

**AGENDA  
REGULAR MEETING  
GROUNDWATER REPLENISHMENT SYSTEM STEERING COMMITTEE  
(A Committee of Orange County Water District  
and Orange County Sanitation District Directors\*)  
18700 Ward Street, Fountain Valley  
Monday, October 12, 2020, 5:00 p.m.**

\* Orange County Water District Notice: The GWRS Steering Committee (SC) meeting is being noticed as a joint meeting with the Orange County Water District (OCWD) Board of Directors and Orange County Sanitation District (OCSD) Board of Directors for the purpose of strict compliance with the Brown Act and it provides an opportunity for all Directors to hear presentations and participate in discussions. The SC has been delegated limited authority by the OCWD and OCSD Boards of Directors. Agenda items requiring Board approval will be placed on future OCWD and/or OCSD Board meeting Agendas. OCWD Directors receive no additional compensation or stipend as a result of simultaneously convening this meeting. Board approval will be placed on future OCWD and/or OCSD Board meeting Agendas. OCWD Directors receive no additional compensation or stipend as a result of simultaneously convening this meeting.

**Due to the spread of COVID-19 and as authorized by the Governor's Executive Order, OCWD will hold its October 12 GWRS Steering Committee meeting by Zoom meeting and will be available by either computer or telephone audio as follows:**

**Computer Audio: You can join the Zoom Meeting by clicking on the following link:**  
<https://ocwd.zoom.us/j/99932513258>

**Meeting ID: 999 3251 3258**

**Telephone Audio: (669) 900 9128**

**ROLL CALL**

**VISITOR PARTICIPATION**

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

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

**CONSENT CALENDAR (ITEM NO. 1)**

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

**1. MINUTES OF PREVIOUS MEETING**

**RECOMMENDATION:** Approve Minutes of the July 13, 2020 GWRS Steering Committee meeting as presented

**END OF CONSENT CALENDAR**

## **INFORMATIONAL ITEMS**

2. GWRS OPERATIONS UPDATE
3. UPDATE ON GWRS FINAL EXPANSION PROJECT
4. GWRS THIRD QUARTER OUTREACH REPORT (JULY – SEPT. 2020)

## **DIRECTORS' ANNOUNCEMENTS/REPORTS**

### **GENERAL MANAGERS' REPORT**

- Next GWRS Steering Committee Meeting – January 11, 2021

## **DETERMINATION OF ITEMS (IF ANY) TO BE AGENDIZED FOR FUTURE OCWD BOARD MEETING AND/OR OCSD BOARD MEETING**

## **ADJOURNMENT**

## 2020 GWRS Steering Committee Members

### OCWD Committee Members

Roger Yoh  
Cathy Green  
Vicente Sarmiento

### OCWD Alternates

Tri Ta  
Dina Nguyen  
Steve Sheldon

### OCSD Committee Members

David Shawver  
James Ferryman  
Tim Shaw

### OCSD Alternates

Jesus Silva  
Lucille Kring  
Erik Peterson

In accordance with the requirements of California Government Code Section 54954.2, this agenda has been posted for viewing at the guard shack entrance and in the main lobby of the Orange County Water District, 18700 Ward Street, Fountain Valley, CA not less than 72 hours prior to the meeting date and time above. All written materials relating to each agenda item are available for public inspection in the office of the District Secretary. Backup material for the Agenda is available at the District offices for public review and can be viewed online at the District's website: [www.ocwd.com](http://www.ocwd.com).

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

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



**MINUTES OF THE MEETING  
GROUNDWATER REPLENISHMENT SYSTEM STEERING COMMITTEE  
Monday, July 13, 2020**

Due to the Governor's Executive Order N-25-20, OCWD Director Yoh called the Groundwater Replenishment System Steering Committee to order telephonically. Following the Pledge of Allegiance to the flag, the Secretary called the roll and reported a quorum.

**Committee Members**

David Shawver  
 Roger Yoh  
 James Ferryman (absent)  
 Cathy Green  
 Tim Shaw  
 Vicente Sarmiento (absent)

**Alternates**

Jesus Silva  
 Phil Hawkins (absent)  
 Erik Peterson  
 Tri Ta  
 Dina Nguyen (absent)  
 Steve Sheldon (absent)

OCWD Directors Bilodeau, Brandman and Rowe were in attendance.

<b>OCWD Staff</b>	<b>OCSD Staff</b>
Mike Markus, Mehul Patel	Jim Herberg, Jennifer Cabral
Christina Fuller, Assistant District Secretary	

**CONSENT CALENDAR**

The Consent Calendar was approved upon motion by Director Shaw, seconded by Director Green and carried [6-0] as follows.

*Yes – Yoh, Shawver, Green, Shaw, Silva, Peterson*

1. Minutes of Previous Meeting

**The minutes of the GWRS Steering Committee meeting held January 13, 2020 are approved as presented.**

**INFORMATIONAL ITEMS**

2. GWRS Operations Update

Executive Director of Operations/GWRS Mehul Patel reported that as of as of June 30, 2020, the GWRS Fiscal Year 2019-2020 production total was 97,774 af which is 5,226 af below the target fiscal year production of 103,000 af. He advised the average production was lower than normal due to a 14-day outage of the GWRS Advanced Water Purification Facility for construction work related to the GWRS Final Expansion project which occurred from April 27 to May 11, 2020. Mr. Patel reported that the construction work included an update of the Process Control System software that runs the GWRS facility as well as modifications to an existing electrical switchgear system. He stated that during the outage OCWD staff drained and examined the GWRS distribution pipeline. He recalled that an approximately four mile stretch of the pipeline had an epoxy lining installed back in 2018 to repair signs of corrosion to the existing mortar lining.

3. Update on GWRS Final Expansion Project

GWRS Program Manager Sandy Scott-Roberts stated that the GWRS Final Expansion Project is currently under construction by Shimmick Construction Company to expand the Advanced Water Treatment Facility and construct the GWRS pump station and flow equalization tanks at OCSD Plant No. 2. She advised that the pipeline rehabilitation project has been bid and will be recommended for award at the July 15 OCWD Board of Directors meeting. Ms. Scott-Roberts provided an update on project components and the completion status of project elements.

4. First & Second Quarter Outreach Report [January– June 2020]

Director of Public Affairs Gina Ayala reported that in-person tours were suspended in March in accordance with OCWD's COVID-19 response plan. She advised that this resulted in the cancellation of 29 tour requests. She reported that OCWD implemented a virtual tour program in order to facilitate continued GWRS outreach. Ms. Ayala stated two virtual tours were held in June with approximately 93 participants. She advised that in addition, an on-demand virtual tour was created and posted to OCWD's social media channels, and has been viewed more than 1,200 times.

**ADJOURNMENT**

There being no further business to come before the Committee, the meeting was adjourned at 5:45 p.m.

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OCWD Director Roger Yoh, Chair



## AGENDA ITEM SUBMITTAL

**Meeting Date:** October 12, 2020

**To:** GWRS Steering Committee

**From:** Mike Markus/Jim Herberg

**Staff Contact:** M. Patel

**Budgeted:** N/A

**Budgeted Amount:** N/A

**Cost Estimate:** N/A

**Funding Source:** N/A

**Program/Line Item No.:** N/A

**General Counsel Approval:** N/A

**Project Report Approved:** N/A

**CEQA Compliance:** N/A

**Subject: GWRS OPERATIONS UPDATE**

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### SUMMARY

Operation of the Groundwater Replenishment System (GWRS) commenced on January 10, 2008. The GWRS operations update will be discussed at the Committee.

### RECOMMENDATION

Informational.

### DISCUSSION/ANALYSIS

Since startup in 2008 GWRS continues to produce water that meets regulatory requirements. The quality of the secondary effluent received from the Orange County Sanitation District (OCSD) continues to meet all water quality requirements while operating in the nitrified/denitrified (NDN) mode. The GWRS Microfiltration (MF) and Reverse Osmosis (RO) treatment processes have benefited in overall operational improvements as a result of OCSD's efforts to successfully maintain stable operation in the NDN mode.

The average daily average production for the quarter July through September 2020 was 86 mgd. The average production was lower than normal due to several issues as described further in the next section of this report.

The GWRS effluent production for the months of July through September 2020 is shown in the following tables:

### GWRS EFFLUENT PRODUCTION (April - June 2020)

	July 2020 (million gallons)	July 2020 (acre feet)
Mira Loma, Kraemer/Miller Basin Recharge, Mid Basin Injection, Artic, and Canyon Power	2,066	8,657
Seawater Intrusion Barrier	754	2,315
<b>Total</b>	<b>2,820</b>	<b>10,972</b>



	<b>August 2020 (million gallons)</b>	<b>August 2020 (acre feet)</b>
Mira Loma, Kraemer/Miller Basin, Recharge, Mid Basin Injection, Artic and Canyon Power	1,775	5,448
Seawater Intrusion Barrier	753	2,311
<b>Total</b>	<b>2,528</b>	<b>7,759</b>

	<b>September 2020 (million gallons)</b>	<b>September 2020 (acre feet)</b>
Mira Loma, Kraemer/Miller Basin Recharge, Mid Basin Injection, Artic and Canyon Power	2,586	7,938
Seawater Intrusion Barrier	824	2,531
<b>Total</b>	<b>3,410</b>	<b>10,469</b>

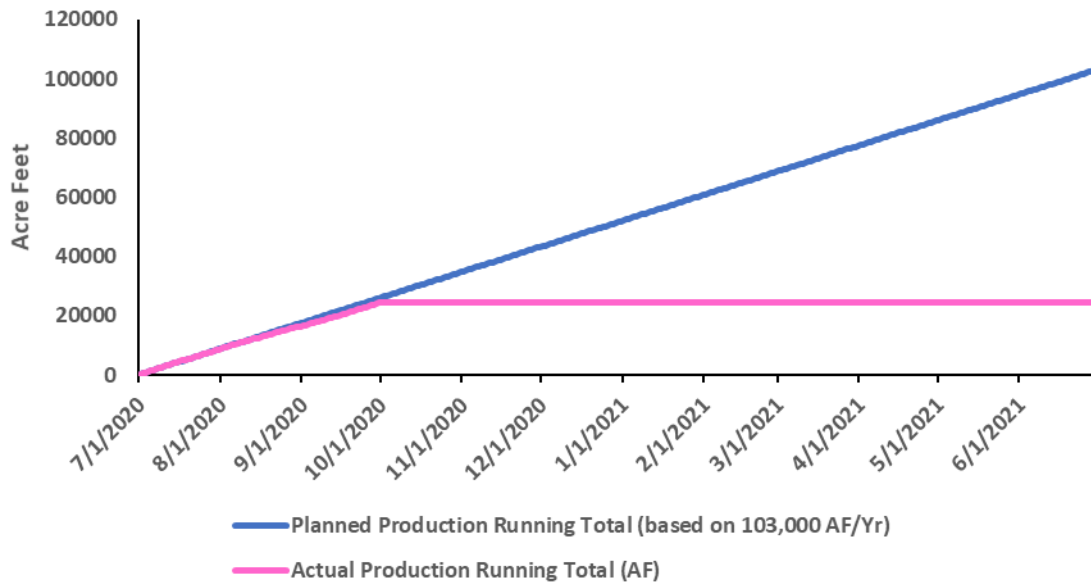
The following graph shows the 2020/2021 fiscal year production compared to the fiscal year production target of 103,000 acre feet (af). As of September 30, 2020, the GWRS Fiscal Year 2020-2021 production total is 24,354 af which is 1,608 af below our target fiscal year production of 25,962 af. This shortfall was due to limited production caused by three separate issues. One issue for lower production was the occurrence of five demand response events in August and two in September due to heat wave events. The GWRS participates in a voluntary electrical load reduction program called Demand Response where production is lowered to 15 mgd when an event is called in order to reduce electrical consumption. This in term results in payment to OCWD from our Demand Response contract provider Enel X for participation in the program. The second issue limiting reduction was a two day planned GWRS outage from August 21 to September 1 for the GWRS Final Expansion construction project to tie in new UV trains. The third issue limiting production is lower flows from OCSD due to ongoing construction of a replacement return activated sludge line at their Plant 1 Activated Sludge #1 process. OCSD requires flows to Plant 1 to be lowered by 3-5 mgd while this work is being completed.

# GWRS ACTUAL PRODUCTION TO TARGET PRODUCTION

Fiscal Year

July 1, 2019 to June 30, 2020

103,000 acre feet planned





## AGENDA ITEM SUBMITTAL

**Meeting Date:** October 12, 2020

**To:** GWRS Steering Committee

**From:** Mike Markus/Jim Herberg

**Staff Contact:** S. Scott-Roberts

**Budgeted:** N/A

**Budgeted Amount:** N/A

**Cost Estimate:** N/A

**Funding Source:** N/A

**Program/Line Item No.:** N/A

**General Counsel Approval:** N/A

**Project Report Approved:** N/A

**CEQA Compliance:** N/A

**Subject: UPDATE ON GWRS FINAL EXPANSION PROJECT**

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### SUMMARY

The GWRS Final Expansion Project is currently under construction by Shimmick Construction Company to expand the Advanced Water Treatment Facility and construct the GWRS pump station and flow equalization tanks at OCSD Plant No. 2. In addition, updates on construction progress on the Headworks Modification Project and Pipeline Rehabilitation Project will be presented.

### RECOMMENDATION

Informational.

### DISCUSSION/ANALYSIS

The GWRS Final Expansion Project is the build-out capacity of the GWRS facility that treats secondary effluent from OCSD to drinking water standards for groundwater replenishment water. The current GWRS facility produces 100 MGD of purified water. The build-out treatment capacity increases the water production to a total of 130 MGD. OCSD/OCWD completed a joint effluent reuse study (SP-173) in 2016 which analyzed the project components required to facilitate the GWRS Final Expansion Project. With the study complete, both agencies embarked on completing all the projects required to meet the build-out capacity of 130 MGD as part of the GWRS Final Expansion Project.

To increase the amount of water produced from the GWRS facility, additional secondary effluent from OCSD must be conveyed to GWRS. With an analysis of average raw wastewater inflows to OCSD's two treatment plants, both OCSD Plant No. 1 and Plant No. 2 secondary effluent is required to meet the 130 MGD GWRS production goal. Therefore, new secondary effluent conveyance facilities are required at OCSD Plant No. 2 to convey the secondary effluent to GWRS. These conveyance facilities include an effluent pump station, a flow equalization tank and a pipeline. In addition, recommendations from the SP-173 study showed that the segregation of the Santa Ana Regional Interceptor (SARI) trunk flows to OCSD Plant No. 2 is feasible as part of the GWRS Final Expansion Project. Currently SARI flows are not permitted to be recycled through GWRS due to the industrial and treatment facility discharges that currently flow in the SARI trunk sewer. Therefore, in addition to the conveyance facilities, the OCSD Plant No. 2 headworks facilities will segregate the SARI trunk flows and treat these

flows separately for discharge to the ocean outfall. This project is referred to as the Plant No. 2 Headworks Modification Project.

The Advanced Water Treatment Facility is the GWRS facility made up of the microfiltration, reverse osmosis and UV treatment processes. The AWTF will need to be expanded to treat the additional 30 MGD of secondary effluent to meet the build-out water production goal of 130 MGD total. With all the above considerations, the GWRS Final Expansion Project includes the following project contracts/components:

### **GWRS Final Expansion Project Components**

#### ***CONTRACT 1 – Construction Phase (Shimmick)***

- Advanced Water Treatment Facility Expansion
- P2 Effluent Pump Station
- P2 Flow Equalization Tanks

#### ***CONTRACT 2: - Bid/Construction Phase (JF Shea)***

- Pipeline Rehabilitation

#### ***CONTRACT 3: - Construction Phase (Shimmick)***

- OCSD Headworks Modification

OCWD is responsible for the costs of all the projects listed above for the GWRS Final Expansion Project. However, OCSD will manage the design and construction of the P2 Headworks Modification Project (P2-122).

The construction phase of Contract 1 was awarded to Shimmick Construction Company, Inc. in the amount of \$199.9 million – which includes the AWTF Expansion, P2 Pump Station, and the P2 Flow Equalization Tanks. The Notice to Proceed was issued on November 2, 2019 and per the allotted construction duration – the project is scheduled to be complete on February 19, 2023. Current construction activities include drilling of foundation piles for the new microfiltration cells that will be added to the AWTF. At OCSD Plant No. 2, Shimmick has completed the deep soil mixing foundation work for the pump station and flow equalization tanks and begun installing below grade pipes and prepping the area for the concrete slabs on grade.

Contract 2 (Pipeline Rehab) was advertised for public bid in March 2020. Bids were opened on June 16, 2020. OCWD Board of Directors approved awarding Contract 2 to JF Shea Construction in the amount of \$11.6 million on July 15, 2020. The Notice to Proceed was issued on August 17, 2020 and per the allotted construction duration – the project is scheduled to be complete on June 3, 2021. Current construction activities include the isolation and cleaning of the existing 66-inch pipeline in preparation for the slip-lining rehabilitation work.

The OCSD Headworks Modification Project was advertised for construction bid on October 10, 2019. Bids were opened on December 17, 2019. The OCSD Headworks Modification Project was awarded to Shimmick Construction Co., Inc. at the January 22<sup>nd</sup> OCSD Board of Directors meeting. The Notice to Proceed was issued on March 2, 2020 and per the allotted construction duration – the project is scheduled to be complete on March 8, 2023. Current construction activities include potholing existing utilities, drilling of dewatering wells, and preparatory measurements for new gates to isolate the headworks.

The approved GWRSE Project budget, which includes all three contracts, is shown in Table 1 below with the expected GWRSE Project Budget shown in the right column.

**Table 1 – Approved GWRSE Project Budget vs Expected Project Budget**

<b>Description</b>	<b>Approved Project Budget</b>	<b>Expected Project Budget</b>
<b>Pre-Design</b>		
Studies/CEQA for GWRSE Projects	\$1,000,000.00	\$890,000
<b>Design Engineering Services</b>		
B&V Design Phase Services (Incl. Amend. Nos. 1, 2, 4, 5)	\$7,356,450	\$7,356,450
B&V Design Services During Construction (Amend. No. 3)	\$6,345,300	\$6,345,300
<b>Construction Management/Inspection</b>		
Butier/Carollo CM Agreement	\$8,500,000	\$8,500,000
Specialty/Materials Construction Inspection	\$1,500,000	\$1,900,000
<b>Total CM and Inspection</b>	<b>\$10,000,000</b>	<b>\$10,400,000</b>
<b>Construction</b>		
Contract 1 - AWTF Expansion Construction	\$123,776,159	\$116,776,159
Contract 1 - P2 Effluent Pump Station Construction	\$54,611,819	\$54,611,819
Contract 1 - P2 Flow Equalization Tank Construction	\$21,554,022	\$21,554,022
Contract 2 - P2 Pipeline Rehabilitation Construction	\$18,000,000	\$11,600,000
<b>Total Construction Phase</b>	<b>\$217,942,000</b>	<b>\$204,542,000</b>
<b>Engineering Support, Legal &amp; Administration</b>		
SPI Agreement (Process Support)	\$792,817	\$792,817
Legal/Admin/Survey/Public Outreach Support	\$2,584,183	\$2,800,000
<b>Total ELA</b>	<b>\$3,377,000</b>	<b>\$3,592,817</b>
Construction Contingency	\$14,283,250	\$12,073,433
OCSD Headworks Modification Project	\$50,000,000	\$48,000,000
<b>TOTAL</b>	<b>\$310,304,000</b>	<b>\$293,200,000</b>
Grant - State Revolving Fund		-\$5,000,000
Grant - Round 1 IRWM (Prop 1)		-\$3,589,553
Grant - USBR Title XVI		-\$1,325,000
<b>Total Net Expected Project Budget</b>		<b>\$283,285,447</b>

The expected GWRSE Project Budget is less than the approved project budget due to the following factors:

- The Microfiltration (MF) System for the GWRSE Project was competitively bid in this phase and due to this process – significant savings in the cost of the MF equipment were achieved

- The Headworks Modification Project bid was significantly lower than the Engineer's Estimate
- The Pipeline Rehabilitation Project bid was also significantly lower than the Engineer's Estimate

The expected GWRSE Project budget will continue to be tracked for planning purposes. Funding for this project is through a variety of different sources. In August 2018, OCWD Board of Directors executed a loan agreement with the EPA for a low interest rate WIFIA loan in the amount of \$135 million. The remaining \$186 million is slated to be received from the State Revolving Fund (SRF) Loan. Also, through the SRF Loan application process the GWRSE Project was awarded a total of \$5 million in grants.

OCWD was also recently notified that the project is being awarded \$3.6 million in Prop 1 grants from the IRWM grant program managed by the California Department of Water Resources.

Additionally, OCSD/OCWD applied for USBR Title XVI grant for the P2 Headworks Modification Project in Summer of 2017. Staff was notified in November 2017 that the application for P2-122 received some of the highest ratings and was awarded \$1,325,000 in grant funding.

The grants described above are also shown on the expected GWRSE Project Budget.

Table 2 below shows the construction completion percentages for each of the project elements (based on expenditures and duration) as of September 30, 2020.

**Table 2 – GWRSE Project Elements Completion Status Table**

<b>GWRSE Project Element</b>	<b>Percent Complete (Expenditures)</b>	<b>Percent Completed (Duration)</b>
AWTF Expansion	24%	28%
P2 Effluent Pump Station	24%	28%
P2 Flow Equalization Tanks	24%	28%
Pipeline Rehabilitation	9%	15%
OCSD Headworks Modification*	15%	18%

*\*Values as of September 17, 2020*

The detailed construction progress criteria for each of the contracts will be presented during this meeting in addition to construction photos and milestones.

**PRIOR BOARD/COMMITTEE ACTIONS**





## AGENDA ITEM SUBMITTAL

**Meeting Date:** October 12, 2020

**To:** GWRS Steering Committee

**From:** Mike Markus

**Staff Contact:** G. Ayala/C. Nettles

**Budgeted:** N/A

**Budgeted Amount:** N/A

**Cost Estimate:** N/A

**Funding Source:** N/A

**Program/Line Item No.:** N/A

**General Counsel Approval:** N/A

**Engineers/Feasibility Report:** N/A

**CEQA Compliance:** N/A

**SUBJECT: GWRS THIRD QUARTER OUTREACH REPORT (JULY – SEPT. 2020)**

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### SUMMARY

Outreach for the Orange County Water District (OCWD) and its programs and projects, including the Groundwater Replenishment System (GWRS), continues with a major focus to build and maintain support for the GWRS, grow virtual outreach programs, and field media interest and coverage.

#### Attachment(s):

- 2020 third quarter news clip report

### RECOMMENDATION

Informational

### DISCUSSION/ANALYSIS

#### Tours:

In-person, non essential, GWRS tours were suspended in March in accordance with the District's COVID-19 response plan. To facilitate continued GWRS outreach, OCWD implemented a virtual tour program. There were 10 virtual tours, three joint virtual tours and three essential in-person tours during the third quarter of 2020. The tours accounted for approximately 700 guests. Following is a list of groups, companies, schools, and organizations that participated in the tours:

- Four public tours
- Three joint tours
- Two Orange County Grand Jury tours (in-person)
- California State University, Fullerton (CSUF), Nursing
- EPA Administrator Andrew Wheeler and staff (in-person)
- Los Angeles Sanitation & Environment
- Mexican Association of Water Leaders
- National Alliance for Water Innovation Energy-Water Desalination Hub
- University of California, Berkeley, Chemistry

- United States Bureau of Reclamation

In addition, an updated [on-demand virtual tour](#) was created and posted to the District's social media channels. The on-demand tour has been viewed more than 1,800 times.

#### **Fourth Quarter 2020 Virtual Tours:**

- October 2 – Public tour
- October 5 – California State University, Long Beach Nursing
- October 7 – CSUF Hydrology
- October 23 – Katella High School
- October 28 – University of California, Irvine, Engineering
- November 6 – Public tour
- November 12 - Joint tour with OCSD
- December 3 – California Special Districts Association
- December 4 – Public tour
- December 15 – Joint tour with OCSD

#### **Speakers Bureau:**

Below is a listing of the July through September speakers' bureau engagements that included a portion of the presentation about the GWRS. As with tours, speakers' bureau engagements moved to a virtual format in March.

- On July 8, Tim Sovich provided a virtual presentation on groundwater and the GWRS during an OC Coastkeeper-hosted webinar titled "What's Up With Water."
- On July 16, Director Ahmad Zahra spoke about OCWD, the GWRS and Fullerton's water supply to members of the Fullerton Sunrise Rotary.
- On July 21, Mehul Patel presented at an American Membrane Technology Association-hosted webinar about GWRS operations during COVID-19.
- On August 13, Sandy Scott-Roberts and Ben Smith presented "Too Pure Water from Orange County Water District Results in Pipeline Rehabilitation Project - GWRS Pipeline Epoxy Lining Project and Inspection Work" at the American Society of Civil Engineers and Utility Engineering & Surveying Institute Pipelines 2020 Virtual Conference.
- On September 14, Mike Markus presented a case study on the GWRS during the Water Reuse 101 panel at the WaterReuse Virtual Symposium.
- On September 14, Mehul Patel spoke during the WaterReuse Virtual Symposium in a debate titled Reverse Osmosis Based Vs Carbon Based Treatment for Potable Reuse.

- On September 22, Sandy Scott-Roberts presented on the GWRS during the Aguas do Tejo Atlantico Innovation Pathway conference.

#### **Fourth Quarter 2020 Speakers Bureau:**

- October 14 – California Water Environment Association virtual screening of Brave Blue World documentary with panel discussion
- October 21 – ACWA webinar on virtual events and tours
- October 27 – American Water Works Association Annual Fall Conference 2020

#### **Webinars**

In May, OCWD launched a monthly webinar series on emerging and newsworthy topics. Each webinar features an OCWD expert and District partner as they discuss important OCWD programs and projects that impact the region's water supply. The following webinars were held in the third quarter and featured the GWRS:

- [How'd They Do That? An Insider's Look at Expanding the World's Largest Potable Reuse Facility](#)
- [You Never See Our Best Work: OCWD's Seawater Intrusion Barrier](#)

#### **Media**

There were 18 global news hits for the GWRS. This number reflects multiple hits of the same story. The total reach for the combined articles was approximately 12.9 million. The news clip report is attached.

#### **Press Releases, Electronic Publications and Videos:**

- During the third quarter of 2020, OCWD issued the following press releases that mentioned or featured the GWRS:
  - [OCWD Awarded \\$5 Million in Grants Toward Expansion of World's Largest Water Reuse Facility](#)
  - [OCWD and EPA Save Ratepayers \\$79.4 Million By Updating WIFIA Loan for World's Largest Water Reuse Project](#)
  - [World's Largest Water Reuse Facility Receives Loan Saving Ratepayers Nearly \\$42 Million](#)
- Staff wrote and distributed the July, August and September issues of Hydrospectives, OCWD's monthly e-newsletter, which mention or feature articles about the GWRS:
  - <https://www.ocwd.com/news-events/newsletter/2020/july-2020/>
  - <https://www.ocwd.com/news-events/newsletter/2020/august-2020/>
  - <https://www.ocwd.com/news-events/newsletter/2020/september-2020/>

## **Website:**

- The website homepage was updated to include a quick link to the GWRS virtual tour video.
  - <https://www.ocwd.com/>
- The GWRS Final Expansion web page was updated to include a new construction time lapse video, and additional photos of interest to residents and the community.
  - <https://www.ocwd.com/gwrs/final-expansion/>
- There were 5,679 views of the GWRS portion of OCWD's website. The top three web pages within the GWRS section of the website were: 1) GWRS, 2) the process, and 3) the final expansion. A single user may visit multiple pages within the website on one visit. These views relate to external traffic and do not include internal OCWD views.

## **Construction outreach:**

- OCWD worked with the Orange County Sanitation District to distribute two notices to stakeholders.
  - [Summer 2020 construction update](#)
  - [GWRS Secondary Effluent Pipeline Rehabilitation Project fact sheet](#)

## GWRS MEDIA CLIPS JULY - SEPT 2020

#	Date	Source	Headline	Country	URL	Reach
18	28-Sep-2020	Water Online	Biwater Inc. Continues Robust Business Growth Despite The Impact From COVID-19	U.S.	<a href="https://www.wateronline.com/doc/biwater-inc-continues-robust-business-growth-despite-the-impact-from-covid-0001">https://www.wateronline.com/doc/biwater-inc-continues-robust-business-growth-despite-the-impact-from-covid-0001</a>	37,813
17	28-Sep-2020	Water Online	World's Largest Water Reuse Facility Receives Loan Saving Ratepayers Nearly \$42M	U.S.	<a href="https://www.wateronline.com/doc/world-s-largest-water-reuse-facility-receives-loan-saving-ratepayers-nearly-m-0001">https://www.wateronline.com/doc/world-s-largest-water-reuse-facility-receives-loan-saving-ratepayers-nearly-m-0001</a>	37,813
16	24-Sep-2020	The San Diego Union-Tribune	Pure Water Oceanside gets \$69 million loan	U.S.	<a href="https://www.sandiegouniontribune.com/communities/north-county/oceanside/story/2020-09-24/pure-water-oceanside-gets-69-million-loan">https://www.sandiegouniontribune.com/communities/north-county/oceanside/story/2020-09-24/pure-water-oceanside-gets-69-million-loan</a>	2,941,859
15	24-Sep-2020	Tribune (Premium)	Pure Water Oceanside gets \$69 million loan	U.S.		4,193
14	22-Sep-2020	Municipal Sewer & Water Magazine	News Briefs: Water Utility Imposters Brandish Gun in D.C.	U.S.	<a href="https://www.mswmag.com/online-exclusives/2020/09/news-briefs-water-utility-imposters-brandish-gun-in-d-c">https://www.mswmag.com/online-exclusives/2020/09/news-briefs-water-utility-imposters-brandish-gun-in-d-c</a>	5,338
13	14-Sep-2020	WaterWorld	RO Provides Promising Win in Battle against Water Scarcity	U.S.	<a href="https://www.waterworld.com/wastewater/treatment/article/14182398/ro-provides-promising-win-in-battle-against-water-scarcity">https://www.waterworld.com/wastewater/treatment/article/14182398/ro-provides-promising-win-in-battle-against-water-scarcity</a>	52,851
12	08-Sep-2020	Water Finance & Management	Orange County saves ratepayer money with WIFIA loan update	U.S.	<a href="https://waterfm.com/orange-county-saves-ratepayer-money-with-wifia-loan-update/">https://waterfm.com/orange-county-saves-ratepayer-money-with-wifia-loan-update/</a>	6,039

## GWRS MEDIA CLIPS JULY - SEPT 2020

#	Date	Source	Headline	Country	URL	Reach
11	04-Sep-2020	Advisor News	EPA Updates WIFIA Loan, Saving More Money for Orange County Ratepayers	U.S.	<a href="https://advisornews.com/oarticle/epa-updates-wifia-loan-saving-more-money-for-orange-county-ratepayers">https://advisornews.com/oarticle/epa-updates-wifia-loan-saving-more-money-for-orange-county-ratepayers</a>	3,596
10	03-Sep-2020	EPA United States Environmental Protection Agency	EPA Administrator Concludes Southwest Swing with Nixon Library Address	U.S.	<a href="https://www.epa.gov/newsreleases/epa-administrator-concludes-southwest-swing-nixon-library-address">https://www.epa.gov/newsreleases/epa-administrator-concludes-southwest-swing-nixon-library-address</a>	4,793,120
9	03-Sep-2020	EPA United States Environmental Protection Agency	EPA Updates WIFIA Loan, Saving More Money for Orange County Ratepayers	U.S.	<a href="https://www.epa.gov/newsreleases/epa-updates-wifia-loan-saving-more-money-orange-county-ratepayers">https://www.epa.gov/newsreleases/epa-updates-wifia-loan-saving-more-money-orange-county-ratepayers</a>	4,793,120
8	03-Sep-2020	Water Online	Orange County Water District And EPA Save Ratepayers \$79.4M By Updating Wifia Loan For World's Largest Water Reuse Project	U.S.	<a href="https://www.wateronline.com/doc/orange-county-water-district-epa-ratepayers-m-by-updating-wifia-loan-world-s-largest-water-project-0001">https://www.wateronline.com/doc/orange-county-water-district-epa-ratepayers-m-by-updating-wifia-loan-world-s-largest-water-project-0001</a>	37,813
7	03-Sep-2020	Water Online	EPA Updates WIFIA Loan, Saving More Money For Orange County Ratepayers	U.S.	<a href="https://www.wateronline.com/doc/epa-updates-wifia-loan-saving-more-money-for-orange-county-ratepayers-0001">https://www.wateronline.com/doc/epa-updates-wifia-loan-saving-more-money-for-orange-county-ratepayers-0001</a>	44,533
6	31-Aug-2020	Water Online	Orange County Water District Reduces Electricity Use To Free Up Power Grid During Heatwave	U.S.	<a href="https://www.wateronline.com/doc/orange-county-water-district-electricity-power-grid-during-heatwave-0001">https://www.wateronline.com/doc/orange-county-water-district-electricity-power-grid-during-heatwave-0001</a>	44,533

## GWRS MEDIA CLIPS JULY - SEPT 2020

#	Date	Source	Headline	Country	URL	Reach
5	25-Aug-2020	California Water News Daily	OCWD Receives Grant Funding for Groundwater Replenishment System Expansion Project	U.S.	<a href="http://californiawaternewsdaily.com/infrastructure/ocwd-receives-grant-funding-for-groundwater-replenishment-system-expansion-project/">http://californiawaternewsdaily.com/infrastructure/ocwd-receives-grant-funding-for-groundwater-replenishment-system-expansion-project/</a>	3,197
4	20-Aug-2020	Water Online	Orange County Water District Awarded \$5M In Grants Toward Expansion Of World's Largest Water Reuse Facility	U.S.	<a href="https://www.wateronline.com/doc/orange-county-water-district-awarded-m-in-grants-toward-expansion-reuse-facility-0001">https://www.wateronline.com/doc/orange-county-water-district-awarded-m-in-grants-toward-expansion-reuse-facility-0001</a>	44,533
3	30-Jul-2020	Event-Newsenterprise	August is water quality month in Orange County	U.S.	<a href="https://event-newsenterprise.com/17100-2/">https://event-newsenterprise.com/17100-2/</a>	1,208
2	17-Jul-2020	New Santa Ana	The City of Santa Ana releases its latest Water Quality Report	U.S.	<a href="http://newsantaana.com/the-city-of-santa-ana-releases-its-latest-water-quality-report/">http://newsantaana.com/the-city-of-santa-ana-releases-its-latest-water-quality-report/</a>	50,519
1	03-Jul-2020	Laguna Beach Independent Newspaper	Rouda introduces bill to help businesses reopen safely	U.S.	<a href="https://www.lagunabeachindy.com/rouda-introduces-bill-to-help-businesses-reopen-safely/">https://www.lagunabeachindy.com/rouda-introduces-bill-to-help-businesses-reopen-safely/</a>	12,722
<b>TOTAL REACH</b>						<b>12,914,800</b>