AGENDA IRVINE RANCH WATER DISTRICT ENGINEERING AND OPERATIONS COMMITTEE MEETING TUESDAY, NOVEMBER 16, 2021

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=mdf5a84817a9578071e7f0897e8ad23e9

Meeting Number: 187 372 1168 Meeting Password: bmJ32pYGAf6

CALL TO ORDER 1:30 n.m.

PLEASE NOTE: Webex observers of 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. Observers joining the meeting while the Committee 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.

	F		
<u>ATTENDANCE</u>	Committee Chair: Committee Member:	John Withers Karen McLaughlin	
ALSO PRESENT	Paul Cook Jose Zepeda Rich Mori Kelly Lew Lars Oldewage Jacob Moeder	Kevin Burton Paul Weghorst Eric Akiyoshi Jim Colston Malcolm Cortez Bruce Newell	Wendy Chambers Cheryl Clary Richard Mykitta Ken Pfister Scott Toland Mitch Robinson
	Belisario Rios		

PUBLIC COMMENT NOTICE

Public comments are limited to three minutes per speaker on each subject. If you wish to address the Committee on any item, you may attend the meeting in person and submit a "speaker slip." You may also submit a public comment in advance of the meeting by emailing comments@irwd.com before 9:00 a.m. on Tuesday, November 16, 2021.

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.
- 4. Determine which items may be approved without discussion.

INFORMATION

5. UPCOMING PROJECTS – CORTEZ / AKIYOSHI / LEW / MORI / BURTON

Recommendation: Receive and file.

6. <u>GROUNDWATER WORKPLAN UPDATE – JOHNSON / ROBINSON / AKIYOSHI / BURTON</u>

Recommendation: Receive and file.

ACTION

7. <u>DECLARATION OF REAL PROPERTY AS EXEMPT SURPLUS LAND – THATCHER / AKIYOSHI / BURTON</u>

Recommendation: That the Board adopt a resolution by title declaring that real property designated APN 093-242-80 is exempt surplus land that is not necessary for IRWD's use, authorizing District staff to negotiate disposal of the property, and finding that the declaration and disposal of the property is exempt from the California Environmental Quality Act.

OTHER BUSINESS

- 8. Directors' Comments
- 9. 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.

November 16, 2021

Prepared by: M. Cortez / E. Akiyoshi /

K. Lew / R. Mori

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	Start	Start	Construction	Construction
r roject Name	Planning	Design	Award	Final Acceptance
Gillette/Morse DW Pipeline Relocation				Winter 2022
IBC Sidewalk Relocations			Winter 2022	Fall 2022
HATS Diversion Structure Relining				Summer 2022
MWRP Compressed Natural Gas and Diesel/Gasoline Fueling Station			Winter 2022	Summer 2023
MWRP Tertiary Filter Rehabilitation			Summer 2022	Summer 2023
Operations Center Purchasing Warehouse			Fall 2022	Fall 2023
Generator Fuel Storage Upgrades			Winter 2022	
MWRP MBR Fall Protection			Fall 2021	Winter 2022
San Joaquin Reservoir Filtration Facility			Winter 2022	Winter 2023
DW Reservoir Air Vent and Misc. Retrofits			Winter 2022	Spring 2022
Coastal Z2 and Z4 Pump Stations Rehabilitation		Winter 2022	Fall 2022	Summer 2023
MWRP Circular Secondary Clarifier Rehabilitation		Winter 2022	Fall 2022	Spring 2023
Rattlesnake Outlet Pipe Flow Meter Replacement			Fall 2021	Winter 2022
Silverado Bridge 174 DW Improvements		Fall 2021	Winter 2023	Winter 2024
Silverado Bridge 175 DW Improvements			Spring 2022	Spring 2023
Woodbridge RW Replacement			Winter 2022	Winter 2023
Lake Forest Woods Sewer Improvements		Winter 2022		
Santiago Canyon Pump Station Improvements			Winter 2022	Summer 2023
Sewer Siphon Improvements Phase 1				Fall 2021
Turtle Rock Chloramine Booster Station			Spring 2022	
DATS Miscellaneous Repairs				Winter 2022
Lake Forest Well No. 2 Treatment and Improvements		Winter 2022	Summer 2022	
Wells 1, 11, and 13 Rehabilitation				Fall 2021
Wells 51 Rehabilitation				Fall 2021
Well OPA-1 PFAS Treatment			Winter 2022	Fall 2022
15 MG Zone 1 Reservoir Coating Replacement and Improvements				Spring 2022
SR-55 Freeway Widening - Sanitary Sewer Relocation on Cowan			Fall 2021	Spring 2022
City of Orange Well No. 23 - Well Pump Feasibility Evaluation		Winter 2022		
Well ET-1 PFAS Treatment			Winter 2022	Winter 2023
SGU PFAS Treatment		Winter 2022		
Zone A to Rattlesnake Reservoir BPS				Spring 2023
Lake Forest Zone B-C BPS				Fall 2022
SAC Pipeline Relocation in Santiago Creek at Irvine Regional Park				Spring 2022
Baker WTP Diesel Fuel Storage		Winter 2022		
PDF Sodium Hypochlorite Storage and Feed System				Summer 2022
Santiago Creek Dam Outlet Tower and Spillway Improvements			Spring 2023	
Rattlesnake Dam Risk Reduction Investigation	Winter 2022			
Santiago Canyon Fleming Zone 8 Tank and Zone 8-9 BPS			Winter 2022	Winter 2024
LAWRP Modernization		Spring 2022		

IRWD UPCOMING PROJECTS STATUS REPORT

Project Name	Start	Start	Construction	Construction
Project Name	Planning	Design	Award	Final Acceptance
LAWRP Construction Bypass Sewers	<u> </u>	Spring 2022		
Crystal Cove RW PRV		' '	Winter 2022	Fall 2022
MWRP Biosolids and Energy Recovery Facilities				Fall 2021
Syphon Reservoir Access Road and Intersection Improvements			Fall 2022	Summer 2023
Syphon Reservoir Improvements			Winter 2024	Fall 2026
PA 12, Innovation Park DW and RW (RA w/ICDC)				Winter 2022
PA 12, Innovation Park DW (RA w/ICDC)				Winter 2022
PA 12, Innovation Park Regional RW (RA w/ICDC)				Fall 2022
PA 1, Jeffrey Road Extension RW (RA w/CDC)			Winter 2022	
Tustin Legacy, Flight Drive RW (RA w/Tustin)				Winter 2022
Tustin Legacy, Neighborhood South Phase 1, S (RA with/Tustin)				Summer 2022
PA 51, Marine Way DW, RW (RA w/Heritage Fields)				Winter 2022
PA 51, South C St and LY St, S, RW (RA w/Heritage Fields)				Winter 2022
PA 51, Alton Pkwy from Technology to Muirlands, DW S, RW (RA w/Heritage Fields)				Winter 2022
PA 51, Marine Way from Barranca Pkwy to Alton Pkwy, DW S, RW (RA w/Heritage Fields)				Spring 2022
PA 51, Alton Interceptor Sewer (RA w/Heritage Fields)				Spring 2022
PA 51, Marine Way from Alton to Barranca Sewer (RA w/Heritage Fields)				Spring 2022
PA 51, GP1 St DW, S, RW (RA w/Heritage Fields)				Spring 2022
PA 51, GP2 St, DW, S, RW (RA w/Heritage Fields)				Spring 2022
PA 51, Magnet from Ridge Valley to Bosque RW (RA w/Heritage Fields)				Spring 2022
PA 51, Cadence South DW, S, RW (RA w/Heritage Fields)				Summer 2022
PA 51, District 5 A St DW, RW (RA w/Heritage Fields)				Summer 2022
PA 51, Chinon from Cadence South to Cadence (RA w/Heritage Fields)				Summer 2022
PA 51, District 5, F and N St DW, RW				Summer 2022
PA 51, District 5, E St RW (RA w/Heritage Fields)				Summer 2022
PA 51, District 5, Astor DW, RW (RA w/Heritage Fields)				Summer 2022
PA 51, District 5, Merit DW, RW (RA w/Heritage Fields)				Summer 2022
PA 51, District 5, BB St RW (RA w/Heritage Fields)				Summer 2022
PA 51, District 5, P St and Cadence DW, RW (RA w/Heritage Fields)				Summer 2022
PA 51, Marine Way from Alton Pkwy to Bake Pkwy DW, RW (RA w/Heritage Fields)			Winter 2022	
PA 51, Marine Way at Bake Parkway DW (RA w/Heritage Fields)			Winter 2022	
The Meadows, SS (RA w/Toll Brothers)				Fall 2022
Capital Improvement Program (CIP) Asset Management Phase 1 (Facilities)	In-Process			
Capital Improvement Program (CIP) Asset Management Phase 2 (Linear)	Winter 2022			
Potable Hydraulic Model Updates	In-Process			
Five Year Groundwater Capital Project Plan and Update	In-Process			
IRIS Replacement Planning Model Treatment Plant Cost Update	In-Process			
GIS Road Map	Fall 2021			

IRWD UPCOMING PROJECTS STATUS REPORT

Project Name	Start	Start	Construction	Construction
r Toject Name	Planning	Design	Award	Final Acceptance
			Category	Months
			Winter	Jan. Feb. & Mar.
			Spring	Apr. May & June
			Summer	Jul. Aug. & Sep.
			Fall	Oct. Nov. & Dec.

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November 16, 2021

Prepared by: D. Johnson / M. Robinson /

E. Akiyoshi

Submitted by: K. Burton

Submitted by. R. D. Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

GROUNDWATER WORKPLAN UPDATE

SUMMARY:

Staff updated the IRWD Groundwater Workplan, which identifies future groundwater production requirements and recommended actions for the next five years. The analysis includes the recently-approved agreement with the City of Orange that provides expanded potable groundwater pumping from the Orange Park Acres (OPA) Well 1, helps maximize IRWD's groundwater production, and eliminates the need for building new groundwater production facilities in the next five years. At the Committee meeting, staff will present the analysis and findings for discussion.

BACKGROUND:

The most recent Groundwater Workplan was updated in July 2018. In the subsequent three years, staff completed the Well Treatment Alternatives study, initiated treatment facilities to address the PFAS water quality issues and negotiated an agreement with the City of Orange that allows IRWD to use the full 3,200 acre-feet per year of groundwater from OPA Well 1.

This current analysis transitions from long-term water use and supply needs to a five-year horizon. This transition allows for a focused look at near-term groundwater opportunities and optimizes timing for capital expenditures. The five-year water use projections consider historical water use patterns, knowledge of current development trends, potential changes to water use efficiency regulations, and existing drought conditions.

With the expanded production from OPA Well 1, future groundwater opportunities in the next five years increase from 150 acre-feet in 2022 to 2,800 acre-feet in 2026. Existing Wells 51 and 52 have the potential to supply future groundwater needs of 2,800 acre-feet. These wells will not be connected until future groundwater needs are realized.

Staff will present the details of the analysis at the Committee meeting.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15262 provides exemption for planning studies.

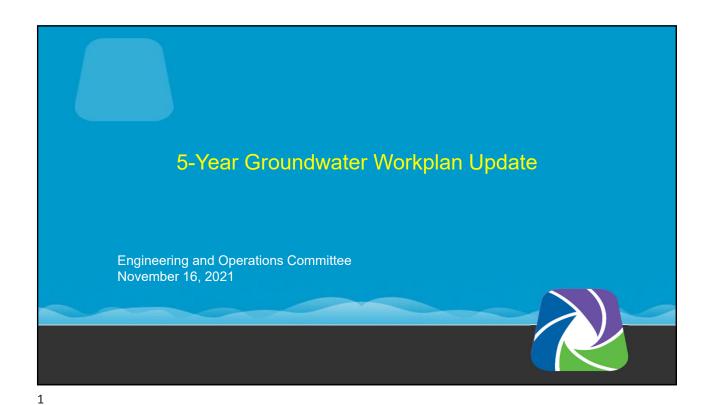
Engineering and Operations Committee: Groundwater Workplan Update November 16, 2021 Page 2

RECOMMENDATION:

Receive and file.

LIST OF EXHIBITS:

Exhibit "A" – Groundwater Workplan Update Presentation



Workshop Overview

- 1. Discuss accomplishments and changed conditions since the 2018 Groundwater Workplan Update
- 2. Review historical water use and groundwater production
- 3. Identify IRWD's future groundwater needs
- 4. Next steps

Irvine Ranch Water District



Changed Conditions Since 2018

Production

- Increased access to OPA well water
- Pump Non-Exempt GW over BPP
- Pump GW to meet 100% of water use inside OCWD
- Increase BPP from 70% to 85%

Water Quality

 Construct PFAS treatment plants

Financial

- Focus on 5-Year facility planning horizon
- Surcharge on pumped GW over 100% BPP
- RW Penalty

Irvine Ranch Water District

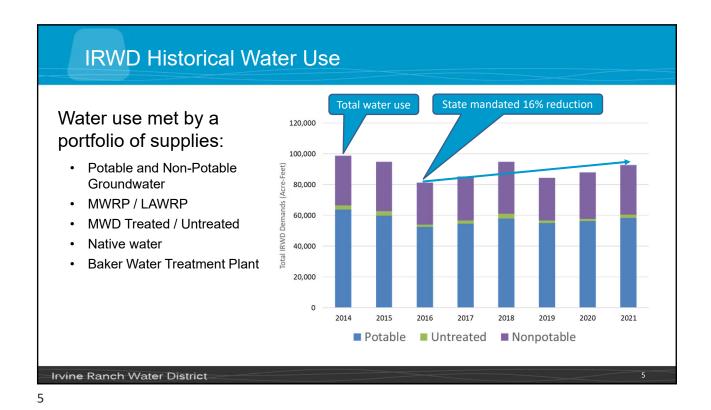
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Historical Water Use and Groundwater Production

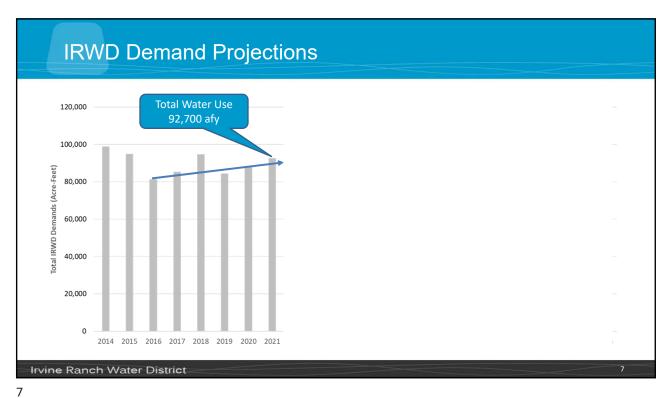




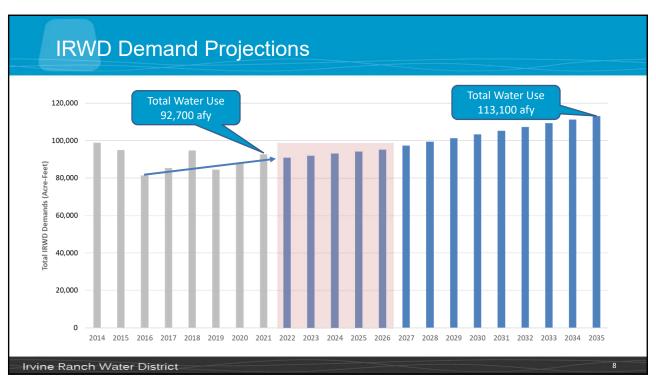


Future Water Use Projections





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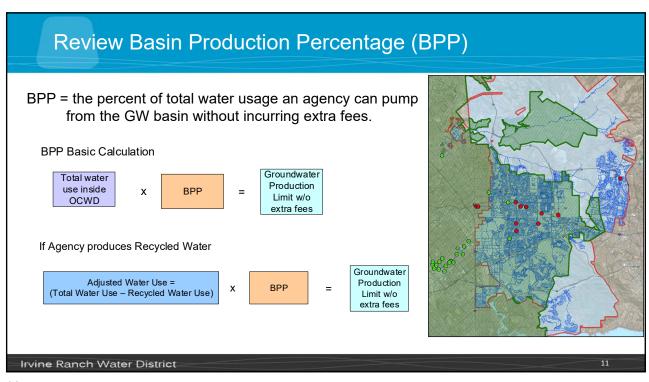
Groundwater Production Considerations

IRWD determines groundwater needs by considering several factors:

- Total IRWD water use
- Basin Production Percentage and Basin Equity Assessment
- Cost of production
- Reliability
- Water Quality
- Operational Flexibility

Irvine Ranch Water District



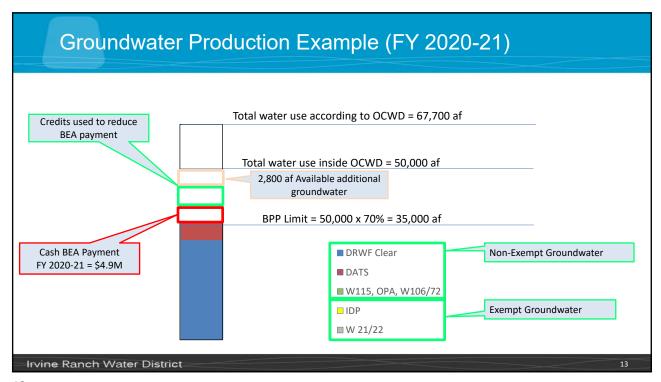


Basin Equity Assessment Calculation

- Conceptually, the Basin Equity Assessment (BEA) is meant to bring the cost of groundwater up to the cost of imported treated MWD water.
- If an agency pumps above the BPP, they must pay the BEA: FY 2020-21 ≈\$586/af

Irvine Ranch Water District



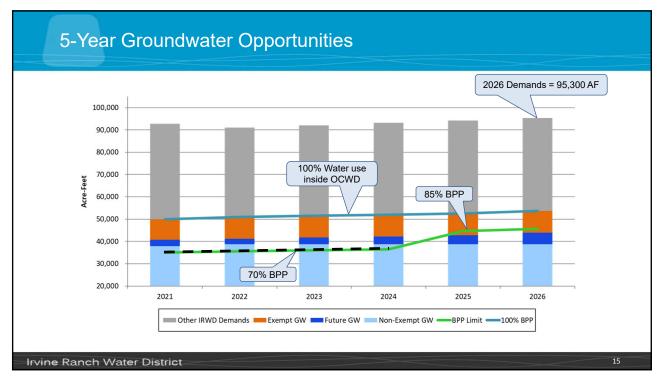


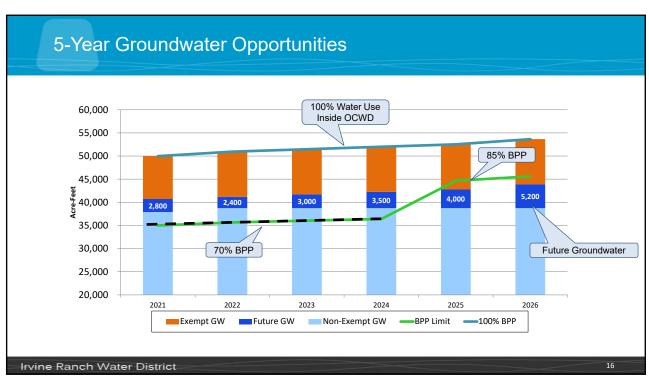
General Principles for Groundwater Production

- ✓ Do not exceed 100% of water use inside OCWD boundary
- ✓ Maximize both non-exempt and exempt groundwater production
- ✓ Pay BEA for groundwater produced over BPP limit
- ✓ Maximize cost effective GW production outside OCWD
- ✓ Consider other factors as required: regulatory, water quality, operations, reliability, and others

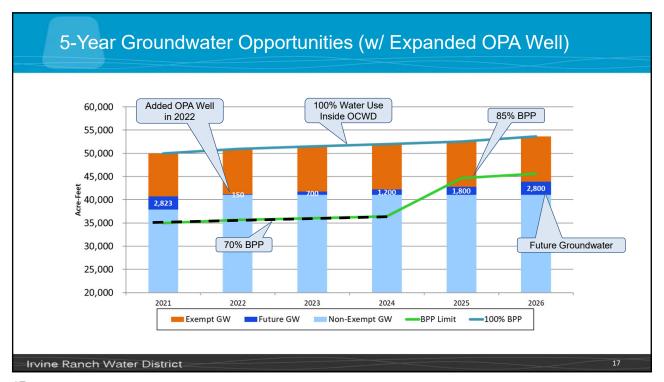
Irvine Ranch Water District











5-Year Groundwater Summary with OPA Well Included					
		Add'l GW after OPA Expansion	Total Estimated Cash BEA w/ Add'l GW	MWD Equivalent Treated Cost	
	2021	NA	\$5.0M	\$5.0M	
	2022	150 AF	\$5.0M+\$1.5M	\$6.5M	
	2023	700 AF	\$5.0M + \$1.7M	\$6.7M	
85% BPP	2024	1,200 AF	\$5.0M + \$2.0M	\$7.0M	
	2025	1,700 AF	\$-0-	\$1.0M	
	2026	2,800 AF	\$-0-	\$1.6M	
Irvine Ranch Water District					



Current Groundwater Opportunities

Projects identified in 2020 Well Treatment Alternatives Study:

- Wells 51 and 52 Blending = 1,500 to 3,000 afy
 - Needs pipeline and verification of capacities and WQ
 - Capital cost ≈\$14.6M
- Future Tustin Legacy Wells = 3,000 afy
 - Needs pipeline and verification of capacities and WQ
 - Capital cost ≈\$13.6M

Irvine Ranch Water District

19

19

Other Potential Impacts to Expanded GW Pumping

Description	Impact on Groundwater Needs
Statewide mandated water reductions	\
Continued new WUE regulations	\downarrow
Threats to Colorado and State Water Project	↑
SCAG/RHNA affordable housing requirements	↑
Expanded GW treatment requirements	\downarrow
OCWD Groundwater Basin Management	↑



Conclusions

- Expanded OPA pumping & PFAS treatment help satisfy 5-year groundwater needs
- Next five years will provide more data regarding water use growth, state mandates, and regional imported water supplies

Irvine Ranch Water District

21

21

Next Steps

- Continue pumping to 100% of water use inside OCWD
- Complete rehabilitation and determine viability of Well 51 for blending
- Continue planning Well 51
- Revisit GW needs every 2-3 years
 - Provides prudent capital planning
 - Avoids missing out on inexpensive GW opportunities

Irvine Ranch Water District



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November 16, 2021

Prepared by: R. Thatcher / E. Akiyoshi

Submitted by: K. Burton

Approved by: Paul A. Cook

ENGINEERING AND OPERATIONS COMMITTEE

DECLARATION OF REAL PROPERTY AS EXEMPT SURPLUS LAND

SUMMARY:

Staff recommends the Board adopt a resolution declaring that a 10-foot-wide strip of land identified as APN 093-242-80 is exempt surplus land not necessary for IRWD's use, authorizing District staff to negotiate the disposal of the property, and finding that the declaration and disposal of the property is exempt from the California Environmental Quality Act (CEQA).

BACKGROUND:

With IRWD's consolidation with Orange Park Acres Mutual Water Company (OPAMWC) in 2008, IRWD took possession of certain parcels of land within Orange Park Acres. One of the parcels was a 10-foot-wide strip of land acquired by OPAMWC in 1967. This parcel of land, identified as Assessor's Parcel Number 093-242-80, is located away from IRWD's facilities and is not required for the operations of the District. Staff recommends that the District dispose of this property.

The total area of the land being disposed is approximately 4,750 square feet. Land less than 5,000 square feet can be declared exempt surplus land per the Surplus Land Act. Upon approval of the resolution declaring this parcel as exempt surplus land, staff will begin negotiations to dispose the land. Provided as Exhibit "A" is a draft resolution declaring the property as exempt surplus land, authorizing staff to negotiate the disposal, and declaring the disposal is exempt from CEQA. A map showing the location of the parcel is provided as Exhibit "B".

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This project is not subject to the CEQA as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15061 (b) (3), in that CEQA applies only to projects that may result in a direct physical change in the environment or reasonably foreseeable indirect physical change in the environment.

Engineering and Operations Committee: Declaration of Real Property as Exempt Surplus Land November 16, 2021 Page 2

RECOMMENDATION:

That the Board adopt the following resolution by title:

RESOLUTION NO. 2021 –

RESOLUTION OF THE BOARD OF DIRECTORS OF IRVINE RANCH WATER DISTRICT
DECLARING THAT REAL PROPERTY DESIGNATED
APN 093-242-80 IS EXEMPT SURPLUS LAND THAT IS NOT NECESSARY FOR THE DISTRICT'S USE, AUTHORIZING DISTRICT STAFF TO NEGOTIATE DISPOSAL OF THE PROPERTY, AND FINDING THAT THE DECLARATION AND DISPOSAL OF THE PROPERTY IS EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

LIST OF EXHIBITS:

Exhibit "A" – Resolution Exhibit "B" – Location Map

EXHIBIT "A"

RESOLUTION NO. 21-

DECLARING THAT REAL PROPERTY DESIGNATED
APN 093-242-80 IS EXEMPT SURPLUS LAND THAT IS NOT
NECESSARY FOR THE DISTRICT'S USE; AUTHORIZING
DISTRICT STAFF TO NEGOTIATE TO DISPOSE OF THE
PROPERTY; FINDING THAT THE DECLARATION AND
DISPOSAL OF THE PROPERTY IS EXEMPT FROM THE
CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the terms of a grant deed dated January 27, 1967, Irvine Ranch Water District's ("**District**") predecessor in interest, the Orange Park Acres Mutual Water Company, acquired title in fee simple to certain property (the "**District Property**") designated Assessor's Parcel No. 093-242-80, the location of which is described as follows in the January 27, 1967 grant deed:

A strip of land, 10.00 feet in width, over that portion of Lot 11, Tract 944 as shown in Miscellaneous Maps, Book 29, page 41, Records of Orange County, California, the southerly and easterly line of said strip being described as follows:

Beginning at the most westerly corner of said Lot 11; thence South 76°00'10" East 305.33 feet along the southerly line of said Lot 11 to a point which bears North 76°00'10" West 378.71 feet from the most southerly corner of said lot; thence North 19°38'30" East 84.78 feet.

A true and correct copy of the January 27, 1967 grant deed is attached as <u>Exhibit 1</u> to this Resolution.

Pursuant to the Surplus Land Act (Cal. Gov. Code, § 54220, et seq.), "surplus land" is land owned in fee simple by any local agency for which the local agency's governing body takes formal action in a regular public meeting declaring that the land is surplus and is not necessary for the agency's use.

The District is a local agency that must comply with the terms of the Surplus Land Act (Cal. Gov. Code, § 54221(a)).

Pursuant to the Surplus Land Act, land must be declared either "surplus land" or "exempt surplus land," as supported by written findings, before a local agency may take any action to dispose of it consistent with an agency's policies or procedures.

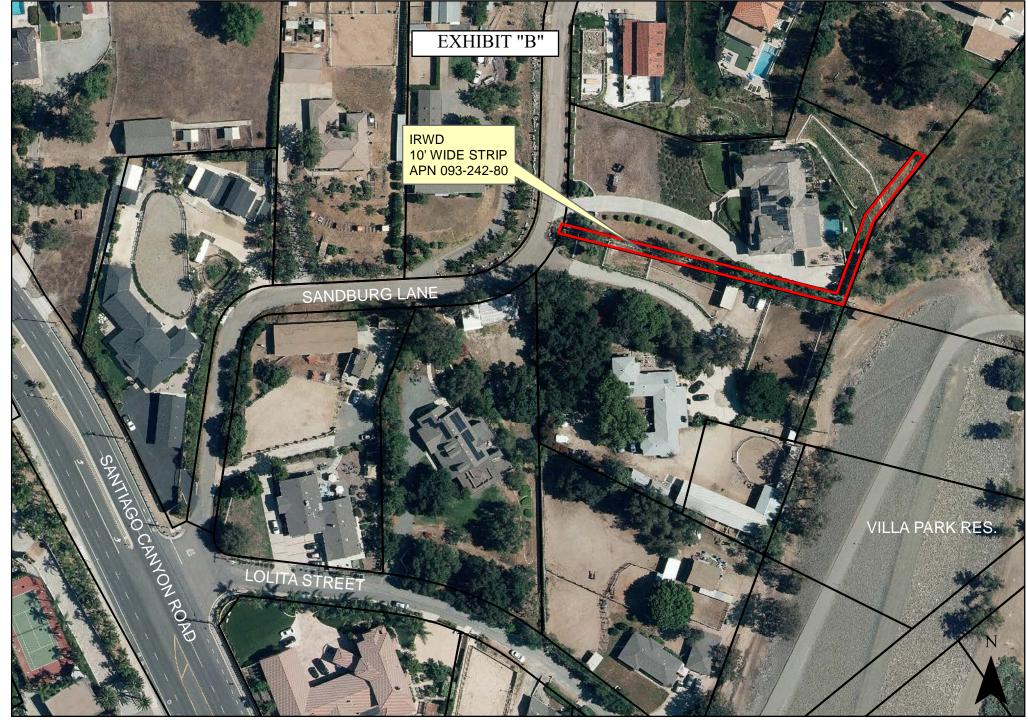
Pursuant to the Surplus Land Act (Gov. Code, § 54221, subd. (f)(1)(B)), "exempt surplus land" includes surplus land that is less than 5,000 square feet in area.

The District intends by this Resolution to declare the District Property to be exempt surplus land because the District Property is less than 5,000 square feet in area and is no longer necessary for the District's use.

The Board of Directors of the District therefore resolves as follows:

- 1. The District hereby declares that the District Property is exempt surplus land because the District Property is less than 5,000 square feet in area and is no longer necessary for the District's use.
- 2. This Resolution has been reviewed with respect to the applicability of the California Environmental Quality Act ("CEQA") (Cal. Public Resources Code § 21000, et seq.). District staff has determined that the designation of the District Property as exempt surplus land does not have the potential for creating a significant effect on the environment and is therefore exempt from further review under CEQA pursuant to State CEQA Guidelines section 15060, subdivision (c)(3) because it is not a "project" as defined by the CEQA Guidelines Section 15378. Adoption of the Resolution does not have the potential for resulting in either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment.
- 3. The General Manager, or designee, is hereby authorized to submit this declaration of exempt surplus land to the California Department of Housing and Community Development, in conformance with state law, and file a Notice of Exemption pursuant to CEQA Guidelines Section 15062.
- 4. The General Manager, or the General Manager's designee, is hereby authorized to do all things which are deemed necessary or proper to effectuate the purposes of this Resolution, and any actions previously taken in connection with the purpose of this Resolution are hereby ratified and confirmed, including all actions necessary to dispose of the District Property in a manner consistent with applicable federal, state, and local laws.

Regularly passed	I and adopted on this	dav of	. 2021.



LOCATION MAP

1 inch = 100 feet

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