply with Project	12,695	12,304	11,525	13,470	14,151

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

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation up to a level 5 in all of the 5-year increments. This does not reflect a reduction in demands, thus representing a conservative view of supply capability.

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments.

125,000 Future Potable MWD Imported Irvine Desalter 100,000 Baker Water Treatment Plant (native portion) Acre-Feet per Year DRWF/DATS/OPA Supplies Under 75,000 Development Maximum Supply Capability ----Baseline Demand 50,000 — 🗕 – Demand with Project - WRMP Build-out Demand 25,000 0 2025 2030 2035 2040 2045

(in acre-feet per year)	2025	2030	2035	2040	2045
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	38,270	40,222	42,274	44,430	45,323
DRWF/DATS/OPA	39,818	39,818	39,818	39,818	39,818
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	2,400	2,400	2,400	2,400	2,400
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	2,800	2,800	2,800	2,800
Maximum Supply Capability	87,106	91,858	93,910	96,066	96,959
Baseline Demand	81,815	86,964	89,993	90,218	90,444
Demand with Project	81,811	87,315	90,344	90,570	90,797
WRMP Build-out Demand	81,811	87,315	90,344	90,570	90,798
Reserve Supply with Project	5,295	4,543	3,566	5,496	6,163

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation up to a level 5 5-year increments. This does not reflect a reduction in demands, thus representing a conservative view of supply capability.

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments. measures as described in the 2020 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water.

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

125,000 Future Potable MWD Imported Irvine Desalter 100,000 Baker Water Treatment Plant (native portion) Acre-Feet per Year DRWF/DATS/OPA Supplies Under 75,000 Development Maximum Supply Capability ---- Baseline Demand 50,000 ← - Demand with Project - WRMP Build-out Demand 25,000 0 2030 2025 2035 2040 2045

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

(in acre-feet per year)	2025	2030	2035	2040	2045
Current Potable Supplies					
MWD Imported (EOCF#2, AMP, OCF, Baker)	38,270	40,222	42,274	44,430	45,323
DRWF/DATS/OPA	39,818	39,818	39,818	39,818	39,818
Irvine Desalter	5,618	5,618	5,618	5,618	5,618
Wells 21 & 22	2,400	2,400	2,400	2,400	2,400
Baker Water Treatment Plant (native portion)	1,000	1,000	1,000	1,000	1,000
Supplies Under Development					
Future Potable	-	2,800	2,800	2,800	2,800
Maximum Supply Capability	87,106	91,858	93,910	96,066	96,959
Baseline Demand	81,815	86,964	89,993	90,218	90,444
Demand with Project	81,811	87,315	90,344	90,570	90,797
WRMP Build-out Demand	81,811	87,315	90,344	90,570	90,797
Reserve Supply with Project	5,295	4,543	3,566	5,496	6,163

*For illustration purposes, IRWD has shown MWD Imported Supplies as estimated under a MWD short-term allocation up to a level 5 in all of the 5-year increments. This does not reflect a reduction in demands, thus representing a conservative view of supply capability.

Notes: By agreement, IRWD is required to count the production from the Irvine Subbasin in calculating available supplies for TIC developments. measures as described in the 2020 UWMP. Under a MWD Allocation, the Baker WTP would be limited to available MWD and native water.
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 10			
East Orange County Feeder No. 2	41.4	18,746	
Allen-McColloch Pipeline*	64.7	29,296	
Orange County Feeder	18.0	8,150	
	124.1	56,192	56,192
Potable - Treated Surface			
Baker Treatment Plant (Imported) 10	6.3	4,554 6	4,554
Baker Treatment Plant (Native)	4.2	3,048 6	3,048
Potable - Groundwater			
Dyer Road Wellfield	80.0	28,000 2	
OPA Well	4.4	3,200 11	
Deep Aquifer Treatment System-DATS	12 3	8,618 ²	
Wells 21 & 22	8.6	2,400 2	
Irvine Desalter	9.7	5,618 ³	49,479
Total Potable Current Supplies	249.6		113,273
Nonpotable - Recycled Water			
MWRP (25 2 mgd)	39 1	28,228 *	
LAWRP (5 5 mgd)	8.5	6,161	
Future MWRP & LAWRP	10.6	7,623	42,012
Nonpotable - Imported 10			
Baker Aqueduct	40.2	11,651 ំ	
Irvine Lake Pipeline	65.0	9,000 *	
	105.2	20,651	20,651
Nonpotable - Groundwater			
Irvine Desalter-Nonpotable	6.2	3,461 8	3,461
Nonpotable Native			
Irvine Lake (see Baker Treatment Plant above)	4.2	3,048 ^{8,9}	
Total Nonpotable Current Supplies (Excludes Native)	169.6		66,124
Total Combined Current Supplies	419.2		179,397
Supplies Under Development			
Potable Supplies			
Future Groundwater Production Facilities	3.9	2,800	2,800
Total Under Development	3,9	2,800	2,800
Total Supplies			
Potable Supplies	253 4		116,073
Nonpotable Supplies	169.6		66,124
Total Supplies (Current and Under Development)	423.0		182,197

1 Based on converting maximum day capacity to average by dividing the capacity by a peaking factor of 1.6. Max Day is equivalent to Treatment Plant Production

2 Contract amount - See Assessment Potable Supply-Groundwater(iii) Due to groundwater limitations, value changed from 6,329 AF to 2,400 AF

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

4 MWRP 28.0 mgd treatment capacity (28,228 AFY RW production) with 90% plant efficiency (25,2 mgd) and LAWRP permitted 5,5 mgd

tertiary treatment capacity (6,161 AFY)

5 Future estimated MWRP & LAWRP recycled water production Includes biosolids and expansion to 33 mgd

6 Since 2017, Baker Water Treatment Plant (WTP) treats imported and native water. Baker Aqueduct capacity has been allocated to Baker WTP participants and IRWD owns 46.50 cfs in Baker Aqueduct, of which, 10.5 cfs is for for potable treatment. IRWD has 36 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 Assessment Footnote 8, page 27). In 2023, IRWD executed an Agreement that sells 3 cfs to South County agencies, leaving 7 5 cfs for daily use for IRWD. However, should an emergency arise, IRWD retains 10.5 cfs

7 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.

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

9 Based on 70+ years historical average of Santiago Creek Inflow into Irvine Lake, Since 2020, native water is treated through Baker WTP

10 Supplies in this table are total and are not adjusted to account for any reductions in imported water

11 Per Agreement with the City of Orange, average annual capacity increased to 3,200 acre-feet

*64.7 cfs is current assigned capacity; based on increased peak flow, IRWD can purchase 10 cfs more (see page 25 (b)(1)(iii))

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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 shown in the following table:

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

(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

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, 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

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 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

mentioned in this assessment, by virtue of the consolidation of IRWD and LAWD on December 31, 2000.

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 (currently available)

IRWD recently constructed the Baker Water Treatment Plant (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 is supplied with untreated imported water from MWD and native Irvine Lake water supply. IRWD owns 10.5 cfs of treatment capacity rights in the Baker WTP.⁸

•POTABLE SUPPLY - GROUNDWATER

(i) Orange County Water District Act ("OCWD"), 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 to such limitation (§ 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 through 2035 in its Final Draft Long-Term Facilities Plan (January 2006), last updated November 19, 2014. The Long-Term Facilities Plan is updated approximately every five years.

(ii) Irvine Ranch Water District v. Orange County Water District, Orange County Superior Court Case 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 (OCWD Resolution No. 86-2-15, adopted on February 19, 1986, and reaffirmed on June 2, 1999). 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 ("DWRF") / 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

⁸ The Baker WTP is supplied nonpotable imported water through the existing Baker Pipeline. IRWD's existing Baker Pipeline capacity (see Section 2(b)(1) NONPOTABLE SUPPLY – IMPORTED) has been apportioned to the Baker WTP participants based on Baker WTP capacity ownership, and IRWD retains 10.5 cfs of pipeline capacity through the Baker WTP for potable supply and retains 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply. In 2023, IRWD executed an agreement that sells 3 cfs to South County agencies, leaving 7.5 cfs for daily use for IRWD. However, should an emergency arise, IRWD retains the right to the use of the 3 cfs sold.

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 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 ("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 its well ("OPA Well"). The well is operated within the Basin.

Wells 21 and 22 (currently available)

In early 2013, 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 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, and a site for an additional well and treatment facility has been acquired by IRWD. These production facilities can be constructed and operated under the Act; no statutory or contractual approval is required to do so. Appropriate environmental review has or will be conducted for each facility. See discussion of the Act under Potable Supply - Groundwater, paragraph (i), above.

•NONPOTABLE SUPPLY - RECYCLED

Water Recycling Plants (currently available)

Water Code Section 1210. IRWD supplies its own recycled water from sewage collected by IRWD and delivered to IRWD's Michelson Water Recycling Plant ("MWRP") and Los Alisos Water Recycling Plant ("LAWRP"). Under the recently completed MWRP Phase II Capacity Expansion Project, IRWD increased its tertiary treatment capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand through the year 2045. MWRP currently has a permitted tertiary capacity of 28 million gallons per day ("MGD") and LAWRP currently has a permitted tertiary capacity of 5.5 MGD. Water Code Section 1210 provides that the owner of a sewage 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 recycled water, and do not permit stream discharge of recycled water under normal conditions; thus, no issue of downstream appropriation arises, and IRWD is entitled to deliver all of the effluent to meet contractual and customer demands. Additional reclamation capacity will augment local nonpotable supplies and improve

reliability.

•NONPOTABLE SUPPLY - IMPORTED⁹

Baker Pipeline (currently available)

Santiago Agueduct Commission ("SAC") 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's original capacities in the Baker Pipeline include 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. These existing Baker Pipeline capacities have been apportioned to the Baker WTP participants based on Baker WTP capacity ownership. IRWD retains 10.5 cfs of the pipeline capacity for potable supply through the Baker WTP and retains 36 cfs in Reach 1U of the Baker Pipeline capacity for nonpotable supply (See also footnote 8, page 27). In 2023, IRWD executed an Agreement that sells 3 cfs to South County agencies, leaving 7.5 cfs for daily use for IRWD. However, should an emergency arise, IRWD retains the right to use the 3 cfs sold. 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

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

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 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 (3,048 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.

¹⁰ The 1956 Agreement provides for facilities to deliver MWD imported water into Irvine 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.

(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 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 the MWD 2020 UWMP, MWD has extended its planning timeframe out through 2045 to ensure that the MWD 2020 UWMP may be used as a source document for meeting requirements for sufficient supplies. In addition, the MWD 2020 UWMP 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 MWD 2020 UWMP summarizes MWD's planning initiatives over the past 15 years, which includes the Integrated Resources Plan (IRP), the IRP 2015 Update, the WSDM Plan, Strategic Plan and Rate Structure. The reliability analysis in MWD's 2015 IRP Update shows that MWD can maintain reliable supplies under the conditions that have existed in past dry periods throughout the period through 2040. The MWD 2020 UWMP includes tables that show the region can provide reliable supplies under both the single driest year (1977) and multiple dry years (1990-92) through 2045. 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, if needed, to supplement the MWD 2020 UWMP in years when the MWD UWMP is not being updated.

IRWD is permitted by the statute (Wat. Code, § 10610 *et seq.*) 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 UWMP. As referenced above under <u>Summary of Results of Demand-Supply Comparisons</u> - *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, 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 well projects (PR Nos. 11828 and 11829), IRWD adopted its fiscal year 2023-24 capital budget on April 24, 2023 (Resolution No. 2023-6) and the mid-cycle capital budget for fiscal year 2024-25 was adopted on May 28, 2024. Budgeting portions of the funds are 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 \$585.5 million (water) and \$711.1 million (recycled water and sewer) of unissued, voterapproved general obligation 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 the MWD 2020 UWMP, 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 rightof-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 the MWD 2020 UWMP, 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). Additionally, in general, supplies under development may necessitate the preparation and completion of environmental documents and/or regulatory approvals prior to full construction and implementation. IRWD obtains such approvals when required, and copies of documents pertaining to approvals can be obtained from IRWD.

See also the MWD 2020 UWMP, 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 2020 UWMP, section 6.2.

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

The Orange County Groundwater Basin ("Basin") is described in the Orange County Water District Groundwater Management Plan ("GMP") 2015 Update, dated June 17, 2015¹¹. 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 260,000 AFY.

The DWR has not identified the Basin as "critically overdrafted," and has not identified the Basin as overdrafted in its most current bulletin that characterizes the condition of the Basin, Bulletin 118. The efforts being undertaken by OCWD to avoid long-term overdraft in the Basin are described in the OCWD GMP 2015 Update and OCWD Master Plan Report ("MPR"), including in particular, Chapters 4, 5, 6, 14 and 15 of the MPR. OCWD has also prepared a Long Term Facilities Plan ("LTFP") which was received by the OCWD Board in July 2009 and was last updated in November 2014. The LTFP Chapter 3 describes the efforts being undertaken by OCWD to eliminate long-term overdraft in the Basin. See also following section on "**Sustainable Groundwater Management Act"**.

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

¹¹ OCWD has also prepared a Long-Term Facilities Plan which was received and filed by its Board in July 2009, and last updated in November 2014.

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 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 GMP, 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 the Basin's 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 GMP, OCWD MPR, section 3.2 and LTFP, section 6). See also the following section on "*Sustainable Groundwater Management Act*".

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

The following table shows the amounts pumped, by groundwater source since the year 2002:

(In AFY)					
Year (ending 6/30)	DRWF/DATS/ OPA/21-22	Irvine Subbasin (IRWD)	Irvine Subbasin (TIC)	LAWD ¹²	
2024	38,546	2,681	0	0	
2023	36,558	4,692	0	0	
2022	35,344	5,159	0	0	
2021	38,722	3,644	0	0	
2020	33,975	4,005	0	0	
2019	38,603	3,961	0	0	
2018	38,196	4,619	0	0	
2017	39,787	4,077	0	169	
2016	37,216	4,672	0	307	
2015	40,656	9,840	0	336	
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	
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) <u>Description and analysis of the amount and location of groundwater projected to be</u> <u>pumped by IRWD from the Basin</u>:

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

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.

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 potential 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.

Year (ending 6/30)	DRWF ¹³	Future GW ¹⁴	IDP (Potable)	IDP (Nonpotable)
2025	42,218	2,800	5,618	3,461
2030	42,218	2,800	5,618	3,461
2035	42,218	2,800	5,618	3,461
2040	42,218	2,800	5,618	3,461

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(11)			1

(e) <u>If not included in the 2020 UWMP</u>, analysis of the sufficiency of groundwater projected to be pumped by IRWD from the Basin to meet the projected water demand of the Project:

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

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 3,200 AFY for the OPA well and 2,800 AFY for Wells 21 & 22.

¹⁴ Under-development.

¹⁵ OCWD has adopted a basin production percentage of 85% for 2024-25. In prior years OCWD has maintained a basin production percentage that is lower 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. 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. In 2008, OCWD began operating its replenishment supply project, the Groundwater Replenishment System project ("GWRS"). The GWRS currently produces approximately 100,000 AFY of new replenishment supply from recycled water (OCWD GMP).

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 hereto. 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, Basin 8-1, as a medium priority basin for purposes of groundwater management. The SGMA specifically calls for OCWD, which regulates the Orange County groundwater basin, to serve as the groundwater sustainability agency or "GSA". The SGMA allows Special Act Districts created by statute, such as OCWD, to prepare and submit an alternative to a Groundwater Sustainability Plan ("GSP") that is "functionally equivalent" to a GSP. Basin 8-1 includes the OCWD service area and several fringe areas outside of OCWD that are within the Basin 8-1 boundary. Per the requirements of SGMA, an Alternative Plan must encompass the entire groundwater basin as defined by DWR. On January 1, 2017, OCWD and the overlying agencies within Basin 8-1, including IRWD, jointly prepared and submitted an alternative plan in compliance with SGMA (Basin 8-1 Alternative). The Basin 8-1 Alternative was updated in January 2024.

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

 \boxtimes 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, Updated 2017

Water Shortage Contingency Plan, Irvine Ranch Water District, June 2021

2020 Urban Water Management Plan, Irvine Ranch Water District, June 2021

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

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

2020 Integrated Water Resources Plan Regional Needs Assessment, Metropolitan Water District of Southern California, April 2022

2020 Urban Water Management Plan, Metropolitan Water District of Southern California, June 2021

2020 Urban Water Management Plan, Municipal Water District of Orange County, May 2021

Climate Action Plan, Metropolitan Water District of Southern California, May 2022

Climate Action Plan Phase 2: Climate Change Analysis Guidance, California Department of Water Resources, September 2018

Master Plan Report, Orange County Water District, April 1999

Groundwater Management Plan 2015 Update, Orange County Water District, June 2015

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

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

2022-2023 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2024

Basin 8-1 Alternative, Orange County Water District, January 2017

Basin 8-1 Alternative 2022 Update, Orange County Water District, January 2022

Exhibit A

Depiction of Project Area

PA25



Exhibit B

Uses Included in Project

December 11, 2024

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 City of Irvine hereby requests an assessment of water supply availability for the below-described project. The [[City]] 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: Vista Point

Location of project: Academy Way, Irvine, CA 92617 (University Research Park 9 - Planning Area 25)

- (For projects requiring a new assessment under Water Code §10910 (h).) Previous Water Supply Assessment including this project was prepared on: <u>June 2019</u>. 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:

\bowtie	Residential: No. of dwelling units: 2,500 (1,300 additional units from previous WSA)
	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 acresSq. ft. of floor space
	Mixed use (check and complete all above that apply)

□ Other.

Total acreage of project: 39.91 gross acres

Acreage devoted to landscape:

Greenbelt	golf course	parks	
Agriculture	other landscaped	areas 42%	

Number of schools ______Number of public facilities ______

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: N/A

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

Current uses: vacant land and professional offices.

General Plan land use and zoning designations for properties zoned 5.5 Medical and Science would be changed to a "Multi Use" designation and 2,500 units would be moved from other areas in the city anticipated to be developed with residential units as evaluated in the City of Irvine 2045 General Plan Update Final Program Environmental Impact Report (GPU EIR).

Is the project included in the existing General Plan? <u>No</u> If no, describe the existing General Plan Designation <u>See land use note above</u>

The City 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 if it determines that one is required.

The City 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.

CITY OF IRVINI

REQUEST RECEIVED

Eric Martin, Senior Planner

Date: Irvine Raneh Water District

REQUEST COMPLETE:

Date:_

Bv:

Irvine Ranch Water District

Exhibit "C"

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

To: (Lead Agency) <u>City of Irvine</u> <u>One Civic Center Plaza</u> Irvine, CA 92623-9575

> (Applicant) The Irvine Company 550 Newport Center Drive Newport Beach, CA 92660

Project Information

Project Title: Vista Point

Tentative Tract No. 2024-116 Verification requested prior to tentative map application

Number of residential units in Project: 2,500

Uses in Project including non-residential (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 ______, Vista Point. A copy of the Assessment is attached hereto and incorporated herein by this reference (see Exhibit C).

Verification of Availability of Sufficient Water Supply

On _____, 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 66473.7of the Government Code (the "Verification Law") to provide the City 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 City's approval of a tentative map. The City 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 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"). 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 an 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 2045. In addition, this Verification includes the elements required by the Verification Law that are not included within the required contents of the Assessment.

Supporting Documentation

As noted above, the principal supporting documentation 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 2020 UWMP was adopted in June 2021 and the next update for 2025 is anticipated in July 2026. The water demand for the Project will be included in IRWD's 2025 UWMP update.

In addition to the Assessment, the most recent WRMP and the 2020 UWMP mentioned above, other supporting documentation referenced herein is found in Section 5 of this Verification. This includes the most recent Metropolitan Water District of Southern California's (MWD) Urban Water Management Plan (MWD 2020 UWMP) detailing an evaluation by MWD, the wholesaler of IRWD's imported water supplies, of the reliability of MWD's supplies, adopted in May 2021.

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 can be obtained from IRWD.

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.

Source	1990	1995	2000	2005	2010	2015	2020
Potable – imported	44,401	28,397	36,777	19,306	15,227	13,674	15,904
Potable – groundwater	10,215	20,020	20,919	37,160	42,089	54,616	42,374
Nonpotable - recycled	11,589	10,518	14,630	15,296	20,847	21,770	26,412
Nonpotable - imported	24,899	2,333	16,343	5,304	5,562	7,869	1,528
Nonpotable – groundwater	816	1,834	2,890	2,285	3,761	3,462	4,795
Nonpotable – native	2,778	5,980	4,949	7,251	837	6,205	1,682
Total	94,698	69,082	96,508	86,602	88,323	107,596	92,695

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

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. IRWD adopted an updated Water Shortage Contingency Plan on June 28, 2021 pursuant to Water Code Section 10632. As stated in IRWD's Water Shortage Contingency Plan, use of local supplies, storage and other supply augmentation measures can mitigate shortages, and be used as necessary and appropriate 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 demand projections 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 or Verification 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 2020 MWD UWMP. MWD's demand projections account for the effects of long-term conservation best management practices.

(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 2022-2023 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 currently available in addition to its 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") and Section 2(a), and Section 2(b)(1) - "NONPOTABLE SUPPLY – RECLAIMED"). Under the MWRP Phase II Capacity Expansion Project, IRWD increased its tertiary treatment capacity on the existing MWRP site to produce sufficient recycled water to meet the projected demand of the Project through the year 2045. 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 reclamation, 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 average years, a single dry year, and five years of consecutive drought. (2020 MWD UWMP). In the MWD 2020 UWMP, MWD states that it has supply and storage capabilities sufficient to meet projected demands from 2025 through 2045 under a normal year, a single dry year, and five consecutive drought year conditions. See MWD 2020 UWMP Section 2.3 Water Reliability Assessment.

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. In 2020, MWD completed another update of the IRP. In MWD's 2020 IRP Regional Needs Assessment, MWD finds that SWP supplies are highly susceptible to varying hydrologic conditions, climate change, and regulatory restrictions. In this report, MWD assesses climate vulnerabilities and the need for future projects such as indirect potable reuse, stormwater capture, and expanded storage capacity to mitigate and adapt to these vulnerabilities and ensure future resilience. In 2022, MWD released a Climate Action Plan which complements MWD's IRP planning process and set reduction targets and outlined strategies to reduce emission levels by 2045.

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's 2020 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. 11828 and 11829), IRWD adopted its fiscal year 2023-24 capital budget on April 24, 2023 (Resolution No. 2023-6) and the mid-cycle capital budget for fiscal year 2024-25 was adopted on May 28, 2024. Budgeting portions of the funds are for such projects. (A copy is available from IRWD on request.) IRWD has approximately \$585.5 million (water) and \$711.1 million (recycled water and sewer) of unissued, voter-approved bond

authorization. See also MWD's 2020 UWMP, Section 3 and 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 delivery infrastructure

See the Assessment, Section 2(b)(3), incorporated herein by reference. See also MWD's 2020 UWMP, Section 3 and 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. See also MWD's 2020 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 2017

Water Shortage Contingency Plan, Irvine Ranch Water District, June 2021

2020 Urban Water Management Plan, Irvine Ranch Water District, June 2021

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

2020 Integrated Water Resources Plan Regional Needs Assessment, Metropolitan Water District of Southern California, April 2022

2020 Urban Water Management Plan, Metropolitan Water District of Southern California, May 2021

Climate Action Plan, Metropolitan Water District of Southern California, May 2022

Groundwater Management Plan 2015 Update, Orange County Water District, June 2015

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

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

Master Plan Report, Orange County Water District, April 1999

2022-2023 Engineer's Report on Groundwater Conditions, Water Supply and Basin Utilization in the Orange County Water District, Orange County Water District, February 2024

Exhibit A

Depiction of Project Area

PA25



Exhibit B

Uses Included in Project

November 15, 2024

1

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)

The City of Irvine 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 City 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: Vista Point

Location of project: Academy Way, Irvine, CA 92617 (University Research Park 9)

Planning Area(s): <u>25</u> (Enclose a project map and exhibits)

Was the project included as part of a previously completed Water Supply Assessment (Water Code §10910)? If yes no Revised to new WSA, Requested 12-11-2024, "Vista Point" If yes, date and project title of Water Supply Assessment June 11, 2019 – University Research Park 9 (URP)

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.* <u>00925635-PTP</u> Tentative Tract No.* <u>2024-116</u>

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

(*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: 2,500
- □ Shopping center or business: No. of employees_____ Sq. ft. of floor space _____

	Commercial office: No. of Hotel or motel: No. of room	employees Sq. ft. o	of floor space				
Ē	Industrial, manufacturing, processing or industrial park: No. of employees						
(/ <u></u> /	No. of acres	_Sq. ft. of floor space					
	Mixed use (check and com Other:	plete all above that apply)					
Total	acreage of project:	39.91 gross acres					
Acrea	ge devoted to landscape:						
Greer	nbelt	_golf course	parks				
Agricu	ulture	other landscaped areas_					
Other	factors or uses that would	affect the quantity of water neede	ed, such as peak flow requirements:				

Is the project included in the existing General Plan? <u>No If</u> no, describe the existing General Plan Designation <u>University Research Center Planning Area 25</u>

The City 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 City 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 City to request a new Water Supply Assessment prior to completion of the new Water Supply Verification.

The City 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.

CITY OF IRVINE

By: Eric Martin, Senior Planner

REQUEST RECEIVED:

Date: 11512025 By: <u>Irvine Ranch Water District</u>

REQUEST COMPLETE:

- Date:
- By:_

Irvine Ranch Water District

Exhibit C

Water Supply Assessment

(Pending Board Approval)
February 6, 2025 Prepared by: M. Seesangrit / A. McNulty Submitted by: F. Sanchez / P. Weghorst Approved by: Paul A. Cook

WATER RESOURCES POLICY AND COMMUNICATIONS COMMITTEE

WATER EFFICIENCY TACTICAL INCENTIVE BUDGET INCREASE

SUMMARY:

On June 10, 2024, the IRWD Board approved a regional rebate program budget in the amount of \$445,000 to provide supplemental funding for FY 2024-25 rebate programs. Participation in the Turf Replacement and the Spray to Drip rebate programs is higher than expected and projected to surpass the current program budget. Staff recommends that the Board approve an increase of \$496,000 to the Operating Budget for FY 2024-25 to continue IRWD's participation in the regional rebate programs through June 2025.

BACKGROUND:

In 2015 the District entered into the Water Conservation Participation Agreement (provided as Exhibit "A") with the Municipal Water District of Orange County (MWDOC) to participate in the regional rebate program administered by Metropolitan Water District. MWDOC and Metropolitan provide base-level regional funding for the programs, which IRWD supplements with targeted funding for IRWD customers. Each year the IRWD Board approves funding for the rebate programs and authorizes the General Manager to allocate these funds between the various programs and modify device incentive levels up to the amounts approved by the Board. Funding allocations are based on prior customer participation and availability of regional funding.

Status of Rebate Program Funding:

On June 10, 2024, the Board approved a total rebate programs budget in the amount of \$445,000 for FY 2024-25 and these funds were allocated among the various programs. The program budget for FY 2024-25 is expected to be exhausted before the end of the fiscal year due to higher-than-expected participation. Participation rates increased due to strategic marketing efforts and the statewide ban on non-functional turf for commercial landscapes that was passed in 2023.

Rebate Program Participation:

Turf Replacement and Spray to Drip rebates are available to commercial and residential customers irrigating with potable water. In 2024, the District made a tactical incentive funding level change to incentivize more participation in the residential Turf Replacement rebate program. Customers were informed of the funding level change during the District's *No Mo' Mow* campaign which ran from April through October 2024. The first half of the campaign encouraged customers to remove their lawns. To stimulate residential customers to act, the second half of the campaign included an expiration date for the \$5 per square foot (sq ft) turf rebate. At the conclusion of the campaign, IRWD's supplemental funding of \$2 per sq ft for

Water Resources Policy and Communications Committee: Water Efficiency Tactical Incentive Budget Increase February 6, 2025 Page 2

residential customers was removed leaving a remaining regional base-level turf rebate amount of \$3 per sq ft. Commercial customers irrigating with potable water are still eligible for IRWD's supplemental funding of \$2 for a total turf rebate of \$5 per sq ft. Overall, the *No Mo' Mow* campaign resulted in a 58% increase in turf rebate applications compared to the same time the previous year.

Non-Functional Turf Ban:

Assembly Bill 1572, which was enacted in 2023, prohibits the use of potable water to irrigate non-functional turf on commercial, industrial, and institutional properties. Non-functional turf is solely decorative and has no other function, such as recreation. The prohibition includes turf located on road medians and areas outside businesses that are not used for recreation. Exempt from the ban is functional grass, such as sports fields, picnic areas, cemeteries, and the areas irrigated with recycled water. The ban does not address residential turf.

The non-functional turf ban applies to public agencies in 2027, and then to commercial customers and Homeowners Associations (HOA) in the following two years. The non-functional turf ban and the current \$5 per sq ft rebate for commercial customers has motivated large landscape customers to begin replacing non-functional turf areas. The rebate is capped at 200,000 sq ft for public agency landscapes and 50,000 sq ft for commercial and HOA landscapes.

Increased Inspection Costs:

IRWD elected to utilize MWDOC's contractor in-lieu of IRWD staff time to conduct all Turf Replacement and Spray to Drip inspections beginning in July 2024. This change added an additional cost paid to MWDOC for the pre- and post-inspections and freed up IRWD staff to focus on other programs and assignments.

Need for Additional Program Funding:

Since July 2024, over 124 Turf Replacement rebates applications have been received for over 1.1 million sq ft and over 90 Spray to Drip rebate applications have been received for over 1.4 million sq ft. Pending rebate applications have a combined funding commitment of \$94,000 and staff forecasts an additional \$402,000 will be required to provide funding for program inspection costs and IRWD's supplemental funding for commercial customer rebates through the end of the fiscal year. Staff recommends that the Board authorize an increase to the FY 2024-25 Operating Budget from over-allocation revenues for tactical incentives in the amount of \$496,000 to continue funding these successful programs, which support IRWD's continued compliance with the "Making Conservation as a Way of Life" regulation.

FISCAL IMPACTS:

An increase to the Operating Budget for FY 2024-25 from over-allocation revenues for tactical incentives in the amount of \$496,000 is needed to continue funding the Turf Replacement and Spray to Drip rebate programs.

Water Resources Policy and Communications Committee: Water Efficiency Tactical Incentive Budget Increase February 6, 2025 Page 3

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

That the Board authorize an increase to the FY 2024-25 Operating Budget for tactical incentives in the amount of \$496,000 from over-allocation revenues and authorize the General Manager to allocate the funding to the FY 2024-25 rebate programs administered through the Water Conservation Participation Agreement Between MWDOC and IRWD; and to execute addenda to the agreement as may be necessary to allocate funds to specific programs and modify device incentive levels based on customer participation rates and regional program funding levels.

LIST OF EXHIBITS:

Exhibit "A" - Water Conservation Participation Agreement with MWDOC

Note: This page is intentionally left blank.

Exhibit "A"

Water Conservation Participation Agreement between the Municipal Water District of Orange County and Irvine Ranch Water District

This Water Conservation Participation Agreement ("Agreement") is made between the Municipal Water District of Orange County ("MWDOC") and Irvine Ranch Water District ("Participant Agency"). MWDOC and Participant Agency may be collectively referred to as "Parties" and individually as "Party."

Recitals

- A. The Metropolitan Water District of Southern California ("Metropolitan") provides incentive funding to residential, commercial, and industrial water users in its service area for a variety of water conservation activities, including, but not limited to, rebates for the purchase and installation of water-saving devices ("Metropolitan Base Incentives").
- B. MWDOC is a member agency of Metropolitan and has agreements with Metropolitan that enable residential, commercial, and industrial water users in MWDOC's service area, and for the benefit of MWDOC's member agencies, to participate in and take advantage of Metropolitan's Base Incentives.
- C. Participant Agency, as a MWDOC member agency or a direct Metropolitan member agency, may elect to participate in Metropolitan's program to replace non-conserving items within its service area.
- D. The Metropolitan Base Incentives amounts for each eligible device or program available to MWDOC and Metropolitan member agencies are listed in the attached Addendums 1A and 1B. It is expected that Metropolitan will establish funding for additional water conservation items and to change some or all of the existing funding rates throughout the term of this Agreement. Any such changes will be incorporated herein by amendment to Addendums 1A and 1B.
- E. Metropolitan and MWDOC each have fiscal responsibility to manage their individual budgets, and hence may have a need to limit availability of funds.
- F. MWDOC and Metropolitan member agencies may also choose to provide additional supplemental funding of their own to augment the Metropolitan Base Incentives. Based on the terms and conditions of this Agreement, MWDOC will facilitate supplemental funding for Participant Agency through the Metropolitan rebate contractor ("Rebate Contractor") or MWDOC directly. Metropolitan member agencies will coordinate any supplemental funding directly with Metropolitan.
- G. In addition to the Metropolitan Base Incentives, MWDOC has developed and arranged additional local, state, and federal grant funding ("Grant Funding") for eligible devices in a number of water conservation programs ("MWDOC Administered Programs") that MWDOC offers to Participant Agency and Metropolitan member agencies. This grant funding may be used to enhance the Metropolitan Base Incentives. Granting agencies

include, but are not limited to, the Department of Water Resources and the United States Bureau of Reclamation.

- H. Participant Agency may also operate customized, local water conservation incentive programs in their respective service areas ("Participant Agency Administered Programs) and may have access to the Metropolitan Base Incentives and Grant Funding for such, subject to MWDOC and Metropolitan approval and the terms and conditions of this Agreement and any MWDOC and/or Metropolitan agreements.
- I. The purpose of this Agreement is to create a master water conservation participation agreement between MWDOC and Participant Agency that combines all of the conservation programs and incentives ("Programs") into one agreement. Addendums to this Agreement will be issued for changes involving Metropolitan approved items, MWDOC Board approved items, Grant Funding, adding and subtracting MWDOC Administered Programs and Participant Agency Administered Programs as identified in Section 2, and changes to incentive programs, including funding and incentive levels.

NOW THEREFORE, in consideration of the promises and covenants hereinafter set forth, the Parties do agree as follows:

Section 1: Agreement Term and Administration

- 1.1 This Agreement will be effective on July 1, 2015 or upon execution of this Agreement by all Parties, whichever is later, and shall terminate on June 30, 2025 ('Term"). Continuance of this Agreement will be subject to annual budget approval by MWDOC's Board of Directors.
- 1.2 This Agreement may be amended at any time by written mutual agreement of the Parties, or by Addendums issued by MWDOC as set forth in Recital I.
- 1.3 This Agreement may be terminated by either Party for any reason upon thirty (30) days written notice to the other Party.
- 1.4 All Addendums are enforced for the duration of this Agreement unless the Addendums are amended or terminated by either Party.
- 1.5 In the event the Agreement is terminated early, Participant Agency is responsible for payment of any funding contributions required by this Agreement that that were initiated prior to the effective date of the termination. For purposes of this Agreement, an application is deemed initiated when an application has been received by Metropolitan's rebate vendor, EGIA, by MWDOC, or a reservation has been made within any of MWDOC's online application portals that is pursuant to any of the programs described within this Agreement and the attached Addendums.
- 1.6 Notwithstanding any other provision in this Agreement, funds for all of the programs described within this Agreement and the attached Addendums are conditioned upon the

availability of funds and MWDOC is under no obligation to provide funding for any of the programs if MWDOC determines, in its own discretion, that such funding is exhausted, reduced, eliminated, or unavailable from any funding source, for any reason.

Section 2: Program Funding

2.1 Supplemental Funding

2.1.1 In addition to the Metropolitan Base Incentives, Participant Agency may provide additional funding to augment the Metropolitan Base Incentives amounts for those programs and devices that Participant Agency identifies, and in the amounts indicated, in the appropriate locations in Addendums 2A, 2B, and 2C ("Supplemental Funding"). The Supplemental Funding listed in Addendums 2A through 2C shall specify the amount of Supplemental Funding Participant Agency will provide per device or program, as well as the total maximum Supplemental Funding amount committed to each category of device or program. If the Participant Agency does not complete, sign, and return Addendums 2A through 2C to MWDOC, notwithstanding any other provision of this Agreement, the Participant Agency will not be bound by this Section or the provisions in Addendums 2A through 2C. In general, Supplemental Funding Addendums submitted by the 15th of a month will become effective the first of the following month.

2.1.2 If Participant Agency elects to provide Supplemental Funding or enhanced incentives under this Agreement for any device or program, Participant Agency is responsible for tracking the use of and the remaining availability of those funds. MWDOC will assist, in every way possible, but the ultimate responsibility for tracking all Participant Agency funding is the responsibility of Participant Agency. Participant Agency will ultimately be responsible for any overuse of Participant Agency Supplemental Funding.

2.1.3 Any requests for changes or revisions to Participant Agency's Supplemental Funding, including funding transfers between Programs, must be submitted by Participant Agency to MWDOC in the form of revised Addendum 2s listing the new funding amounts/limits.

2.1.4 The Participant Agency may elect to participate in the Supplemental Funding Program and be bound by the provisions of this Section 2.1, Sections 3, 5, 6, 7, and 8 of this Agreement, and Addendum 2A through 2C by having its authorized representative complete and sign Addendum 2A through 2C in the spaces provided.

2.2 MWDOC Administered Programs

2.2.2 Participant Agency may elect to take advantage of the MWDOC Administered Programs by having its authorized representative complete and sign Addendums 3A through 3C in the spaces provided. If Participant Agency completes and signs Addendums 3A through 3C, Participant Agency agrees to be bound by the provisions of this Section 2.2, Sections 3, 5, 6, 7, and 8 of this Agreement, and Addendums 3A through 3C. If the Participant Agency does not complete, sign, and return Addendums 3A through 3C, notwithstanding any other provision of this Agreement, the Participant Agency will not be bound by this Section or the provisions in Addendums 3A through 3C.

2.3 Participant Agency Administered Programs

2.3.1 From time to time, funding may be made available for Participant Agency to operate a customized member agency administered local water conservation incentive program or programs ("Participant Agency Administered" "PA" or "MAA Program") in its service area and access the Metropolitan Base Incentives for such, subject to MWDOC approval of the program and the terms and conditions of this Agreement and Addendum 4. The Participant Agency Administered Program(s) and requirements in connection with it are described in more detail in Addendum 4.

2.3.2 Upon receipt of approval of a Participant Agency Administered Program by MWDOC, Participant Agency is bound by the provisions of Sections 3, 5, 6, 7, and 8 of this Agreement and Addendum 4.

2.4 Exhaustion of Funding

2.4.1 In the event Participant Agency provided funding for any Program or device is exhausted, and Participant Agency does not elect to add additional funding or transfer available funding from another Program or device, MWDOC will discontinue offering the additional rebate funding for that Program or device in Participant Agency's service area. Notwithstanding any other provision in this Agreement, MWDOC may terminate this Agreement as it relates to Section 2 at any time without prior notice in the event that MWDOC determines that funding for any device or program on Addendums 2 through 4 or MWDOC Grant Funding is exhausted, reduced, eliminated, or unavailable from any funding source, for any reason.

Section 3: Participant Agency Responsibility and Ownership

- 3.1 Participant Agency, at its sole discretion, may independently contract with its own agents under separate agreements for program administration and management for any Participant Agency Administered Program provided that doing so does not compromise program performance, create or present a conflict of interest, or violate the terms of this Agreement.
- 3.2 Participant Agency and/or its agent shall provide all necessary services and materials for such Participant Agency Administered Programs including, but not limited to the following: program administration, promotion, marketing materials, data collection, and analysis, installation verification, and reporting.
- 3.3 All materials and supplies necessary to implement a Participant Agency Administered Program shall be the exclusive property of Participant Agency. MWDOC shall have no

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ownership, right, title, security interest, or other interest in any Participant Agency Administered Program materials or supplies, nor any rights duties, or responsibilities, therefor.

- 3.4 Participant Agency is responsible for assuring that any Participant Agency Administered Program complies with all federal, state, and local requirements.
- 3.5 Participant Agency agrees to cooperate with MWDOC's data management activities related to assessing device saturation and program success.
- 3.6 As part of any Participant Agency Administered Program, Participant Agency shall use, maintain, and submit to MWDOC within the designated timeframe an electronic database, to be approved by MWDOC prior to use, for any conservation items installed, distributed, or rebated by Participant Agency or its agents to avoid duplicate distributions and to determine the saturation rate of items by the appropriate geographic delineation.
- 3.7 Participant Agency is solely responsible for the performance of its staff or representatives in complying with the terms of this Agreement and for the proper allocation and appropriate use of funds provided by Metropolitan and/or MWDOC for the purpose of achieving water conservation savings under this Agreement.

Section 4: MWDOC's Obligations

- 4.1 MWDOC will be response to Participant Agency for ensuring that timely reports on the Programs' results are prepared by MWDOC's staff.
- 4.2 MWDOC will develop a database of information regarding participation in the Programs and provide monthly electronic and/or written reports of activity to Participant Agency.
- 4.3 MWDOC will invoice Participant Agency for any Participant Agency funding obligations on a monthly basis for rebates issued in the previous month.
- 4.4 MWDOC does not guarantee any minimum number of rebates will be available for Participant Agency's service area.

Section 5 Marketing.

5.1 Participant Agency agrees to assist in the marketing of programs it participates in under this Agreement. With regard to Participant Agency Administered Programs, Participant Agency will be solely responsible for marketing its Participant Agency Administered Program to customers in its service area.

Section 6: Installation Verification

6.1 Participant Agency shall be responsible for conducting installation verifications of items installed, distributed, and/or rebated by Participant Agency under Participant Agency

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Administered Programs, and/or for paying all costs associated with this verification. Installation verification measures for program devices must be designed to ensure that materials, installation verifications of eligible program devices, and services meet requirements established by Metropolitan, which requirements will be provided to Participant Agency by MWDOC.

- 6.2 Participant Agency may be responsible for conducting installation verifications of items installed, distributed, and/or rebated by Participant Agency or MWDOC under MWDOC Administered Programs, and/or for paying all costs associated with this verification. Installation verification measures for program devices must be designed to ensure that materials, installation verifications of eligible program devices, and services meet requirements established by Metropolitan, which requirements will be provided to Participant Agency by MWDOC.
- 6.3 MWDOC reserves the right to conduct installation verification of items within Participant Agency's service area.
- 6.4 Participant Agency acknowledges that any device receiving funding from Metropolitan may be subject to an installation verification to be performed by Metropolitan, or its agent(s), at Metropolitan's discretion.
- 6.5 Participant Agency shall promptly refund to MWDOC any amounts paid under any Participant Agency Administered Program or MWDOC Administered Program for installed or distributed devices in the event MWDOC or Metropolitan establishes via installation verification that the program devices were not installed.

Section 7: Reporting and Invoicing

- 7.1 For any and all Supplemental Funding provided by Participant Agency and/or Participant Agency provided funding or inspection costs under the MWDOC Administered Programs pursuant to Section 2 of this Agreement, and as more particularly described in Addendums 2 and 3, MWDOC will invoice Participant Agency on a monthly basis for the cost of such funding, and Participant Agency must pay the full amount of such invoice within thirty (30) days of receipt of any such invoice.
- 7.2 For any and all Participant Agency Administered Program(s), Participant Agency will invoice MWDOC on a monthly basis, by the 10th of each month, for any approved funding and costs associated with the Participant Agency Administered Program(s) as indicated in and subject to the provisions of Addendum 4. MWDOC is under no responsibility to reimburse Participant Agency for any costs incurred by Participant Agency that are not approved by MWDOC consistent with the terms and conditions of this Agreement and Addendum 4. The invoice package shall include a fully completed, to the satisfaction of MWDOC, Excel customer/applicant spreadsheet showing program activity, and an invoice, signed by the General Manager or designee of Participant Agency, certifying the information provided as accurate. Participant Agency shall use the Excel customer/applicant spreadsheet and Invoice forms approved by MWDOC.

- 7.3 Participant Agency shall maintain all Participant Agency Administered Program information, including Participant Agency applications, water bills, and purchase receipts, for a period of seven years from the end date of this Agreement.
- 7.4 Payment of Participant Agency invoices shall be in the form of either a credit on MWDOC's water bill to Participant Agency or a check made payable to Participant Agency. Method of payment shall be at MWDOC's discretion.

Section 8: Confidentiality

- 8.1 MWDOC agrees to maintain the confidentiality of Participant Agency's customer names, addresses, and other information gathered in connection with this Agreement. MWDOC will not cause or permit the disclosure of such information expect as necessary to carry out any of the MWDOC Administered or Participant Agency Administered Programs, or as required by law. To the extent that MWDOC contracts with third party contractors to carry out all or any portion of any of the Programs, MWDOC will require such contractors to maintain the confidentiality of such customer information.
- 8.2 Notwithstanding anything to the contrary in this Agreement, Participant Agency acknowledges and agrees that MWDOC may request and use historical water consumption data for purposes of satisfying any grant water use and water quality evaluation requirements of any of the Programs. Participant Agency also acknowledges and agrees that MWDOC may also request to use Program applicant information, such as name, mailing address, site photos, and email address to market other water use efficiency programs to past applicants. A similar provision will be required of every individual applicant.

Section 9. Indemnification.

- 9.1 The parties agree that each Party shall be responsible for its own actions, and the actions of its officers, employees, and agents, in performing services under this Agreement. Except as provided in this Agreement and its Addendums, each Party agrees to indemnify and hold the other Party and its officers and agents harmless and agrees to defend the other Party against any claim or asserted liability arising out of its actions, either willful or negligent, or the actions of its officers, employees, and agents, in performing services pursuant to this Agreement. Such indemnity will include any losses relating to any claim made, whether or not a court action is filed, and will include attorney fees and administrative and overhead costs related to or arising out of such claim or asserted liability.
- 9.2 Participant Agency shall include the following language in its agreement with any consultant or contractor retained by Participant Agency to work on any of the Program" "(Consultant) agrees at is sole cost and expense to protect, indemnify, defend, and hold harmless Metropolitan, MWDOC, and their associated Boards of Directors, officers, representatives, agents and employees from and against any and all claims and liability

of any kind (including, but not limited to, any claims or liability for injury or death to any person, damage to property, natural resources or to the environment, or water quality problems) that arise out of or related to Participant Agency's approval, construction, operation, repair, or ownership of any Program. Such indemnity shall include all damages and losses related to any claim made, whether or not a court action is filed, and shall include attorneys' fees, administrative and overhead costs, engineering and consulting fees, and all other costs related to our arising out of such claim or asserted liability."

Section 10. Certification re Lobbying (43 CFR 18)

10.1 The undersigned hereby certifies on behalf of Participant Agency that no Federal appropriated funds have been paid or will be paid, by or on behalf of the Participant Agency, to any person for influencing or attempting to influence an officer or employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions. To the extent federal funds are involved, the Participant Agency shall require that the language of this certification be included in the awards documents for any sub-awards by the Participant Agency at all tiers (including sub-contracts, sub-grants, and contracts under grants, loans and cooperative agreements) and that sub-recipients, if any, shall certify accordingly.

Section 11. Other Terms

- 11.1 Any alteration or variation of the terms of this Agreement will not be valid unless made in writing and signed by both Parties.
- 11.2 This Agreement will inure to the benefit of and be binding upon the Parties and their respective successors.
- 11.3 The partial or total invalidity of one or more parts of this Agreement will not affect the intent or validity of this Agreement.
- 11.4 This agreement shall be deemed a contract made under the laws of the State of California, and for all purposes will be interpreted in accordance with such laws. The Parties hereby agree and consent to the exclusive jurisdiction of the courts of the State of California, and that the venue of any action brought hereunder will be in Orange County, California.

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11.5 This Agreement constitutes the entire agreement between the Parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement.

MUNICIPAL WATER DISTRICT OF ORANGE COUNTY

By: Robert J. Hunte General Manager 7-14-15

Date:

IRVINE RANCH WATER DISTRICT

By: Paul Cook

General Manager Date: 7-9-15

Approved as to Form: Bowie, Arneson, Wiles & Giannone

Joan C. Arneson Legal Counsel Date: 6/25/15

Note: This page is intentionally left blank.