

AGENDA
IRVINE RANCH WATER DISTRICT
ENGINEERING AND OPERATIONS COMMITTEE MEETING
TUESDAY, NOVEMBER 18, 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 Web: <https://irwd.webex.com/irwd/j.php?MTID=m2b76d44c0c2a14a171b3103619028038>

Meeting Number (Access Code): 2489 679 9047

Meeting password: XBcdKM2tm77

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

CALL TO ORDER 1:30 p.m.

ATTENDANCE Acting Committee Chair: Doug Reinhart _____
 Committee Member: John Withers _____

<u>ALSO PRESENT</u>	Paul Cook	_____	Kevin Burton	_____	Wendy Chambers	_____
	Neveen Adly	_____	Paul Weghorst	_____	Steve Choi	_____
	Jim Colston	_____	Jason Manning	_____	Jose Zepeda	_____
	Eric Akiyoshi	_____	Belisario Rios	_____	Jacob Moeder	_____
	Brian Waite	_____	Lori Rigby	_____	Scott Giatpaiboon	_____
	_____	_____	_____	_____	_____	_____
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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 comments@irwd.com before 8:00 a.m. on Tuesday, November 18, 2025.

COMMUNICATIONS

1. Notes: Burton
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.

INFORMATION

- | | |
|----|---|
| 4. | <u>TOTAL DISSOLVED SOLIDS DISCHARGE OFFSET PROGRAM UPDATE – SWIFT / CHAMBERS</u>

Recommendation: Receive and file. |
| 5. | <u>UPCOMING PROJECTS STATUS REPORT – AKIYOSHI / MOEDER / RIOS / WAITE / BURTON</u>

Recommendation: Receive and file. |
| 6. | <u>IRWD RESEARCH BUSINESS PLAN UPDATE – COLSTON / BURTON</u>

Recommendation: Receive and file. |

ACTION

- | | |
|----|--|
| 7. | <u>IRWD/OC SAN/OCWD GREEN ACRES PROJECT FLOWS AGREEMENT AND IRWD/OC SAN FLOW EXCHANGE AGREEMENT – AKIYOSHI / BURTON</u>

Recommendation: That the Board authorize the General Manager to execute the Flow Exchange Agreement and execute the Green Acres Project Flows Agreement, both subject to non-substantive changes. |
|----|--|

OTHER BUSINESS

8. Directors' Comments
9. Adjournment

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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November 18, 2025
Prepared by: I. Swift
Submitted by: W. Chambers
Approved by: Paul A. Cook



ENGINEERING AND OPERATIONS COMMITTEE

TOTAL DISSOLVED SOLIDS DISCHARGE OFFSET PROGRAM UPDATE

SUMMARY:

IRWD discharges groundwater into Waters of the State, which requires adherence to regulatory limits for various pollutants. To maintain compliance while continuing necessary dewatering operations, staff and consultants have developed a Total Dissolved Solids (TDS) Discharge Offset Program. This program offsets TDS discharges by using other District-operated TDS removal sources.

BACKGROUND:

IRWD's Michelson Water Recycling Plant (MWRP) is located adjacent to the San Joaquin Marsh and the San Diego Creek. High groundwater levels at the facility necessitate continuous dewatering of the shallow groundwater zone to protect in-ground structures. This dewatering is accomplished through a network of shallow wells that discharge into the San Joaquin Marsh, a designated Waters of the State.

The Clean Water Act and National Pollutant Discharge Elimination System (NPDES) regulations impose strict discharge requirements and reporting obligations. The MWRP NPDES permit specifically limits total dissolved solids concentrations to 1,500 mg/L. Over the past ten years, MWRP dewatering flows have periodically exceeded this limit.

To address elevated TDS levels and maintain compliance, IRWD retained a consultant to develop an offset plan, as identified in the District's 2025 Strategic Goals. The objective of the plan is to compensate for TDS loads exceeding the 1,500 mg/L limit at a 2:1 ratio. The plan documents TDS removal achieved through District projects, pipelines, and facilities including the Peters Canyon Pipeline, Shallow Groundwater Unit, and Natural Treatment System. These documented TDS reductions will offset the excess TDS discharged by the MWRP dewatering wells.

Staff's draft PowerPoint presentation is provided as Exhibit "A".

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit “A” – TDS Discharge Offset Program Update





TDS DISCHARGE OFFSET PROGRAM UPDATE

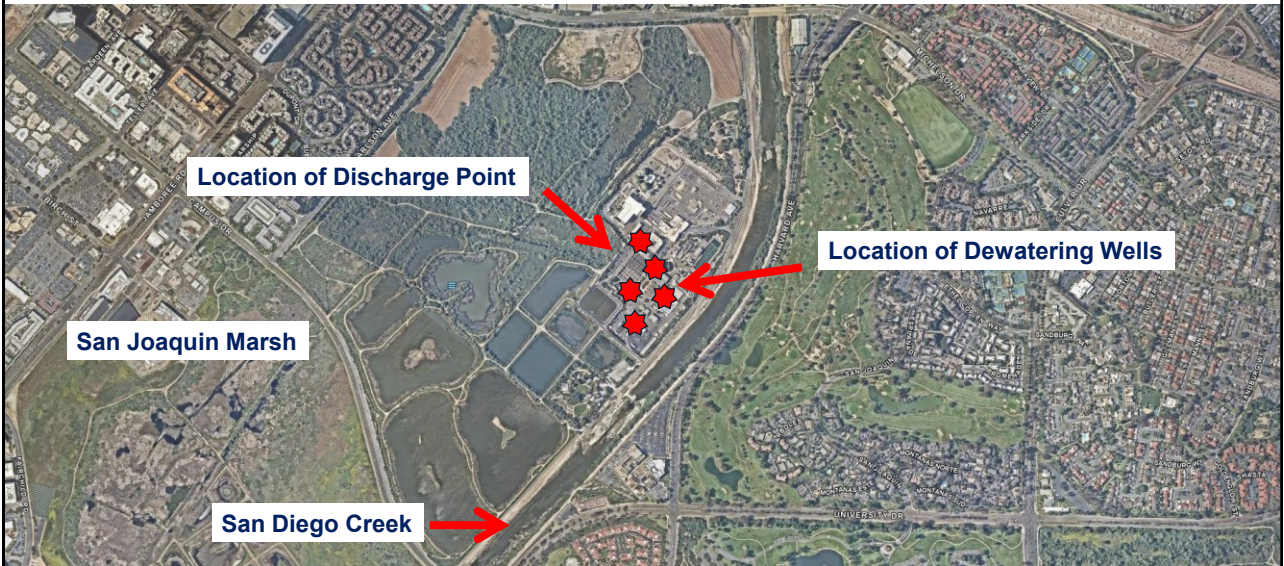
NOVEMBER 18, 2025

Draft

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1

LOCATIONS OF WELLS AND DISCHARGE



Location of Discharge Point

Location of Dewatering Wells

San Joaquin Marsh

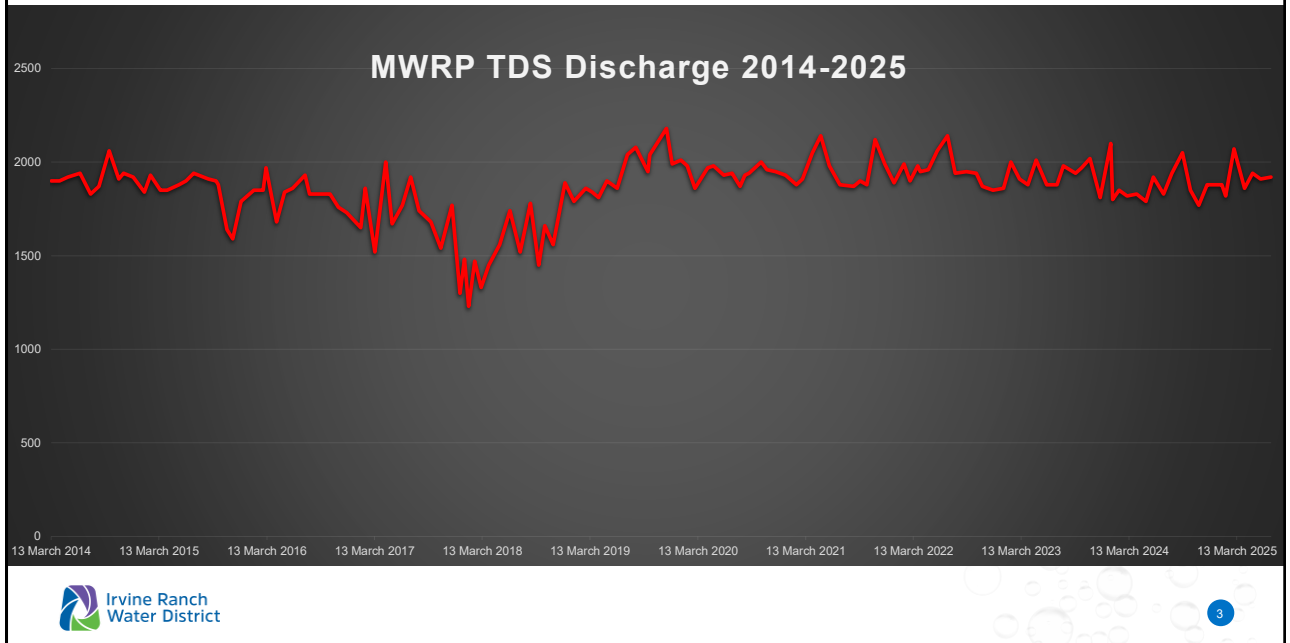
San Diego Creek



2

2

TDS LEVELS OF TIME



3

LOADS AND CREDITS

TDS Offset Plan Monthly Summary As of January 2025	
TDS Banking/Offset Component	TDS Mass Loading (lbs)
Monthly Discharge TDS Mass Load Needed for Offset	14,544
Monthly TDS Mass Load CREDITS Generated by the NTS sites	958,701
Total TDS Mass CREDITS Available to Use (3-year accumulation)	35,230,243
Remaining Total TDS Mass CREDIT BALANCE after January 2025	33,883,457

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November 18, 2025
Prepared by: E. Akiyoshi / J. Moeder /
B. Rios / B. Waite
Submitted by: K. Burton
Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

UPCOMING PROJECTS STATUS REPORT

SUMMARY:

A status report of Irvine Ranch Water District's Upcoming Projects is presented to the Committee for information.

BACKGROUND:

The information, which is provided as Exhibit "A", is a status report submitted quarterly to the Committee for review.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Upcoming Projects Status Report

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Exhibit "A"

IRWD UPCOMING PROJECTS STATUS REPORT

	Project Name	Program	Project	Planning	Design	Construction	Construction
		Manager	Manager				Final Acceptance
1	Coastal Zone B and Coastal Zone D Pump Station Electrical System Replacement	Waite	Alvarez	Completed	In-Process	Jul-27	-
2	East Irvine Zone 3-4 Pump Station Rehabilitation	Waite	Alvarez	In-Process	Apr-26	-	-
3	MWRP Phase 3 Expansion Flow/Loading Study	Waite	Alvarez	In-Process	-	-	-
4	Sand Canyon Headquarters and Operations Center HVAC Upgrades	Waite	Foo	Completed	In-Process	Mar-26	Jun-27
5	Wells 6, 12, 14, and 15 Site Improvements	Waite	Foo	Completed	In-Process	Apr-26	Nov-27
6	Operations Center Warehouse and Water Quality Storage Building	Waite	Foo	Completed	Completed	In-Process	Oct-26
7	Rehabilitation of Irvine Desalter Wells 76, 110, 115R and Destruction of Wells 72, 106	Waite	Foo	Completed	Completed	Completed	Jan-26
8	Silverado Canyon Bridge 174 Domestic Water Pipeline Improvements	Waite	Foo	Completed	Completed	In-Process	Jan-27
9	Silverado Canyon Bridge 175 Domestic Water Pipeline Improvements	Waite	Foo	Completed	In-Process	May-27	Jul-27
10	Silverado Canyon Bridge 177 Domestic Water Pipeline Improvements	Waite	Foo	Completed	Completed	Aug-26	Sep-26
11	Rehabilitation of Dyer Road Wellfield Well No. 7	Waite	Foo	Completed	Completed	Dec-25	Jul-26
12	Biosolids Solids Handling Building Dust Mitigation	Waite	Mai	Completed	In-Process	Mar-26	Apr-26
13	MWRP Biosolids Lift Station and Sewer Pipeline	Waite	Mai	Completed	Completed	In-Process	Feb-27
14	Radio Tower Improvements	Waite	Mai	Completed	Completed	In-Process	May-26
15	Manning Pump Station Replacement	Waite	Mai	Completed	In-Process	Mar-26	Sep-26
16	Lake Forest Woods Sewer Improvements	Waite	Murphy	Completed	Completed	In-Process	Sep-26
17	MWRP Biosolids Handling Upgrades	Waite	Murphy	Completed	In-Process	Sep-26	Sep-27
18	Coastal Zone 1 to 2 and Zone 2 to 4 Pump Stations Rehabilitations	Waite	Murphy	Completed	Completed	In-Process	Jan-27
19	MWRP Fueling Facility	Waite	Ovcharenko	Completed	Completed	In-Process	Apr-26
20	MWRP Tertiary Filter Rehabilitation	Waite	Ovcharenko	Completed	Completed	In-Process	Sep-26
21	LAWRP Effluent Transmission Pump Station Tank Repair	Waite	Ovcharenko	Completed	In-Process	-	-
22	LAWRP Ponds Biosolids Removal and Disposal	Waite	Spangenberg	Completed	In-Process	Mar-26	Jan-27
23	Santiago Creek Dam Improvements	Moeder	Moeder	Completed	In-Process	Aug-26	-
24	Syphon Reservoir Improvements	Moeder	Moeder	Completed	In-Process	Jun-26	Sep-30
25	Howiler Supply Pipeline Vault Rehabilitations	Moeder	Burk	Completed	In-Process	Feb-27	-
26	Orange Heights Zn 5 to 6 and C+ to E Pump Stations	Moeder	Burk	Completed	On Hold	-	-
27	SWD Interconnection Pipeline	Moeder	Burk	Completed	In-Process	Apr-26	Jul-27
28	Howiler to Zone 5 Pump Station	Moeder	Burk	Completed	In-Process	Feb-27	-
29	BWTP Chemical Line Repair	Moeder	Burk	Completed	Jan-25	-	-
30	Rattlesnake Dam Risk Reduction Investigation	Moeder	Cho	Completed	In-Process	-	-
31	Santiago Canyon Fleming Zone 8 Tank and Zone 8-9 BPS	Moeder	Cho	Completed	Completed	In-Process	Mar-26
32	Orange Heights Zone 6 Reservoir	Moeder	Cho	Completed	Completed	On Hold	-
33	Generator Fuel Storage Upgrades	Moeder	Cho	Completed	Completed	In-Process	Mar-26
34	San Joaquin Reservoir Outlet Valve Replacement	Moeder	Cho	Completed	Completed	In-Process	Dec-26
35	Rattlesnake Reservoir Fence	Moeder	Cho	Completed	Completed	In-Process	Feb-26
36	San Joaquin Reservoir Filtration	Moeder	Lu	Completed	Completed	In-Process	Mar-26
37	Sewer Siphon Improvements Phase II	Moeder	Lu	Completed	Completed	In-Process	May-26
38	Rattlesnake Dam Outlet Pipeline Rehabilitation	Moeder	Lu	Completed	In-Process	Jul-26	-
39	Santiago Hills Zone 5 Tank Repair	Moeder	Lu	Completed	Completed	Jan-26	Mar-26
40	Lake Forest Zone 4 Tanka Rehabilitation	Moeder	Mwe	Completed	Completed	Dec-25	Jun-27
41	Chapman Tank Rehabilitation	Moeder	Mwe	In-Process	-	-	-
42	Shaw Tank Replacement	Moeder	Mwe	Completed	In-Process	Sep-26	-

IRWD UPCOMING PROJECTS STATUS REPORT

	Project Name	Program	Project	Planning	Design	Construction	Construction
		Manager	Manager				Final Acceptance
43	San Joaquin Dam Drainage Improvements	Moeder	Mwe	Completed	In-Process	Mar-26	Jul-26
44	MWRP Acid Phase Digester Rehab	Moeder	Mwe	In-Process	-	-	-
45	Sand Canyon Dam Spillway Rehabilitation	Moeder	Sanchez	In-Process	-	-	-
46	Sand Canyon Dam Instrumentation	Moeder	Sanchez	Completed	In-Process	May-26	-
47	Sand Canyon Dam Seepage Improvements	Moeder	Sanchez	Completed	In-Process	Jun-26	-
48	PA 1, Jeffrey Road Extension RW and DW (RA w/CDC)	Rios	Rios	Completed	Completed	Completed	Sep-25
49	PA 51, District 5 South Chinon DW, RW (RA with Heritage Fields)	Rios	Rios	Completed	Completed	In-Process	Sep-25
50	PA 51, Marine Way Stage 2 from Skyhawk to Treble DW, RW (RA with Heritage Fields)	Rios	Rios	Completed	Completed	Completed	Sep-25
51	PA 51 Marine Way Stage 3 from County to Lynx	Rios	Rios	Completed	Completed	In-Process	Sep-25
52	PA 51 Marine Way Stage 4 from Lynx to OCTA Rail	Rios	Rios	Completed	In Process	Nov-25	Jun-26
53	PA 51, Treble from GP5 to Marine Way DW, RW (RA with Heritage Fields)	Rios	Rios	Completed	Completed	In-Process	Sep-25
54	PA 51 Lynx from Harrier to Marine Way DW, SS (RA with Heritage Fields)	Rios	Rios	Completed	Completed	In-Process	Sep-25
55	PA 1, Orchard Hills Neighborhood 4 DW (RA with TIC)	Rios	Rios	Completed	Completed	In-Process	Sep-25
56	PA 1, Orchard Hills Neighborhood 4 RW (RA with TIC)	Rios	Rios	Completed	Completed	In-Process	Sep-25
57	East Orange, Orange Heights Tract 16199 SS, RW	Rios	Rios	Completed	In-Process	Nov-25	Aug-26
58	East Orange, Orange Heights Tract 17995 DW, RW	Rios	Rios	Completed	In-Process	Nov-25	Aug-26
59	East Orange, Orange Heights Jamboree and Chapman DW SS, RW	Rios	Rios	Completed	In-Process	Nov-25	Aug-26
60	Discovery Apartments 12-inch Sewer Up-size	Rios	Rios	Completed	Apr-25	In-Process	Dec-25
61	PA 40 Marine Way Capital Domestic	Rios	Rios	Completed	Completed	In-Process	Oct-25
62	Land Management and Permitting Enterprise System Implementation	Rios	Rios	In-Process	-	-	-
63	I-5 Widening Sand Canyon 12 inch DW Relocation Seg1	Rios	Botello	Completed	In-Process	Feb-26	Sep-26
64	I-5 Widening Sand Culver 36 inch RW Relocation Seg2	Rios	Botello	Completed	In-Process	Feb-26	Sep-26
65	Modjeska Grade Road DW Pipeline Relocation	Rios	Botello	Completed	In-Process	Jan-26	May-26
66	Orange Heights SAC/Baker Pipeline Relocation	Rios	Botello	Completed	Completed	On Hold	-
67	Effluent Transmission Main Reach A Rehabilitation	Rios	Botello	In-Process	-	-	-
68	San Joaquin Hills Road RW Pipeline Replacement	Rios	Botello	Completed	In-Process	Apr-26	Sep-26
69	Silkwood/Willowleaf RW Pipeline Replacement	Rios	Botello	Completed	In-Process	Apr-26	Sep-26
70	Recycled Water PRVs Decommissioning	Rios	Ige	Completed	In-Process	Jan-26	May-26
71	Technology Drive and Ada RW Pipeline Replacement	Rios	Ige	Completed	Completed	In-Process	Feb-26
72	Turtle Rock/Concordia RW Pipeline Replacement	Rios	Ige	Completed	Completed	In-Process	Jun-26
73	Irvine Business Complex Appurtenance Relocations Phase 3	Rios	Ige	Completed	Completed	Jan-26	Jul-26
74	EV Charging Facilities	Rios	Ige	Completed	In-Process	-	-
75	Cabinland DW Pipeline Sizing Verification	Rios	Ige	In-Process	-	-	-
76	Condition Assessment Plan for DRWF Pipeline	Akiyoshi	Robinson	Mar-26	-	-	-
77	LAFCO Annexation of Lake Forest Area in OC San Boundary	Akiyoshi	Akiyoshi	Mar-26	-	-	-
78	Mid-Cycle Capital Budget Update	Akiyoshi	Robinson	Jan-26	-	-	-
79	Great Park Recycled Water Connection Fee and Lake Supply Negotiations	Akiyoshi	Robinson	In-Process	-	-	-
80	Corrosion Protection Program - Impressed Current System Upgrades	Akiyoshi	Jaramillo	Jan-26	-	-	-

November 18, 2025
Prepared by: J. Colston
Submitted by: K. Burton
Approved by: Paul A. Cook 

ENGINEERING AND OPERATIONS COMMITTEE

IRWD RESEARCH BUSINESS PLAN UPDATE

SUMMARY:

Staff will provide an update on the research projects in which IRWD is currently involved.

BACKGROUND:

Periodically, IRWD receives requests to participate in various research projects pertaining to emerging technologies through either direct funding or dedication of in-kind staff resources. Guidelines were developed to assist staff with its evaluation and response to those requests. These guidelines were incorporated into the IRWD Research Business Plan, which also provides a tracking mechanism for the various requests and ongoing research projects and programs in which IRWD participates. The Research Business Plan ensures that IRWD's research resources are being prioritized and utilized effectively.

One of the components of the Research Business Plan is for staff to provide a status update on the research projects to the Engineering and Operations Committee on a quarterly basis. IRWD actively participates in the Technology Approval Group (TAG) sponsored by Isle Utilities. The TAG hosts numerous developing technology providers in order to match interested agencies with their technologies.

Since the last report, staff evaluated one external request to participate in a pilot research project from UC Irvine, Water-Energy Nexus Center, to evaluate an atmospheric water harvester coupled with an engineered septic tank. After consideration, staff declined to participate in that project. The following are projects of interest to IRWD undertaken by the Water Research Foundation, and we are actively following them for potential benefits to IRWD:

- Data-Driven Process Control for Maximizing Energy and Resource Efficiency in WRRFs: Implementation Guide (5141 – New Report)
- Smart Metering Playbook: Compendium of Resources for WRF Subscribers-Case Studies (5261 – New Report)
- One PFAS: A One Water Approach to Managing PFAS (5345 – Project Information Summaries)
- Developing a Greenhouse Gas Emissions Library for Unit Processes by Water Utilities and Decentralized Systems (5255 – Project Updates)
- Upcoming Webcast December 6, 2025: Evaluating Changes in Peak Water Demand and How That May Affect the Choice, Design, Management, and Evaluation of Demand Management Strategies

The following research item has not changed in status since the last report; however, more research papers are expected in the coming months.

- UCI CDC Sponsored PFAS Epidemiological Study – UCI conducted a Centers for Disease Control (CDC) sponsored study of health impacts from the public drinking potable water tainted with Per- and Poly-fluoroalkyl substances (PFAS). Researchers added a PFAS Child Immune Study to this research. The data collection portion of the research has been completed. The data has been reviewed, and numerous scholarly manuscripts are under production. One recent manuscript with summary data is *Multi-site study of communities with PFAS-contaminated drinking water: Methods, demographics, and PFAS serum concentrations*. The Director for Water Quality & Regulatory Compliance participated in a webinar hosted by the Center for Disease Control (CDC) to go over the nationwide results. This research is complete, but the report writing is ongoing.

A summary of the current research projects is attached as Exhibit “A”.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit “A” – Research Projects Summary

Exhibit "A"

Research Projects Summary Table

No.	Project Title	Project Description	IRWD Contact	Organizations Involved	Type of Research	IRWD Participation Resource	Start Date	Projected Completion Date
1	UCI CDC Sponsored PFAS Epidemiological Study	UCI is conducting a Centers for Disease Control (CDC) sponsored study of health impacts from the public drinking potable water. Due to localized PFAS contamination in some Orange County drinking water sources, the CDC is sponsoring research to determine potential public health effects. IRWD's Irvine service area is seen as an ideal control population due to the lack of PFAS in IRWD's served potable water.	Colston	UCI, OCWD, IRWD, CDC	Epidemiological that seeks 1,000 adults and 300 children for blood serum level testing.	Assistance in determining historic sources of drinking water in IRWD's service area.	Jan-23	Dec-25

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November 18, 2025
Prepared by: E. Akiyoshi
Submitted by: K. Burton
Approved by: Paul A. Cook



ENGINEERING AND OPERATIONS COMMITTEE

IRWD/OC SAN/OCWD GREEN ACRES PROJECT FLOWS AGREEMENT AND IRWD/OC SAN FLOW EXCHANGE AGREEMENT

SUMMARY:

IRWD, Orange County Sanitation District (OC San), and Orange County Water District (OCWD) have collaborated to developing two new agreements: one between IRWD, OC San, and OCWD, which will essentially extend the term of the Green Acres Project (GAP) agreement and the other between IRWD and OC San, which will consolidate and streamline multiple previous agreements between the two agencies. Staff recommends that the Board authorize the General Manager to execute the GAP Flows Agreement and authorize the General Manager to execute the Flow Exchange (FE) Agreement, both subject to non-substantive changes.

BACKGROUND:

While IRWD recycles most of the sewage collected from its customers at the Michelson Water Recycling Plant (MWRP) and the Los Alisos Water Recycling Plant (LAWRP), some sewage from IRWD has been sent over the years to OC San's wastewater treatment plants for different reasons. Additionally, OC San's treatment plants have served as IRWD's "backup" for the sewage treatment and/or excess flows disposal. During this time, various flow accommodation agreements have been executed to handle sewage collection and treatment throughout IRWD and neighboring service areas. These agreements also included Operations and Maintenance (O&M) and Capital expenditure charges for the services. A map showing the areas affected by these flow accommodation agreements is provided as Exhibit "A".

IRWD and OC San have collaborated to consolidate and simplify many of the wastewater agreements that have been implemented over the past 60 years. In addition, IRWD, OC San, and OCWD have concurrently been working to develop a new GAP agreement. Consensus has been reached on the terms for a new GAP agreement and a consolidated and simplified flow exchange agreement. Listed below are summaries of the deal points related to the respective agreements.

New GAP Agreement (IRWD/OCWD/OC San): The new GAP agreement will provide OCWD a source of recycled water while providing IRWD a continued no-cost disposal option for excess recycled water for the next 20 years with automatic annual renewals thereafter. The new GAP agreement is provided as Exhibit "B".

Flow Exchange Agreement (IRWD/OC San): This agreement consolidates and simplifies several prior agreements related to the Irvine Business Complex (IBC), Jamboree/Bison area, San Joaquin Hills Planned Community (SJHPC), Harvard Area Trunk Sewer (HATS), Orange Park Acres (OPA), and U.S. Food and Drug Administration Property. The agreement also establishes a pathway for IRWD to annex the remaining portion of its Lake Forest service area into OC San's service area. The IRWD/OC San FE agreement is provided as Exhibit "C".

Described below are the main deal points:

- *IBC, Tustin MCAS, and USFDA Transfer Area:* In April 2001 and July 2003, OC San transferred treatment and local collection responsibilities for this transfer area to IRWD. The FE agreement will transfer the sewage treatment responsibility back to OC San and OC San will charge customers directly for sewage treatment. This will eliminate extensive and expensive flow monitoring every five years and assures OC San and OCWD that the roughly five million gallons per day (MGD) of sewage flows will remain with OC San and available to OCWD for the Groundwater Replenishment System. These flows will continue to be counted as part of IRWD's commitment under the 2013 OCWD/IRWD annexation agreement to send at least four MGD of flows to OC San through October 2, 2033.
- *Jamboree/Bison Transfer Area:* Since April 2005, IRWD has been treating sewage from an OC San Consolidated Revenue Area in Newport Beach. This resulted in approximately 0.2 MGD flow credit on IRWD's Capital Outlay Revolving Fund (CORF) and Equity expenses. The FE agreement will replace the annual flow monitoring and flow credit with OC San simply issuing IRWD an annual check for all the treatment fees and property taxes from this area.
- *HATS Transfer Area:* In June 1991, OC San abandoned several small lift stations and routed the sewage flows to IRWD's HATS trunk sewer. IRWD receives approximately 1.0 MGD flow credit for the flows whenever the flows are directed to MWRP (which is the normal mode of operation). The FE agreement eliminates the annual flow monitoring and provides for up to a one MGD flow credit whenever IRWD is sending sewage flow to OC San through the Main Street Diversion Structure. In addition, OC San will waive all O&M expenses associated with the GAP Outfall in exchange for IRWD waiving approximately the same amount of O&M expenses associated with OC San's use of IRWD's HATS trunk sewer.
- *OPA and SJHPC Transfer Areas:* OPA and SJHPC areas both have flow accommodation agreements where annual flow monitoring or counting of sewer connections are conducted and OC San charges IRWD for sewage treatment. The FE agreement will eliminate the annual activities, and OC San will charge the customers directly for sewage treatment.
- *1% Ad Valorem Property Taxes:* In any area where 1% Ad Valorem property taxes are collected (i.e., IBC, Jamboree/Bison, and SJHPC), the taxes will be split into sewage treatment, regional collection, and local collection. The agency responsible for each service will receive the appropriate portion of the 1% Ad Valorem property tax related to those services. Staff have negotiated and developed a methodology for splitting the tax revenue that will be initiated annually. The FE agreement includes an allocation of currently received ad valorem tax revenue. This results in a net transfer of approximately \$2.7 million per year of the areas' taxes being received by IRWD.
- *Lake Forest Area Annexation:* The majority of Lake Forest's sewer tributary area flows to the LAWRP and is not within OC San's boundary. In the FE agreement, OC San agrees to support the Local Area Formation Commission (LAFCO) process to annex the Lake Forest area into the OC San boundary. While the customers in Lake Forest will remain IRWD customers, flow from LAWRP could go to MWRP. OC San will grant IRWD an Out-of-Area Service Agreement until the LAFCO process is complete. On September 24, 2025, the OC San Board adopted a resolution supporting the LAFCO Lake Forest Annexation process.

The two agreements have been reviewed by legal counsel at IRWD, OC San, and OCWD. All three agencies are scheduled to obtain approval from their respective Boards by the end of November 2025.

FISCAL IMPACT

IRWD and OC San staff have negotiated each financial component of the flow exchange agreement. IRWD's ongoing annual CORF payments are reduced by approximately five MGD worth of contributions, which is as a proportion of OC San's approximately 180 MGD total flow. IRWD's net 1% Ad Valorem property tax revenue from the areas will be approximately \$2.7 million for sewage treatment and collection services being provided by IRWD. The transfer areas involve flow credits and sewage treatment charges being exchanged as well. The agreements are mutually beneficial for the parties involved. Most importantly, the charges being paid by the customers receiving sewage collection and treatment services are fairly allocated based on the cost of the services being provided.

ENVIRONMENTAL COMPLIANCE:

This project is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3). The activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

RECOMMENDATION:

That the Board authorize the General Manager to execute the Flow Exchange Agreement and execute the Green Acres Project Flows Agreement, both subject to non-substantive changes.

LIST OF EXHIBITS:

Exhibit "A" – Location Map
Exhibit "B" – Flow Exchange Agreement
Exhibit "C" – Green Acres Project Flows Agreement

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OC SAN
ORANGE COUNTY SANITATION DISTRICT

Exhibit "A" - Transfer and Annexation Areas

November 2025

Exhibit "A"

LEGEND

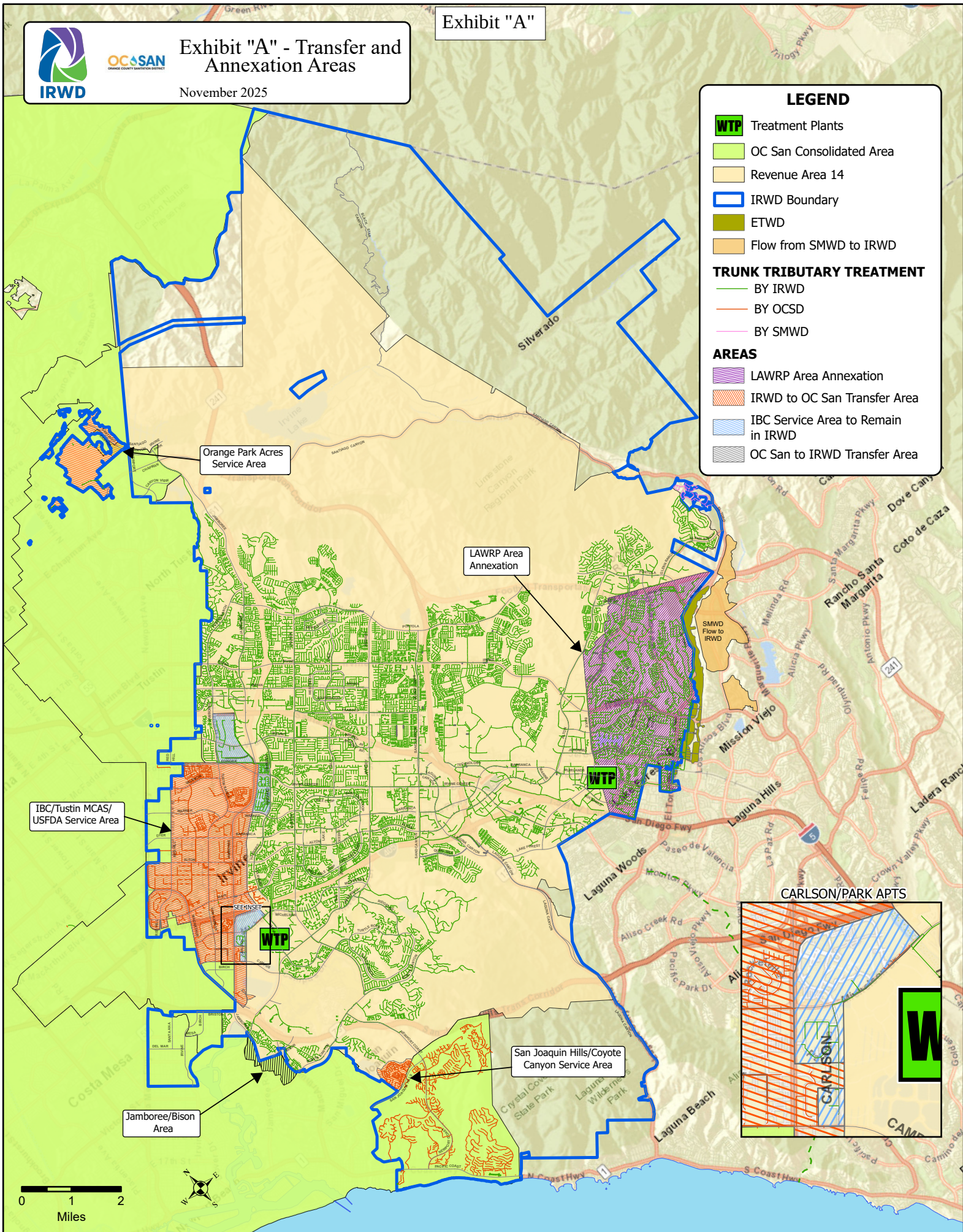
- WTP** Treatment Plants
- OC San Consolidated Area
- Revenue Area 14
- IRWD Boundary
- ETWD
- Flow from SMWD to IRWD

TRUNK TRIBUTARY TREATMENT

- BY IRWD
- BY OCSD
- BY SMWD

AREAS

- LAWRP Area Annexation
- IRWD to OC San Transfer Area
- IBC Service Area to Remain in IRWD
- OC San to IRWD Transfer Area



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FLOW EXCHANGE AGREEMENT

This Flow Exchange Agreement (“**Agreement**”) is dated _____, 2025 and is between the Orange County Sanitation District (“**OC San**”), a county sanitation district, and Irvine Ranch Water District (“**IRWD**”), a California Water District. OC San and IRWD and their predecessors are sometimes referred to individually as a “**Party**” and collectively as the “**Parties**.”

A. OC San was created under the California County Sanitation District Act (California Health and Safety Code Section 4700 et seq.), which empowers it to (i) own, control, manage, and dispose of any interest in real or personal property necessary or convenient for the construction, maintenance, and operation of a sewerage system and sewage disposal or treatment plant (*Id.* at Section 4740) and (ii) acquire, construct, and complete within or without the district, sewage collection, treatment and disposal works, including sewage treatment plants, outfalls, intercepting, collecting and lateral sewers, pipes, pumps, machinery, easements, rights-of-way, and other works, property or structures necessary or convenient for sewage collection, treatment, and disposal (*Id.* at Section 4741).

B. IRWD was created under the California Water District Law (California Water Code Section 34000, et seq.) which empowers it to carry out the powers and purposes granted to it under the California Water Code, including the treatment and reuse of wastewater.

C. OC San is the successor-in-interest to nine County Sanitation Districts of Orange County (“**CSDOC**”), which consolidated to form OC San in 1998. OC San owns the Joint Wastewater Treatment Facilities (“**JWTF**”) which are comprised of two wastewater reclamation plants as well as a regional wastewater transmission system.

D. IRWD owns the Michelson Water Recycling Plant (“**MWRP**”), the Los Alisos Water Recycling Plant (“**LAWRP**”), and local collection facilities. IRWD’s wastewater conveyance and treatment system is interconnected with OC San’s system.

E. The Parties have a long history of working cooperatively on wastewater transmission, treatment, and disposal (including ocean disposal) of excess water, under various flow accommodation agreements, including those listed in Exhibit A (the “**Prior Agreements**”), and are working together to definitively update, consolidate and restate these and other prior agreements into a more manageable and consolidated form

F. Due to the substantial overlap of their service areas, the Parties, through the Prior Agreements, made determinations about which Party as an alternative to or substitute for the other Party, would provide the most efficient approach to local conveyance, regional transmission, treatment, disposal, and wastewater recycling services to various areas in their respective service areas. However, the Prior Agreements contain complicated financial reconciliation of ad valorem taxes and user fees between the Parties that the Parties wish to eliminate.

G. OC San’s jurisdiction encompasses most of IRWD’s jurisdiction, giving the Parties overlapping authority to provide wastewater services therein; however, a portion of

IRWD's service area tributary to the LAWRP ("**LAWRP Area**") is outside OC San's jurisdiction.

H. IRWD has infrastructure available to provide services more efficiently in one area of OC San's jurisdiction, and OC San has infrastructure available to provide services more efficiently in other areas.

I. The Parties intend by this Agreement to ratify and clarify service responsibility and align revenue collection in some of these shared service areas, and to provide for OC San's service to the LAWRP Area through the annexation of the LAWRP Area into OC San. Specifically, the Parties intend by this Agreement to:

- Amend or supersede the Prior Agreements arrangements between the Parties where their territories overlap in order to streamline their interrelated operations and finances, and to optimize service plans for ownership, management, operation, and development and modernization of wastewater treatment and recycling services, as provided in Sections 3 and 4 below,
- Authorize IRWD to act on OC San's behalf in the Jamboree and Bison Lift Station Service Area, as provided in Section 5 below, and
- Provide for the annexation of the LAWRP Area of IRWD to OC San, as provided in Section 6 below.

NOW THEREFORE in consideration of the mutual covenants and conditions contained herein and in the *GAP Flows Agreement* between the Parties and Orange County Water District dated December __, 2025 approved concurrently herewith, the Parties agree as follows:

1. **Effective Date.** This Agreement will become effective ("**Effective Date**") upon:

1.1 The Parties' execution of the *GAP Flows Agreement* dated December __, 2025 and presented for consideration by their Boards concurrently with this Agreement, and

1.2 The earlier of (i) July 1, 2026, or (ii) recordation of the annexation to OC San of the LAWRP Area of IRWD described in Section 6 (the "**LAWRP Area Annexation**") following approval by the Orange County Local Agency Formation Commission ("**LAFCO**").

2. **Reserve Fund Adjustments**

2.1 IRWD Financials. Certain of the Prior Agreements provided for a periodic calculation of operational and capital reserve balances held by the Parties for anticipated payments to each other. Beginning on the Effective Date, OC San shall provide IRWD an annual calculation of anticipated annual operation and maintenance expenses ("**Annual Reserve Amount**"). IRWD shall segregate from its general fund and hold in reserve for payment to OC San the Annual Reserve Amount for that year, with proof provided to OC San that the Annual Reserve Amount has been deposited to a separate identified account.

2.2 OC San Financials. OC San shall credit future invoices to IRWD with any segregated amounts on deposit that OC San maintains on IRWD's behalf on the Effective Date,

and OC San shall remit the total of any remaining amounts on deposit to IRWD one year after the Effective Date.

3. **Transfer Areas**

3.1 Under the Prior Agreements, the Parties allocated Regional Transmission and Wastewater Treatment responsibility to a Party reliant on pumping wastewater against gravity to collect and/or convey that wastewater for treatment.

3.1.1. **“Regional Transmission”** means regional conveyance of wastewater from multiple local sewer service providers’ collection systems, generally having no direct service connections to retail customers, and/or having no diversion pump stations to a wastewater treatment facility belonging to another entity.

3.1.2. **“Wastewater Treatment”** means the treatment of wastewater, disposal of treatment by-products, ocean disposal of excess water, and wastewater recycling.

3.2 The Parties intend to formalize and restate the terms for the transfer of responsibility for Regional Transmission and Wastewater Treatment in certain locations to the Party that can most efficiently provide the services in those areas, where shown in Exhibit B (**“Transfer Areas”**) and to maintain the level of service in these Transfer Areas at the level of service provided prior to the Effective Date, pending the annexation discussed in Section 6.

3.3 IRWD-to-OC San Transfer Areas

3.3.1. Transfer Areas. IRWD currently provides **“Local Collection”** (meaning the collection and transmission of wastewater from the customer to the Regional Transmission facility), as well as Regional Transmission and Wastewater Treatment services to portions of those Local Collection areas, as identified in Exhibit B, specifically:

- Irvine Business Complex/Tustin MCAS/USFDA Service Area,
- Orange Park Acres Service Area, and
- San Joaquin Hills/Coyote Canyon Service Area.

These areas are referred to as the **“IRWD-to-OC San Transfer Areas.”**

3.3.2. Transfer of Service Responsibility. IRWD hereby transfers and OC San hereby accepts transfer of Regional Transmission and Wastewater Treatment service responsibility for the IRWD-to-OC San Transfer Areas as shown in Exhibit B. IRWD shall continue to provide customers with Local Collection services, and all Local Collection facilities serving the IRWD-to-OC San Transfer Areas remain the property and responsibility of IRWD. OC San shall provide Regional Transmission and Wastewater Treatment to customers in the IRWD-to-OC San Transfer areas.

3.3.3. Service Fees and Charges. IRWD will recover its costs of service by continuing to collect sewer service fees, but only in the amount related to Local Collection. IRWD shall not charge customers in the IRWD-to-OC San Transfer Areas for any treatment component of the service charge. OC San will recover its costs for Wastewater Treatment and

Regional Transmission in the IRWD-to-OC San Transfer Areas through imposition and collection of a new and separate fee charged to customers in these areas.

3.3.4. Equity Ownership. Because OC San will be assuming the duty for Regional Transmission and Wastewater Treatment for the IRWD-to-OC San Transfer Area, IRWD hereby transfers to OC San at no cost the Equity Ownership in the JWTF for each transferred area as follows:

- Irvine Business Complex/Tustin MCAS/USFDA Service Area – 4.7 MGD
- Orange Park Acres Service Area – 0.04 MGD
- San Joaquin Hills/Coyote Canyon Service Area – 0.13 MGD

3.3.5. Connection Fees. Within 60 days after the Effective Date, IRWD shall pay to OC San the IRWD treatment component of the connection fees collected by IRWD from customers in the IRWD-to-OC San Transfer Areas between the effective dates of the last flow measurements for each area and the Effective Date of this Agreement. The last flow measurements were completed as follows:

- Irvine Business Complex/Tustin MCAS/USFDA Service Area – September 2022 (effective January 1, 2023)
- Orange Park Acres Service Area – July 2025
- San Joaquin Hills/Coyote Canyon Service Area – May 2025

3.3.6. Ad Valorem Taxes. OC San will continue to collect the increment of ad valorem taxes attributable to Local Collection services for all properties in the IRWD-to-OC San Transfer Areas and will remit them to IRWD within 180 days of the end of each fiscal year. The increment of ad valorem taxes will be calculated for the initial year of this Agreement and increased by the percentage increase in OC San's ad valorem taxes each year. At least every 5 years, the base annual property tax amount remitted to IRWD will be recalculated based on information provided by the County of Orange, but there will be no lookback reconciliation for the prior years. The method for this determination is attached as Exhibit C.

3.4 Supersession of Prior Agreements. The following flow accommodation agreements are hereby superseded and of no further force or effect as of the Effective Date, but any capacity or property rights previously conveyed between the Parties under those agreements will be unaffected by this Agreement:

- The April 25, 2001 *Inter District Wastewater Flow Accommodation Agreement*.
- The July 1, 2003 *Agreement* related to properties with the boundaries of the Irvine Business Complex and the Tustin Marine Corps Air Facility.
- The August 27, 2008 *Agreement to Accommodate Wastewater Flows from the San Joaquin Hills Planned Community/Coyote Canyon Landfill/Gas Recovery Systems Areas that Originate in Revenue Area 14*.
- The June 28, 2010 *Agreement for Administrative Transfer of Orange Park Acres Service Area to Revenue Area 14 and Inclusion of Flows in Revenue Area 14 Wastewater Flow Calculations*.

4. Harvard Area Trunk Sewer. Under the *Agreement for Purchase of Capacity in the [IRWD] Harvard Avenue Trunk Sewer* dated June 10, 1991 (the “**HATS Agreement**”), the Parties provided (among other things) for certain OC San wastewater flows outside of IRWD’s service area to be conveyed through IRWD’s Harvard Avenue Trunk Sewer (“**HATS**”), and back to OC San’s JWTF. The Parties hereby amend the HATS Agreement to provide as follows:

4.1 For the flows in HATS that originate outside of IRWD’s service area, IRWD may provide Wastewater Treatment at MWRP, or IRWD may continue to divert flows to the JWTF at no cost.

4.2 Based on historical flow monitoring, HATS flows originating outside of IRWD’s service area are equivalent to 1.0 MGD. Accordingly, when IRWD diverts wastewater flows to OC San, IRWD will reduce the calculated average daily flow sent to OC San for each month by up to 1.0 MGD (the average monthly flow cannot be negative).

4.2.1. There will be no accrual of the flow reduction for months in which diversions do not occur.

4.2.2. The 1.0 MGD value may be updated via new flow monitoring at the expense of the requesting Party. Flow monitoring should be representative, be performed for a continuous period of not less than 21 days, exclude any day and following 2 days in which there was measurable rainfall, and occur between April and November. Flow monitoring results will be averaged with results from the preceding three years, if any occurred.

4.2.3. IRWD shall make reasonable efforts to schedule non-emergency construction-related and maintenance-related flow diversions to occur during the dry season (April 15 through October 15) and shall coordinate such diversions with OC San.

4.2.4. IRWD’s decision to treat wastewater originating outside of IRWD’s service area at MWRP will not result in a “flow credit” to IRWD.

4.3 For so long as the *GAP Flows Agreement* is in effect, and in exchange for OC San’s waiver of charges to IRWD for flows under that agreement, IRWD shall suspend and waive any charges to OC San for HATS maintenance fees under Section 3 of the HATS Agreement.

4.4 Except as amended by this Agreement, the HATS Agreement will remain in full force and effect.

5. OC San-to-IRWD Transfer Area (Jamboree-Bison). OC San’s Revenue Area 14 is exclusively funded by IRWD. Under the April 27, 2005 *Agreement for Accommodation of Flows from City of Newport Beach Abandoned Lift Stations Accepted by Irvine Ranch Water District Sewer System* (“**Jamboree-Bison Agreement**”), the Parties agreed that in exchange for IRWD’s Regional Transmission by gravity of certain flows from the City of Newport Beach (which is not inside Revenue Area 14) to OC San’s system that would otherwise require pumping, that IRWD would receive a flow credit for Revenue Area 14 to deduct for the flows from Newport Beach. This method required annual flow monitoring. The Parties have determined the consistent reasonable annual flows from this area and intend to (i) continue IRWD’s Regional Transmission

of these flows but eliminate the flow monitoring requirement, (ii) provide for IRWD's treatment of these flows in exchange for fair value, and (iii) provide for this Agreement to supersede the Jamboree-Bison Agreement.

5.1 IRWD as OC San's Agent. OC San hereby designates IRWD as its agent, and IRWD hereby accepts the responsibility as OC San's agent, to provide the services of Regional Transmission and Wastewater Treatment for the area in Exhibit B designated as "**OC San-to-IRWD Transfer Area**" and referred to more generally as the "Jamboree and Bison Lift Station Service Area." The City of Newport Beach provides Local Collection services in the OC San-to-IRWD Transfer Area.

5.2 No Ownership Changes. The Parties acknowledge that no OC San Regional Transmission facilities exist in the OC San-to-IRWD Transfer Area, and that therefore there will be no change of facility ownership under this Agreement with respect to the OC San-to-IRWD Transfer Area.

5.3 Revenues. Beginning on the Effective Date, OC San shall continue to collect and to transfer to IRWD within 180 days of the end of each fiscal year:

5.3.1. OC San's current allocation of ad valorem tax increment for the OC San-to-IRWD Transfer Area,

5.3.2. An amount equivalent to OC San's Service Fees collected for the OC San-to-IRWD Transfer Area, and

5.3.3. Any Capital Facilities Capacity Charges collected after the Effective Date attributable to Regional Transmission and Wastewater Treatment services provided to the OC San-to-IRWD Transfer Area.

5.4 Supersession. Upon the Effective Date, the Jamboree-Bison Agreement will be of no further force or effect.

6. LAWRP Area Annexation

6.1 Pursuant to Government Code Section 56650, the Parties shall file joint resolutions of application with LAFCO to initiate proceedings under the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 for:

6.1.1. Annexation of the territory depicted as "**LAWRP Area**" in Exhibit B to OC San; and

6.1.2. Amendment of OC San's Sphere of Influence to include the LAWRP Area.

6.2 The joint Resolutions of Application to LAFCO for these changes of organization will be in substantially the same form as OC San Resolution NO. OCSAN 21-07 (the Resolution of Application for LAFCO OCSD Annexation Areas - Anaheim/Yorba Linda/Villa Park), and will propose a plan for services and application of OC San service charges consistent with the

terms of this Agreement and in substantial conformance with the LAFCO terms and conditions in LAFCO Resolution No. DA 21-05.

6.3 IRWD has contractual relationships with Santa Margarita Water District and El Toro Water District to share capacity and operations in their service areas pursuant to out-of-area agreements constituting “an alternative to, or substitute for, public services already being provided” by IRWD (see Government Code 56133(e)(1)). IRWD shall ensure that all wastewater flows that discharge through IRWD’s system into the OC San system for Regional Transmission or Wastewater Treatment meet OC San discharge requirements as currently enacted and as amended from time to time.

7. Attorneys’ Fees. In the event that any Party brings any legal action to interpret or enforce any provision of this Agreement, the prevailing Party in that action will be entitled to receive, in addition to all other available relief, costs of litigation and reasonable attorneys’ fees, including expert witness fees, costs and fees incurred on appeal and in enforcing any judgment which may be rendered on the underlying action.

8. No Third Party Beneficiaries. The Parties expressly acknowledge and agree that they do not intend, by their execution of this Agreement, to benefit any person or entities not signatory to this Agreement. No person or entity not a signatory to this Agreement will have any rights or causes of action against IRWD or OC San or any combination thereof, arising out of that Party’s entry into this Agreement.

9. Governing Law. This Agreement will be interpreted and enforced in accordance with the provisions of California law, without regard to conflicts of law provisions.

10. Notice. Unless otherwise permitted by this Agreement, all notices to be given must be in writing and may be made by personal delivery, certified mail, postage prepaid and return receipt requested. Mailed notices must be addressed to the Parties at the addresses listed below, but each Party may change the address by written notice in accordance with this paragraph. Receipt will be deemed made as follows: notices delivered personally will be deemed communicated as of actual receipt; mailed notices will be deemed communicated on receipt or rejection.

If to IRWD:

Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attn: Paul A. Cook, General Manager
Cook@irwd.com

With a Copy to:

Claire H. Collins, General Counsel
Hanson Bridgett LLP
601 W. 5th Street, Suite 300
Los Angeles, CA 90071
CCollins@hansonbridgett.com

If to OC San:

Orange County Sanitation District
18480 Bandilier Cir.
Fountain Valley, 92708
Attn: Robert Thompson, General Manager
RThompson@ocsan.gov

With a Copy to:

Scott C. Smith, General Counsel
Best Best & Krieger LLP
18101 Von Karman Ste. 1000
Irvine, CA 92612
Scott.Smith@bbklaw.com

11. Counterparts. This Agreement may be executed in counterparts, each of which will constitute an original.
12. Entire Agreement. This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements, either written or oral, express or implied.
13. Further Acts. The Parties shall execute such additional documents and take such further actions as are reasonably necessary to accomplish the objectives and intent of this Agreement.
14. Indemnification. Each Party shall defend, indemnify, and hold the other Party, and its officials, officers, employees and agents free and harmless from any claim, loss, damage, or injury to property or persons, including wrongful death, in any manner arising out of or incident to any act, omission or willful misconduct of that Party and its officers, employees or agents, arising out of or in connection with the execution or performance of this Agreement, including without limitation the payment of attorneys' fees.
15. Waiver. The failure of any Party to insist upon strict compliance with any provision of this Agreement or to exercise any right or privilege provided herein, or any Party's waiver of any breach hereunder unless in writing, shall not relieve any other Party of any of its obligations hereunder, whether of the same or similar type. The foregoing shall be true whether the waiving Party's actions are intentional or unintentional.
16. Authorization to Execute. The signatories to this Agreement warrant that they have been lawfully authorized by their respective Parties to execute this Agreement on their behalf.
17. Severability. If any provision or clause of this Agreement or any application of it to any person, firm, organization, partnership or corporation is held invalid, such invalidity shall not affect other provisions of this Agreement which can be given effect without the invalid provision or application. To this end, the provisions of this Agreement are declared to be severable.

18. Prohibition Against Assignment. No Party may assign this Agreement or any interest in it without the prior written consent of the other.

ORANGE COUNTY SANITATION DISTRICT

IRVINE RANCH WATER DISTRICT

By: _____
Robert Thompson, General Manager

By: _____
Paul A. Cook, General Manager

ATTEST:

ATTEST:

By: _____
Kelly Lore, MMC, Clerk of the Board
Orange County Sanitation District

By: _____
Kristine Swan, District Secretary
Irvine Ranch Water District

APPROVED AS TO LEGAL FORM:

APPROVED AS TO LEGAL FORM:

By: _____
Scott C. Smith, General Counsel
Orange County Sanitation District

By: _____
Claire H. Collins, General Counsel
Irvine Ranch Water District

EXHIBIT A

PRIOR FLOW ACCOMMODATION AGREEMENTS BETWEEN IRWD AND OC SAN

1. June 10, 1991 – *Agreement for Purchase of Capacity in the Irvine Ranch Water District (IRWD) Harvard Avenue Trunk Sewer* [**Amended by this Agreement**]
2. April 25, 2001 – *Inter District Wastewater Flow Accommodation Agreement* (United States Food and Drug Administration’s Facilities) [**Superseded by this Agreement**]
3. July 1, 2003 – *Agreement* (IRWD to provide local service to the Irvine Business Complex and the Tustin Marine Corps Air Facility) [**Superseded by this Agreement**]
4. April 27, 2005 – *Agreement for Accommodation of Flows from City of Newport Beach Abandoned Lift Stations Accepted by Irvine Ranch Water District Sewer System* (Jamboree and Bison Flow Accommodation) [**Superseded by this Agreement**]
5. August 27, 2008 – *Agreement to Accommodate Wastewater Flows from the San Joaquin Hills Planned Community/Coyote Canyon Landfill/Gas Recovery Systems Areas that Originate in Revenue Area 14* [**Superseded by this Agreement**]
6. June 28, 2010 – *Agreement for Administrative Transfer of Orange Park Acres Service Area to Revenue Area 14 and Inclusion of Flows in Revenue Area 14 Wastewater Flow Calculations* [**Superseded by this Agreement**]



OC SAN
ORANGE COUNTY SANITATION DISTRICT

Exhibit "B" - Transfer and Annexation Areas

November 2025

LEGEND

- WTP** Treatment Plants
- OC San Consolidated Area
- Revenue Area 14
- IRWD Boundary
- ETWD
- Flow from SMWD to IRWD

TRUNK TRIBUTARY TREATMENT

- BY IRWD
- BY OCSD
- BY SMWD

AREAS

- LAWRP Area Annexation
- IRWD to OC San Transfer Area
- IBC Service Area to Remain in IRWD
- OC San to IRWD Transfer Area

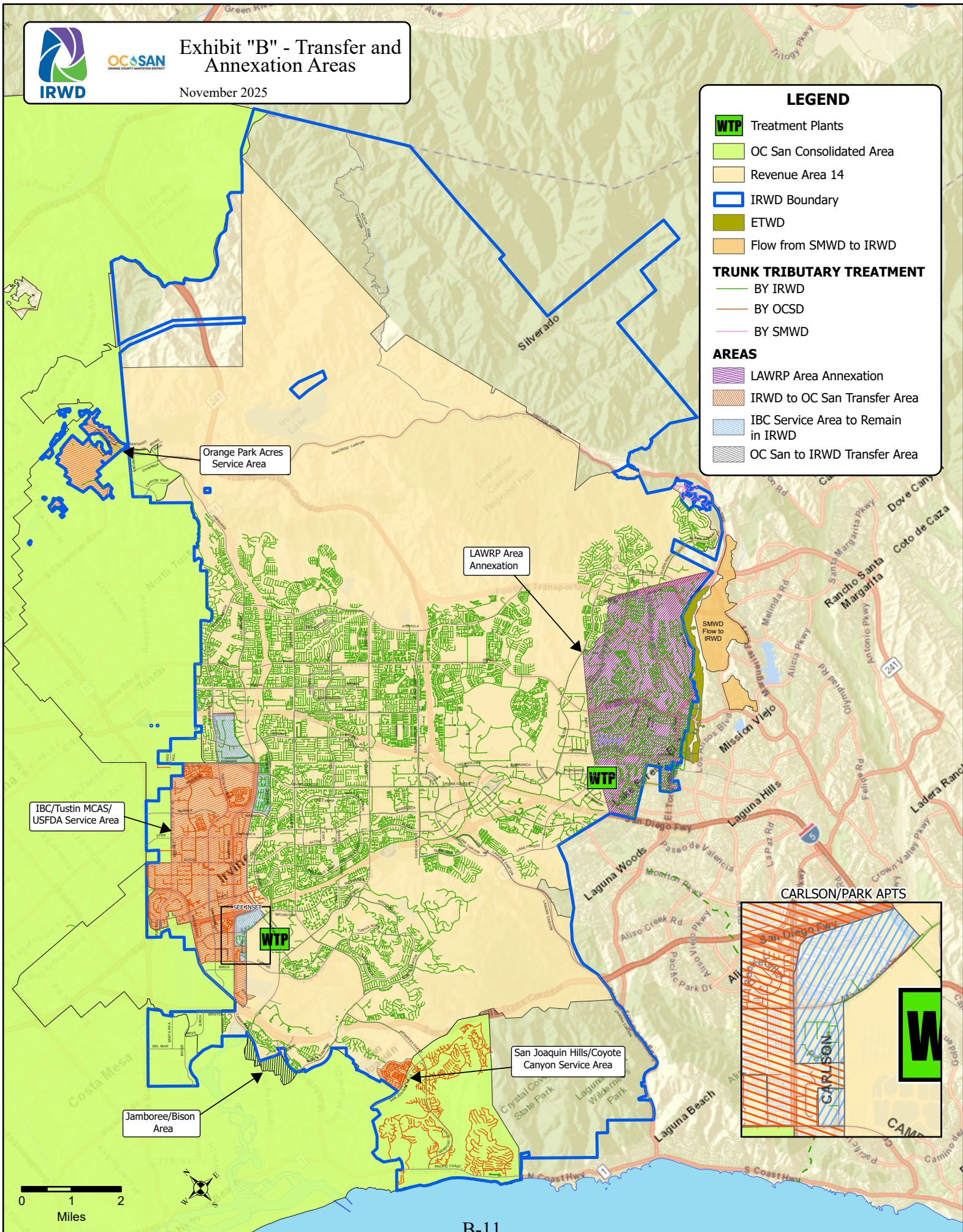


EXHIBIT C

AD VALOREM TAX ALLOCATION METHOD

Where ad valorem taxes are specific to Local Collection of sewage, IRWD will receive 100% for applicable Tax Rate Areas (TRAs)

Where the ad valorem taxes are for both Wastewater Treatment and collection of sewage, the prorated portion of the tax associated with treatment or collection will be remitted to the other Party.

- OC San shall send to IRWD the collection portion of the ad valorem tax for applicable TRAs.
- IRWD shall send to OC San the Wastewater Treatment portion of the ad valorem tax for applicable TRAs.
- The proration will be calculated using current service fees of the Party receiving the taxes from the County of Orange.

GAP FLOWS AGREEMENT

This GAP Flows Agreement (“**Agreement**”) is effective December ___, 2025 (“**Effective Date**”), and is among:

- Orange County Water District (“**OCWD**”),
- Irvine Ranch Water District (“**IRWD**”), and
- Orange County Sanitation District (“**OC San**”).

OCWD, IRWD, and OC San are sometimes individually referred to as a “**Party**” and collectively as the “**Parties**.”

A. Purpose. The purpose of this Agreement is to establish the rights and duties of the Parties with respect to IRWD’s supply of recycled water to OCWD’s Green Acres Project (“**GAP**”) or OCWD’s Groundwater Replenishment System (“**GWRS**”), and IRWD’s capacity to discharge recycled water into the OC San ocean outfall system (“**Outfall**”).

B. The GAP System. GAP provides recycled water to approximately 100 different end users in Costa Mesa, Fountain Valley, Huntington Beach, Newport Beach, and Santa Ana. OCWD’s Green Acres Phase II pipeline (“**GAP II**”), which is a takeoff from the GAP system, provides recycled water to Newport Beach end users, and is a part of the GAP system.

C. Recycled Water Supplies to GAP. The GAP system has two sources of supply: (i) tertiary treated wastewater from OCWD, treated from secondary treated wastewater received from OC San’s Plants No. 1 and 2 and supplied primarily during the summer months; and (ii) tertiary treated recycled water from IRWD’s Michelson Water Recycling Plant (“**MWRP**”) received intermittently, usually during the winter months, through IRWD’s intertie facility (the “**Intertie**”) that connects to GAP, which includes the GAP II pipeline.

D. 2011 IRWD GAP II/GWRS Agreement. On December 21, 2011, the Parties and the City entered into the *Agreement for Irvine Ranch Water District Interties to Orange County Water District Green Acres Project and Groundwater Replenishment System and Orange County Sanitation District Outfall* (“**2011 GAP II/GWRS Agreement**”) relating to the Parties’ operation of the Intertie, GAP II, and the Outfall.

E. 2013 Annexation Agreement. On October 2, 2013, the OCWD and IRWD entered into an *Annexation Agreement*, under which IRWD agreed to convey 4 million gallons per day (“**mgd**”) of sewage, recycled water and runoff flows generated from within IRWD to OC San until 2033.

F. Cross-Services. By a separate agreement, OC San and IRWD are working to consolidate, restate, and streamline several agreements to simplify their operations and finances with regards to the treatment of wastewater. Terms of the separate agreement will provide for the continued sewage flow from IRWD’s Irvine Business Complex into OC San’s retail territory, for the benefit of OCWD and the efficient operation of GWRS.

G. The Parties intend by this Agreement to amend and restate, and in doing so, supersede, the 2011 GAP II/GWRS Agreement.

The Parties therefore agree as follows:

1. **Ownership & Maintenance of Facilities.** Each Party owns the facilities identified on Exhibit A, which are necessary for the delivery of recycled water to OCWD as per Sections 2 and 3 herein, and each Party shall operate and maintain the facilities they own and appurtenant equipment and telemetry.

2. **IRWD Discharge of Recycled Water to GAP.**

2.1 **IRWD-Initiated Discharges.** IRWD may discharge to the Intertie at its sole discretion up to 8 mgd of recycled water treated in accordance with the standards set forth in California Code of Regulations Title 22 (“**Recycled Water**”). If IRWD initiates discharges of Recycled Water to the Intertie, then IRWD will not be entitled to any compensation for that discharged Recycled Water.

A. **Notice.** IRWD shall provide notice to OCWD at least 14 calendar days prior to each scheduled date for commencement or cessation of the discharge of Recycled Water to the Intertie.

B. **Min-Max Daily Discharges.** If IRWD elects to discharge Recycled Water to the Intertie, then during the period its discharge, IRWD shall discharge a minimum of 4 mgd and a maximum of 8 mgd of Recycled Water.

C. **In Lieu of OCWD GAP Operations.** OCWD will not operate the GAP treatment plant, clearwell, pump stations or Santa Ana GAP Reservoir whenever IRWD is delivering Recycled Water to the Intertie.

D. **Continuous Discharges.** IRWD shall make a good faith effort to meet GAP customer demands when discharging Recycled Water to the Intertie. IRWD shall not operate the Intertie on an intermittent basis, but rather will attempt in good faith to operate the Intertie on a continuous basis for each Intertie delivery season that IRWD elects to commence discharges of Recycled Water to the Intertie.

2.2 **OCWD-Requested Supply.** OCWD may request in writing that IRWD discharge Recycled Water to meet GAP or GWRS supply needs at a time when IRWD has not itself elected to discharge Recycled Water to the Intertie (“**OCWD-Requested Supply**”). If IRWD Recycled Water is readily available, and supplied to OCWD at the Intertie at OCWD’s request, then OCWD shall pay IRWD for any OCWD-Requested Supply at a rate equivalent to the Metropolitan Water District of Southern California’s full-service untreated water rate to cover IRWD’s additional costs.

2.3 **No Required Flow.** Nothing in this Agreement requires IRWD to deliver any Recycled Water to the GAP system.

3. **Total Flow From IRWD to OC San and OCWD.** Sections 3.13 and 3.14 of the 2013 Annexation Agreement require IRWD to deliver until October 22, 2033 a total of 4 mgd of combined flows from (i) sewage flows generated by IRWD to OC San, (ii) Recycled Water flows to GAP, and (iii) supply sources qualifying for the OC San Urban Runoff Diversion Program. Upon execution of this Agreement, and the execution of the separate agreement between OC San and IRWD referenced in Recital F, sewage flows from the Irvine Business Complex that are delivered by IRWD to OC San will continue to count towards IRWD's obligation to comply with Sections 3.13 and 3.14 of the Annexation Agreement.

4. **Acceptance of Recycled Water Flows.**

4.1 **Acceptance in GWRS Facilities.** OCWD shall accept any Recycled Water discharged by IRWD to the Intertie for use to supply GAP users or for treatment by the GWRS. Recycled Water that is discharged by IRWD to the Intertie will be deemed to have been delivered through the GWRS Connection to the Outfall (as described in Section 4.2) if it is discharged by IRWD to the Intertie when GWRS is not receiving any influent water and the control valve at the GWRS Connection is in the open position. The volumes of Recycled Water delivered to GAP or GWRS and deemed to have been delivered to the Outfall will be determined from meter readings as provided in Section 8.2. OCWD will not be entitled to any compensation from IRWD for treating or disposing of Recycled Water.

4.2 **Acceptance of up to 8 mgd in OC San Outfall.** OC San shall accept up to 5 mgd of Recycled Water not accepted by OCWD and deemed to have been discharged by IRWD through the GWRS Connection to the Outfall. OC San shall accept up to an additional 3 mgd of Recycled Water discharged by IRWD directly to the Outfall Connection.

4.3 **LRP Payments.** IRWD waives any claim to receive Local Resources Program subsidy payments from The Metropolitan Water District of Southern California for Recycled Water delivered to the Intertie.

4.4 **No Required Acceptance for GWRS.** OCWD is not required to accept any Recycled Water from IRWD for use in, treatment by, or discharge through GWRS.

4.5 **Mutual Waiver of Fees.** OC San shall accept IRWD's flows under this Agreement at no cost for so long as for IRWD waives the Harvard Avenue Trunk Sewer maintenance fees. If the *Agreement for Purchase of Capacity in the [IRWD] Harvard Avenue Trunk Sewer* dated June 10, 1991 is terminated, the Parties will meet and negotiate in good faith to determine the appropriate OC San charge to IRWD for conveyance of flows under this Agreement.

5. **Access to IRWD's Outfall Connection Telemetry.** IRWD owns certain Outfall Connection telemetry and a control valve at OC San's Plant No. 2. OC San hereby confirms, ratifies and continues in effect the non-exclusive license conveyed to IRWD pursuant to the 1998 Outfall Connection Agreement for access to the Outfall Connection Cla Valve and telemetry and for such access purposes over the portions of OC San's Plant 2 property depicted on Exhibit B; but OC San may modify the license area or designated access route from time to time following written notice to IRWD.

5.1 Regular Maintenance. OC San shall permit IRWD to access OC San's property for routine and scheduled maintenance or repairs of the Outfall Connection telemetry and control valve, upon written or electronic notice at least one week prior to the date of the maintenance. IRWD shall comply with any and all security provisions adopted or instituted by OC San for access into and across OC San's property.

5.2 Emergency Access. In the event of an emergency, IRWD shall notify OC San by telephone prior to access, and OC San shall not unreasonably condition or delay IRWD's access to the OC San property required for emergency response.

5.3 Indemnity. IRWD will indemnify, defend and hold harmless OC San for any property damage, bodily injury, or wrongful death caused by the gross negligence or willful misconduct of IRWD's employees, contractors, or agents while accessing OC San's property.

6. **Shutdown of IRWD's Flows to OC San's Outfall.**

6.1 The Outfall Connection is intended to be used for the disposal of Recycled Water delivered by IRWD through the Intertie and GAP II at any time elected by IRWD as specified in Section 4, which is in excess of the amount accepted into GAP and the GWRS under Sections 5.1 and 5.2. The overflow weir at the GWRS Screening Facility allows IRWD flows at the Plant No. 1 GWRS Connection to enter the OC San outfall and is also intended to be used for the disposal of Recycled Water delivered by IRWD through the Intertie and GAP II, at any time elected by IRWD, which is in excess of the amount accepted into GAP and the GWRS.

6.2 Outfall Shutdowns. If OC San temporarily shuts down Recycled Water deliveries into the Outfall for scheduled or emergency maintenance or repairs or during conditions of high flows through the Outfall, then IRWD shall limit its discharge of Recycled Water through the Intertie to the amount that OC San and OCWD reasonably determine can be used by GAP and GWRS during that shutdown.

A. Scheduled Shutdowns. OC San shall provide IRWD with written notice one week prior to the date of any scheduled maintenance or repair. OC San shall use reasonable efforts to schedule maintenance and repairs during the non-rainy season.

B. Emergency Shutdowns. If emergency high flow conditions or maintenance require a shutdown of the Recycled Water deliveries into the Outfall, then OC San shall give reasonable notice to IRWD by telephone prior to the shutdown.

7. **Source Control.**

7.1 In accordance with both: (a) the 2010 OCWD-OC San GWRS Agreement and (b) the GWRS permit, OC San shall maintain a comprehensive industrial wastewater pretreatment source control program for controlling the discharge of wastes from point sources, including in those areas serviced by IRWD. OC San's current source control program addressing these requirements includes: (a) monitoring and testing of federally regulated categorical and locally regulated non-categorical industrial discharges, (b) a non-point source program for discharges with the potential to adversely affect GWRS performance and water quality, (c) the planning and development of non-industrial source controls for contaminants, and (d) the

regulatory authority to prohibit the discharge of pollutants to the sewer causing OC San effluent to be unsuitable for reclamation, as contained within OC San Ordinance No. OC San-53. For the Recycled Water discharged by IRWD that may supply GWRS that includes any specific contaminant specified by state or federal regulators, both now and in the future, as harmful or potentially harmful to human health and drinking water supplies, and/or affects GWRS performance and water quality, OC San shall develop and implement a pollution source control strategy for that constituent.

7.2 If any contaminants, either known as of the date of this Agreement or discovered after that date, are found in IRWD Recycled Water which require removal in order for the GWRS to meet current or future GWRS permit requirements, and/or any other state or federal regulatory agency standards, then IRWD, OCWD, and OC San will meet and confer in good faith regarding: (a) the appropriate type of source control and/or water treatment needed to address the contaminants; (b) the appropriate sharing of cost for the construction and operation of any necessary treatment facilities; and/or (c) the development and implementation of additional source control strategies. IRWD shall supply trunkline sampling and /or analytical support for all sewer investigations aimed at determining the source or sources of any such contaminant discovered in IRWD's Recycled Water.

7.3 OC San's liability for IRWD's Recycled Water shall extend only to the development and implementation of the additional source control strategies; and shall not include the costs of any construction and/or operation of needed treatment facilities.

7.4 If IRWD Recycled Water is found to contain contaminants in a concentration that affects OCWD's ability to reclaim the GWRS Specification Influent and/or OC San's ability to meet its NPDES discharge limits, and OC San's source control strategies prove unable to mitigate the concentration of said constituent, then OC San and OCWD reserve the right to reject and refuse to accept the IRWD Recycled Water to GWRS. To assist in the identification of contaminant sources or other factors that may affect GWRS performance, IRWD shall provide information concerning all chemicals (e.g., polymers and coagulants) used in the IRWD wastewater and/or solids treatment processes (e.g., manufacturer, type, chemical composition, etc.) in advance of any significant operational change or if requested by OCWD or OC San.

7.5 IRWD shall indemnify, defend and hold harmless OCWD and OC San from any and all liability for any damage to GWRS for noncompliance of these source control terms, conditions and requirements.

8. **Reporting.** IRWD shall provide OCWD and OC San with a monthly report for each calendar month during an operation period for the Intertie, by the last day of the following month. Monthly reports must include the following information:

8.1 **Water Quality Data.** The reports must include final effluent water quality data from MWRP, including, at minimum, the daily results for coliform, electrical conductivity (maximum, minimum and average for each day) and chlorine residual (maximum, minimum and average for each day), and monthly sampling results for total dissolved solids, pH, carbonate, bicarbonate, calcium, magnesium, boron, chloride, sodium, calculated sodium adsorption ratio

(SAR) and adjusted SAR. Results for other constituents that are routinely measured in the final effluent shall also be included. The report shall include the dates of sample collection and units used for reporting. Upon written notification by OCWD or OC San, IRWD shall test for additional constituents based on operational and regulatory needs of OCWD or OC San.

8.2 Meter Readings.

A. IRWD shall provide daily readings, in both acre feet and million gallons, of the quantity of water delivered through the Intertie meter on University Drive and the quantity of excess flow delivered through the Outfall Connection meter.

B. OCWD shall provide daily readings of the quantity of water delivered to the GWRS Connection (at the IT Meter described in Exhibit A) for treatment by OCWD and total water delivered to the Microfiltration Feed meter (described in Exhibit A).

C. OC San shall provide daily readings of the quantity of influent flow to Plant No. 1 and total effluent flow to the Outfall.

D. The Parties' designated staff representatives may revise the designated meters to be read and meter reading responsibilities as they determine that operating circumstances necessitate; and those revision(s) may be made by the mutual written agreement of the Parties' representatives without formally amending this Agreement.

9. **Staff Representatives.** Each Party shall appoint one staff representative and one alternate to facilitate communication between the Parties and aid in the administration of this Agreement. The Parties shall give full consideration to all joint recommendations of the staff representatives. The staff representatives shall meet periodically, but at least once a year, to perform any tasks assigned to them by the Parties, including, but not limited to, the following: provide and receive input on scheduling Recycled Water discharges to the Intertie, GAP, GWRS and the Outfall; address operational concerns in the use and maintenance of the Intertie and GAP II; and address any other operational matters.

10. **Notices.** Any notice or other document and all billings and payments required or permitted to be given by any Party to another Party will be deemed received upon delivery in person to the recipient or upon deposit in the United States mail in the State of California, with postage prepaid, and addressed as follows:

To OC San: Orange County Sanitation District
18480 Bandilier Circle
Fountain Valley, CA 92708
Attention: General Manager
Telephone: (714) 593-7110
E-mail: rthompson@ocsan.gov

To OCWD: Orange County Water District
18700 Ward Street
P.O. Box 8300

Fountain Valley, CA 92728-8300
Attention: General Manager
Telephone: (714)378-3200
E-mail: jkennedy@ocwd.com

To IRWD: Irvine Ranch Water District
15600 Sand Canyon Avenue
P.O. Box 57000
Irvine, CA 92619-7000
Attention: General Manager
Telephone: (949) 453-5590
E-mail: cook@irwd.com

11. **Counterparts.** This Agreement may be executed in counterparts, each of which will constitute an original.

12. **Entire Agreement.** This Agreement contains the entire Agreement of the Parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements, either written or oral, express or implied.

13. **Further Acts.** The Parties shall execute such additional documents and to take such further actions as are reasonably necessary to accomplish the objectives and intent of this Agreement.

14. **Indemnification.** Each Party agrees to defend, indemnify, and hold the other parties, and their officials, officers, employees and agents free and harmless from any claim, loss, damage, or injury to property or persons, including wrongful death, in any manner arising out of or incident to any negligent or otherwise wrongful act, omission or willful misconduct of the agreeing Party, their respective officers, employees or agents, arising out of or in connection with the execution or performance of this Agreement, including without limitation the payment of attorneys' fees.

15. **Waiver.** The failure of any Party to insist upon strict compliance with any provision of this Agreement or to exercise any right or privilege provided herein, or any Party's waiver of any breach hereunder unless in writing, shall not relieve any other Party of any of its obligations hereunder, whether of the same or similar type. The foregoing shall be true whether the waiving Party's actions are intentional or unintentional.

16. **Authorization to Execute.** The signatories to this Agreement warrant that they have been lawfully authorized execute this Agreement on behalf of the Party for which they are signing.

17. **Severability.** If any provision or clause of this Agreement or any application of it to any person, firm, organization, partnership or corporation is held invalid, that invalidity shall not affect other provisions of this Agreement which can be given effect without the invalid provision or application. To this end, the provisions of this Agreement are declared to be severable.

18. **No Assignment.** No Party may assign this Agreement or any interest in it without the prior written consent of the other.

19. **Effectiveness of Agreement; Term.** The term of this Agreement is 20 years and will automatically renew annually unless one of the Parties gives written notice to the other Parties no later than 6 months prior to the renewal or expiration date.

ORANGE COUNTY SANITATION DISTRICT

IRVINE RANCH WATER DISTRICT

By: _____
Robert Thompson, General Manager

By: _____
Paul A. Cook, General Manager

ATTEST:

ATTEST:

By: _____
Kelly Lore, MMC, Clerk of the Board
Orange County Sanitation District

By: _____
Kristine Swan, District Secretary
Irvine Ranch Water District

APPROVED AS TO LEGAL FORM:

APPROVED AS TO LEGAL FORM:

By: _____
Scott C. Smith, General Counsel
Orange County Sanitation District

By: _____
Claire H. Collins, General Counsel
Irvine Ranch Water District

ORANGE COUNTY WATER DISTRICT

By: _____
John Kennedy, General Manager

ATTEST:

By: _____
Clerk of the Board

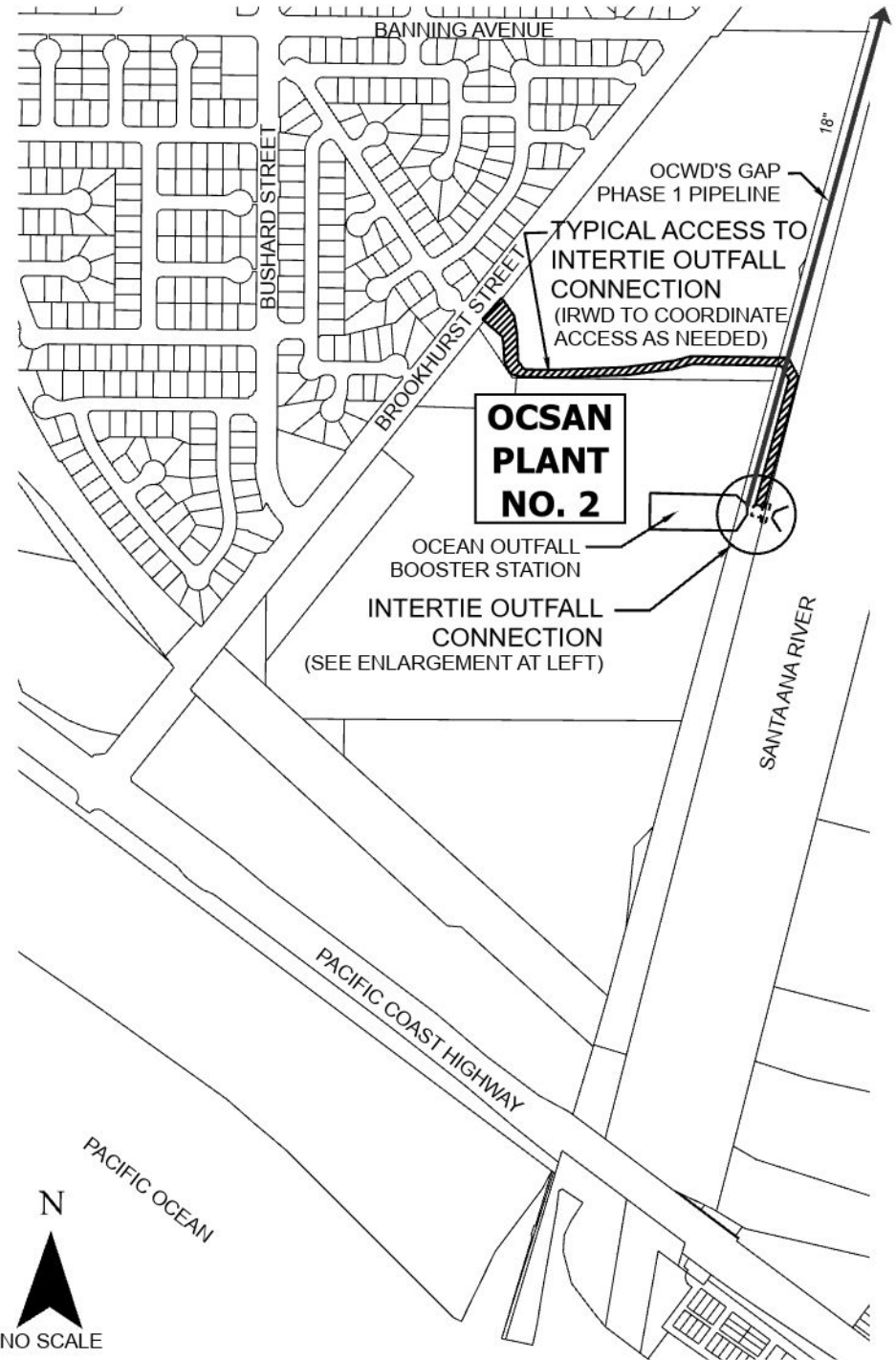
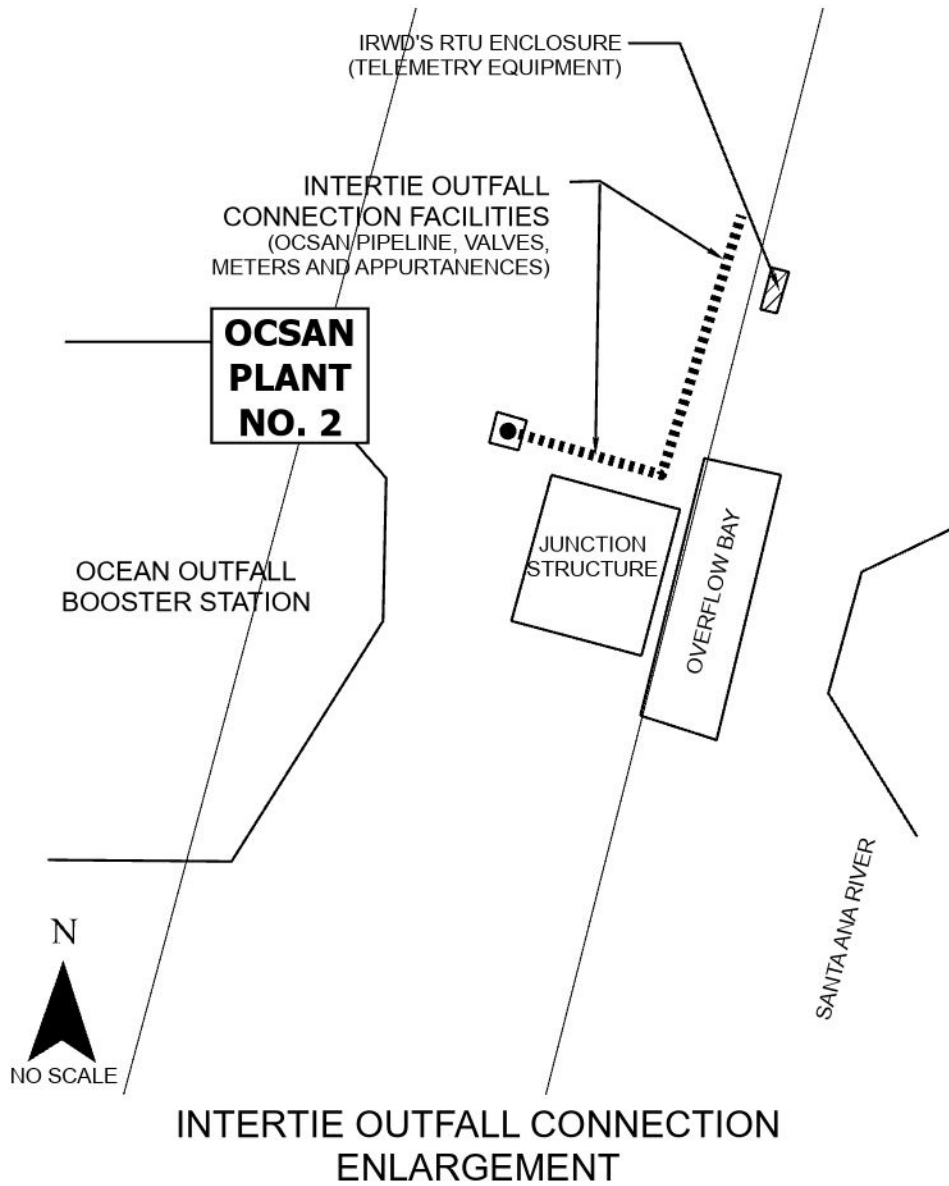
APPROVED AS TO LEGAL FORM:

By: _____
Jeremy Jungreis, General Counsel
Orange County Water District

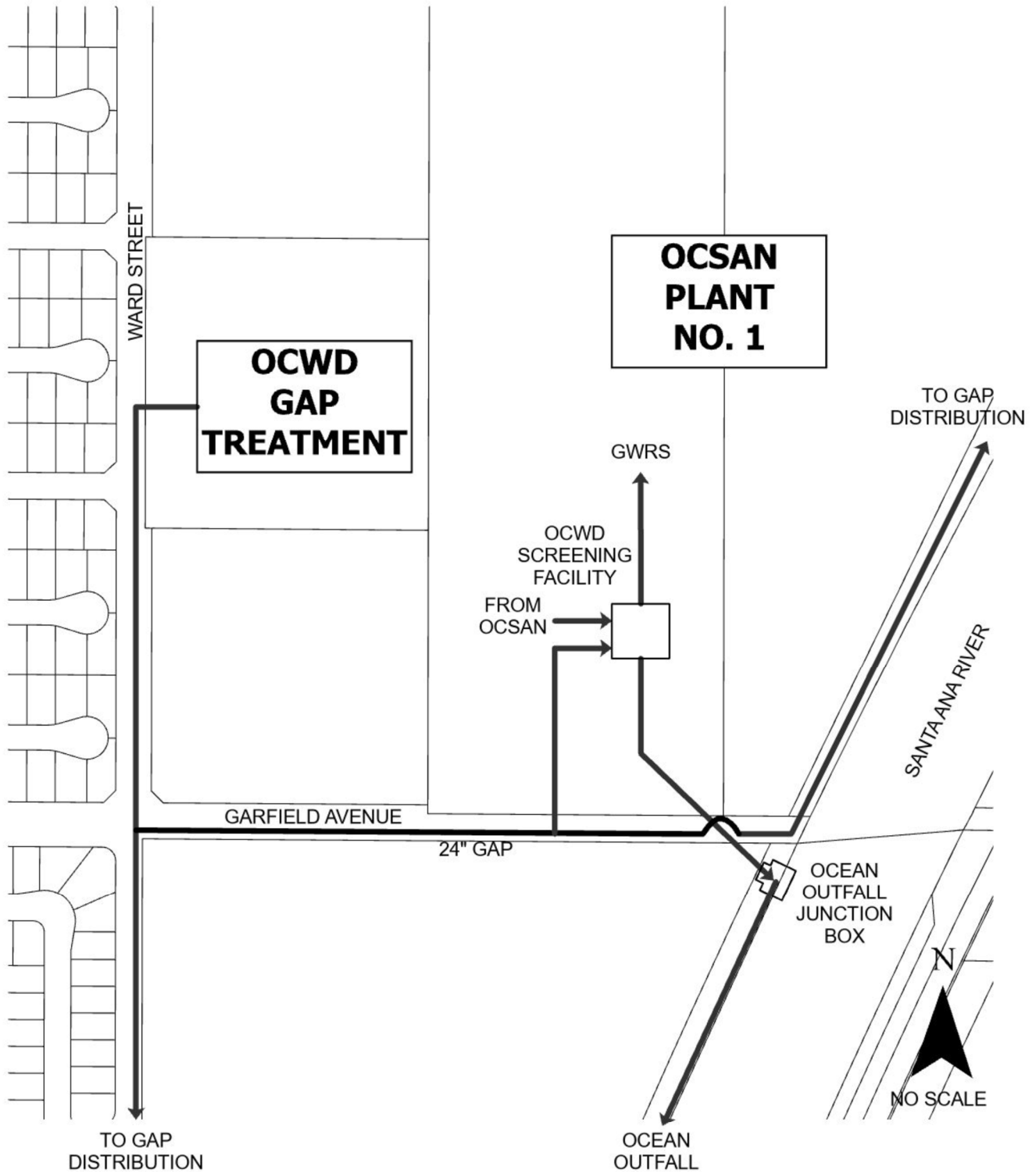
Exhibit A

Acknowledgment of Facilities Ownership

1. IRWD Facilities. IRWD owns:
 - 1.1 the Intertie, Intertie meter and vault, associated pipelines and appurtenances east of, and including, the valve designed to isolate the Intertie from GAP II on Jamboree Road, and
 - 1.2 the Outfall Connection telemetry and Cla Valve at OC San's Plant No. 2.
2. OCWD Facilities. OCWD owns:
 - 2.1 GAP II and associated telemetry equipment and all associated appurtenances north and west of the point of connection between the OCWD GAP II pipeline and the Intertie valve in Jamboree Road,
 - 2.2 the Bonita Creek Park dedicated service line located in the intersection of University Drive and La Vida south of, and including, the valve designed to isolate the Intertie from the park's service line, and
 - 2.3 all other Green Acres Project ("**GAP**") and GAP II facilities not included in Paragraph 1.1 or 1.2.
 - 2.4 the microfiltration feed ("**MFF**"), trickling filter ("**TF**"), activated sludge ("**AS**"), and IRWD feed ("**IT**") meters and GWRS Screening Facility & Overflow Weir, and
 - 2.5 the connection ("**GWRS Connection**") between OC San Plant No. 1 Secondary Effluent Junction Box 4 ("**SEJB 4**") and the 24" GAP pipeline located in Garfield Avenue immediately south of OC San's Plant No. 1 facility, as depicted in Exhibit C, such that the IRWD flows described in Section 4 can be supplied as influent to OCWD's GWRS project.
3. OC San Facilities. OC San owns the Outfall Connection exclusive of all associated telemetry and control valve but inclusive of the meter, as depicted in Exhibit B.



**INTERTIE OUTFALL CONNECTION
EXHIBIT "B"**



**CONNECTION FOR IRWD INTERTIE DELIVERIES
TO GWRS AT OC SAN PLANT NO.1**

EXHIBIT "C"