

Board of Directors Bruce E. Dandy, President Sheldon G. Berger, Vice President Lynn E. Maulhardt, Secretary/Treasurer Mohammed A. Hasan Catherine P. Keeling Gordon Kimball Daniel C. Naumann

General Manager Mauricio E. Guardado, Jr.

Legal Counsel David D. Boyer

<u>AGENDA</u> WATER RESOURCES COMMITTEE Wednesday, July 5, at 9:00 a.m. UNITED WATER CONSERVATION DISTRICT Boardroom, 1701 N. Lombard Street, Oxnard, CA 93030

OPEN SESSION:

1. Public Comment

The public may address the Water Resources Committee on any matter on the agenda or within the jurisdiction of the Committee. All comments are subject to a five-minute time limit.

2. Approval of Minutes Motion

The Committee will review and consider approving the minutes from the Water Resources Committee meeting of May 2, 2023.

3. Update on optimization of groundwater recharge at the Saticoy Facility(30 minutes: Dr. Sercu)

Information Item

Staff will provide an update and additional information on efforts to maximize diversions and groundwater recharge in the Saticoy, Noble and Rose basins.

4. Status of draft EBB Water Phase 1 Monitoring and Contingency plan (20 minutes: Mr. Lindquist)

<u>Motion</u>

Staff will present a brief update on the status of draft monitoring and contingency plan for EBB Water Phase 1 and accept guidance from the Committee on how to engage stakeholders, including the FCGMA, for their input.

5. Water Resources Department and GSA Activities Update (10 minutes, Mr. Lindquist) Information Item

Staff will provide an update to the Committee on recent Water Resources Department activities and provide an update on GSA activities and schedules for the Fillmore and Piru Basins, Mound Basin, Santa Paula Basin, and Fox Canyon Groundwater Management Agency (Oxnard, Pleasant Valley and Las Posas Valley basins).

FUTURE AGENDA ITEMS

ADJOURNMENT

Directors: Daniel C. Naumann, Chair Mohammed Hasan Gordon Kimball

Staff:

Mauricio E. Guardado, Jr. Dr. Zachary Hanson John Lindquist Dr. Bram Sercu

Dr. Maryam Bral Kathleen Kuepper Murray McEachron Dr. Jason Sun Water Resources Committee Agenda Wednesday, July 5, 2023, at 9:00 a.m. Page 2

The Antoractors with Disabilities Act provides that no qualified individual with a disability shall be excluded from participaning in, or denied the benefits of the District's services, programs or activities because of any disability. It vin need special assistance to participate in this meaning, or it vou require agenda material in an alternative format, please contact the District's offices at (805) 525-4431. Nonlication of at least 48 hours prior to the meeting will enable the District to make appropriate area 2, ments

Approved:

Mauricio E. Guarda Io, Jr., General Manager

Dr. Maryam Bral, Chief Engineer

Posted: (date) June 29, 2023 (time) 5:30p.m. .At:UWCD Headquarters, 1701 N. Lombard Street, Oxnard, CA 93030 (attest) Eva Ibarra

Posted: (datc) June 29, 2023 At: www.unitedwater.com (time) 5:45p.m.

(attest) Eva Ibarra



Board of Directors Bruce E. Dandy, President Sheldon G. Berger, Vice President Lynn E. Maulhardt, Secretary/Treasurer Mohammed A. Hasan Catherine P. Keeling Gordon Kimball Daniel C. Naumann

General Manager Mauricio E. Guardado, Jr.

Legal Counsel David D. Boyer

<u>MINUTES</u> WATER RESOURCES COMMITTEE Tuesday, May 2, 2023, at 9:00 a.m. UNITED WATER CONSERVATION DISTRICT Boardroom, 1701 N. Lombard Street, Oxnard CA 93030

Committee Members Present:

Daniel Naumann, chair Mohammed Hasan, director Gordon Kimball, director

Staff Present:

Mauricio Guardado, general manager Anthony Emmert, assistant general manager Brian Zahn, chief financial officer Dr. Maryam Bral, chief engineer Dan Detmer, water resources manager Murray McEachron, principal hydrologist John Lindquist, supervising hydrogeologist Dr. Zachary Hanson, hydrogeologist Daryl Smith, Controller Josh Perez, chief human resources officer Zachary Plummer, technology systems manager Ed Reese, technology systems specialist Eva Ibarra, clerk for the Committee Vanessa Vasquez. administrative assistant

Public Present:

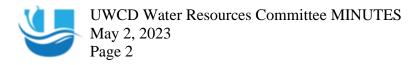
Tony Morgan, DBS&A Alden Broome, Guadalasca Mutual Water Company Jennifer Tribo, Ventura Water David Borchard, FCGMA Director

Call to Order – Open Session

Director Nauman called the committee meeting to order at 9:00 a.m. The clerk of the committee called roll. All committee members were present (Naumann, Kimball and Hasan).

1. Public Comment

Directors asked if there were any public comments. There were none offered.



2. Approval of Minutes

Motion to approve the Minutes from April 04, 2023, Water Resources Committee meeting. Director Naumann; second, Director Hasan. Voice vote: three ayes (Naumann, Kimball, Hasan); none opposed. Motion carries unanimously 3/0.

3. Annual Investigation and Report of Groundwater Conditions within UWCD

United Water Conservation District's Hydrogeologist Dr. Zachary Hanson presented the background of the Annual Investigation and Report of Groundwater Conditions covering District surface and groundwater models, annual overdraft, District-wide annual overdraft water balance methodology, a summary of findings for estimated annual values, updated "total of annual overdrafts" and accumulated overdraft (see attached slides).

During Dr. Hanson's presentation (slide six, A Summary of Findings for the Estimated Overdraft Values) Director Hasan shared his admiration for how technical the presentation was and asked how the leakage from the Semi-perched Aquifer to the Oxnard Aquifer was determined. Dr. Hanson explained the calibrated model was used to estimate this flow.

Director Naumann asked why the basins haven't filled up with the current storms that have occurred. Water Resources Manager Dan Detmer answered this question stating that years of seawater intrusion has had a residual impact, and it will take more wet years to push the seawater out.

At the end of Dr. Hanson's presentation Director Nauman then asked General Manager Mauricio Guardado if there was a need to condense the information being provided in the Groundwater Conditions presentation. Mr. Guardado felt that the information being conveyed was necessary.

No further questions or comments were offered.

4. Annual Supply and Demand Assessment for the Oxnard Hueneme System

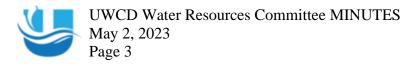
Dr. Hanson presented the Oxnard-Hueneme (OH) system annual supply and demand assessment for the period from July 2023 to June 2024. The presentation included the 2020 Five-Year Planning Update documents submitted June 2021, State Requirements as of 2022, an update on drought conditions, Executive Order N-5-23, Projected Water Supply and upcoming actions.

One member of the public asked about the 3,000 acre-feet of potable water noted (slide 3, 2020 5year Planning Update Documents Update Submitted June 2021) that is provided indirectly to consumers. Dr. Hanson explained that this is used to define an urban water supplier and serves as a threshold for small system users.

No further questions or comments were offered.

5. Progress on Planning and Design for New EBB Water Project Monitoring Wells

Supervising Hydrogeologist John Lindquist presented on the progress and planning for the design for new Extraction Barrier and Brackish (EBB) Water Treatment Project monitoring wells that will cover seawater intrusion near Naval Base Ventura County Point Mugu, EBB Water Phase 1 extraction, existing monitoring wells, planned new monitoring wells, monitoring objectives and current project status.



Director Hasan shared his enthusiasm about the project. Director Naumann then requested a project schedule on the EBB Water Treatment Project.

A member of the public asked about data for the Groundwater Sustainability Plan (GSP). He asked at which point in the evaluation process does basin level impact affect drawdown in the basin. Mr. Lindquist replied that there has been discussion with the Fox Canyon Groundwater Management Agency (FCGMA) and stakeholders on how to achieve sustainability. A mitigation plan for the monitoring wells will be shared with the GMA.

The conversation continued with a member of the public requesting a timeframe for the pilot process and where that process would be in the near future. Mr. Lindquist responded that it would depend on the GMA as they are planning a five-year update of the GSP, and this project would be considered. Discussions could start in the summer and outreach would follow.

A member of the public commented that the five-year update would provide the data necessary to provide input. Mr. Detmer replied that the GMA is going to want information on the timing and scale which would be central to discussion. Mr. Guardado added that the District will work with the GMA to enhance modeling to further help reach sustainability goals. He encouraged the members of the public to be present for any future meetings and be part of the discussion.

6. Update on Water in Storage in Castaic Lake and Releases to Downstream Users

Principal Hydrologist Murray McEachron presented updates on water storage in Castaic Lake and releases to downstream users that included the original terms of the 1978 agreement.

Director Kimball asked about the June 1 deadline for the appropriation of Article 21 water. Mr. McEachron explained that space at Lake Piru would be required to appropriate the water and discussion continued on how river crossings would limit flow and the necessary flow releases needed.

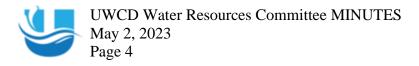
No further questions or comments offered.

7. Water Resources Department and GSA Activities Update

Mr. Detmer presented department updates that included basin conditions with baseflows that will fill the basins through Summer and Fall, water diversion this year from the Freeman Diversion to Saticoy basins, City of Oxnard recycled water credit and meeting with City of Oxnard before approaching GMA and better water quality. He also added that staff have worked with managing release sediment issues and flushing.

A member of the public asked about Forebay storage capacity before this winter's rain. Mr. Detmer replied that available storage in the Forebay was estimated to be 120,000 acre-feet at the end of the last water year. Due to continuing flows in the Santa Clara River, the Forebay will continue to be replenished throughout the year.

A member of the public then asked about Article 21 water. Mr. Guardado responded that staff is working internally on an extension of the deadline for storing Article 21 water in State reservoirs. Discussions on releasing water from Castaic Lake have taken place and Lake Piru continues spilling. A new plan is being implemented in order to ensure all the water is being captured. A member of



the public suggested that if the District doesn't have the capacity for Article 21 water, they could send that water to Metropolitan Water District. Mr. Guardado replied that all opportunities to secure these agreements would be explored rather than losing out on them. Article 21 only allows the option to either obtain the water or leave it to the state for appropriation.

Discussion amongst the committee then ensued on sustainability objectives, dealing with sediment in diverted water and increasing diversions. This then led to plans to celebrate an upcoming accomplishment for the District in reaching 4-million-acre feet of water diverted.

The members of the public expressed their appreciation for staff's hard work.

No additional comments or questions were offered.

FUTURE AGENDA ITEMS

No future agenda items. No questions or comments offered.

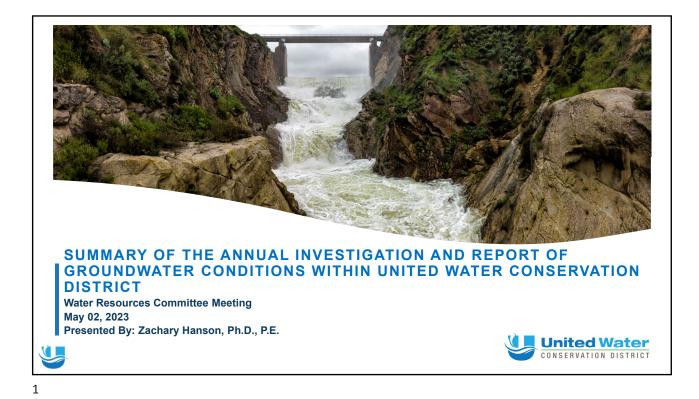
ADJOURNMENT 10:27 a.m.

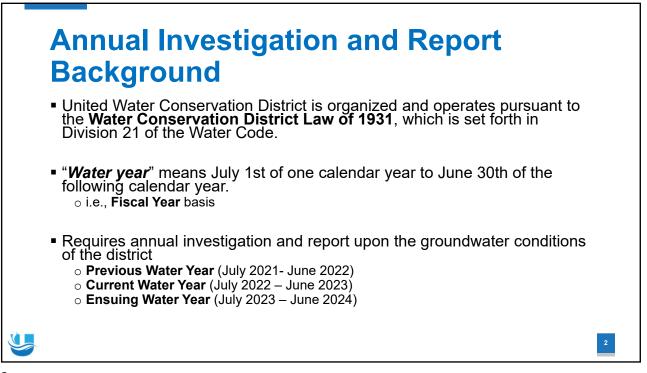
Chair Naumann adjourned the meeting at 10:27 a.m.

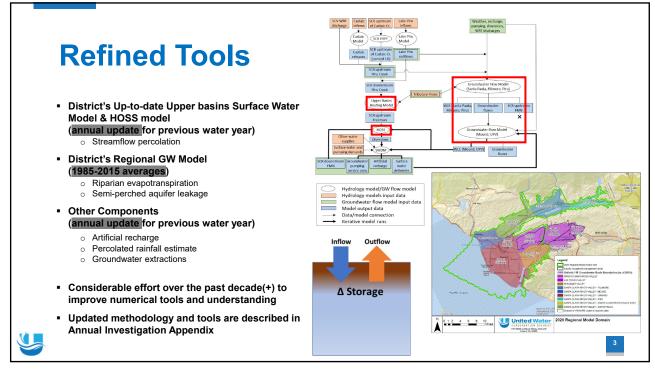
I certify that the above is a true and correct copy of the Minutes of the Water Resources Committee Meeting of May 2, 2023.

ATTEST: _

Daniel Naumann, Chair







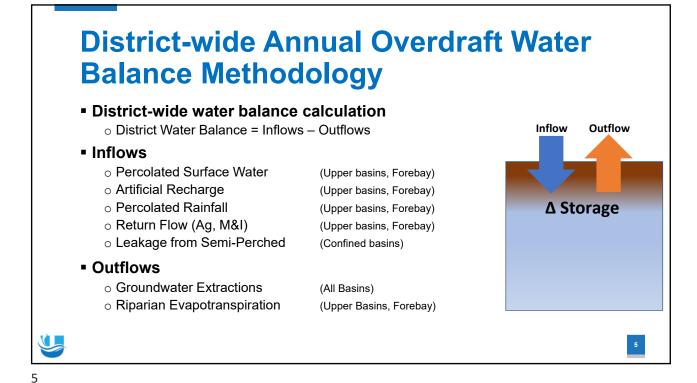


Annual Overdraft

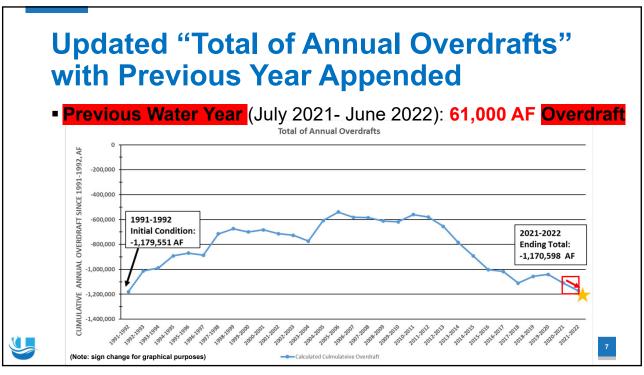
 "Annual Overdraft" means the amount, determined by the board, by which the production of water from groundwater supplies within the district or any zone or zones thereof during the water year exceeds the natural replenishment of such groundwater supplies in such water year. (Water Code § 75506)

o Calculated annually, District-wide Annual Overdraft Water Balance

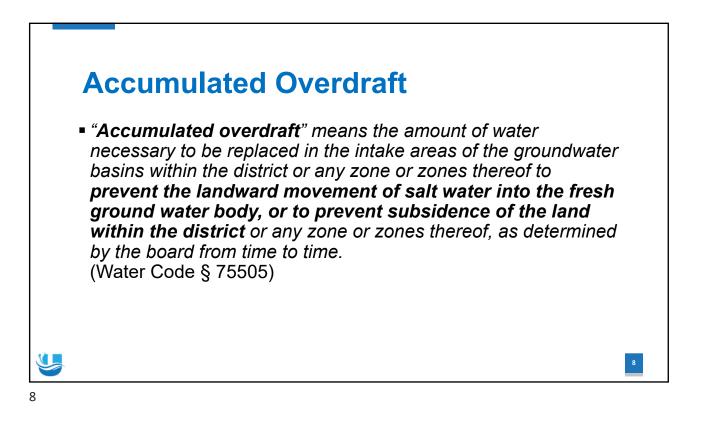


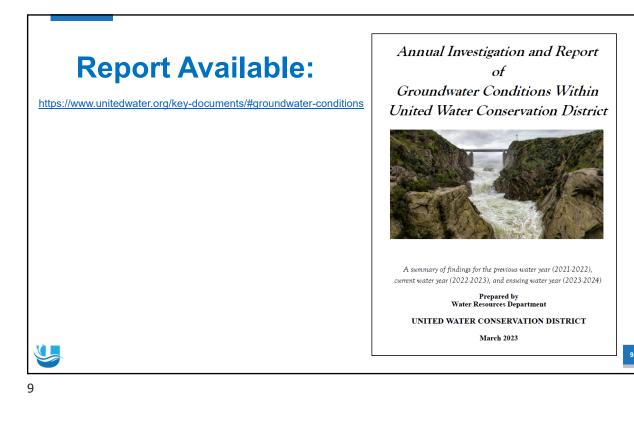


A Summary of Findings for the **Estimated Annual Overdraft Values** Previous Water Year (July 2021- June 2022): 61,000 AF Overdraft ∆ Storage District-wide Annual Overdraft Water Balance Year (July 2022 – June 2023): 69,000 AF 200000 Using precipitation through February of the current year (2023), estimation of overdraft is made from regression with past precipitation and overdraft data y = -1446.4x + 157638 R² = 0.84 150000 100000 feet 50000 (acre -50000 nsuing Water Year (July 2023 – June 2024): **0 to 59,100 AF** verdraft up-100000 1 0-100000 0-200000 Estimated as value between 0 AF and the calculated past 10-year average overdraft 0 50 100 150 200 0 250 Percent of Normal Precipitation (End of February) Weighted with 50% of Prior Year

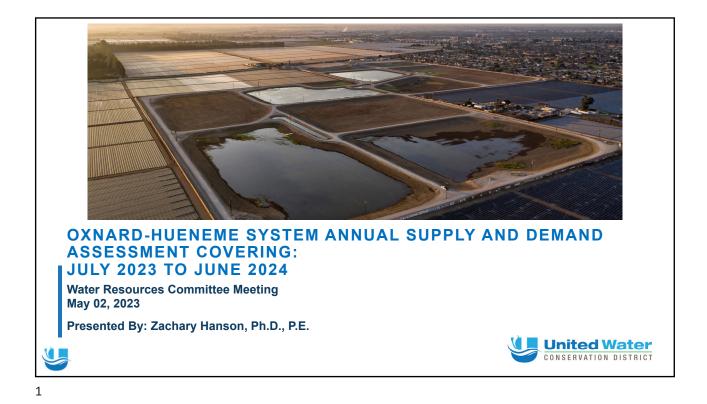


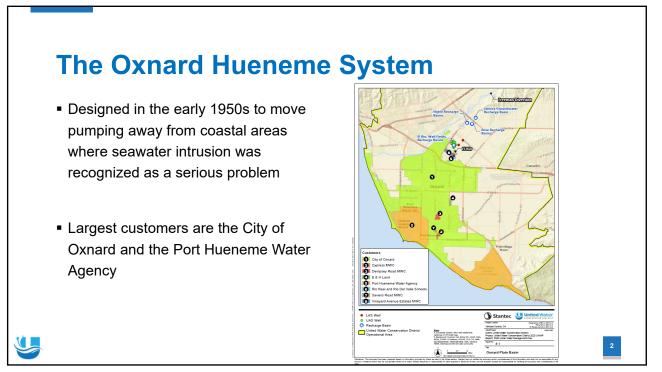




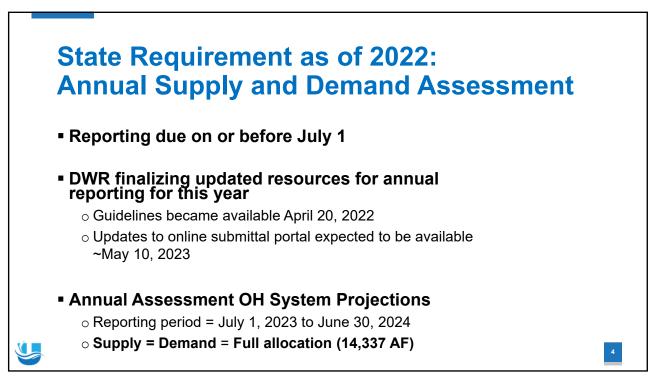


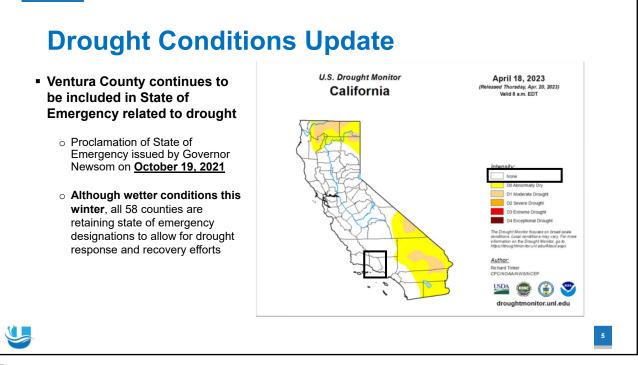


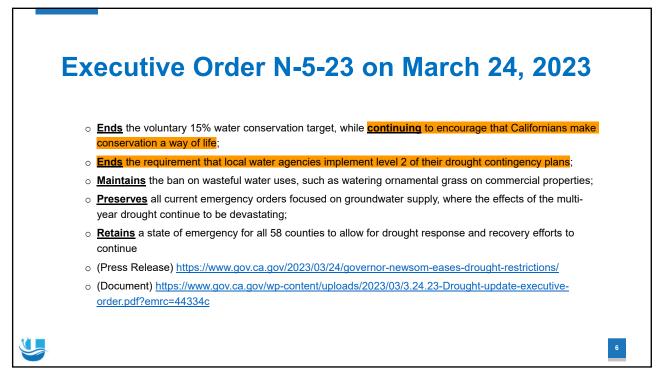




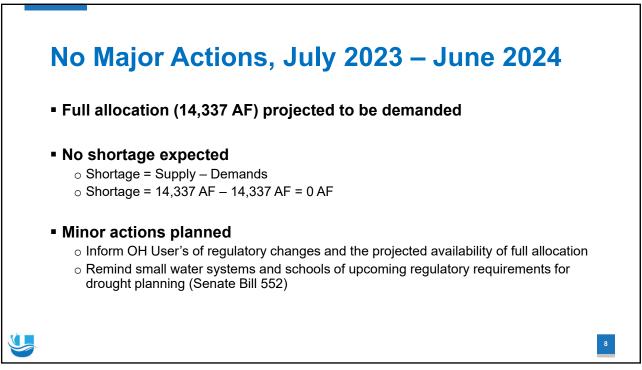


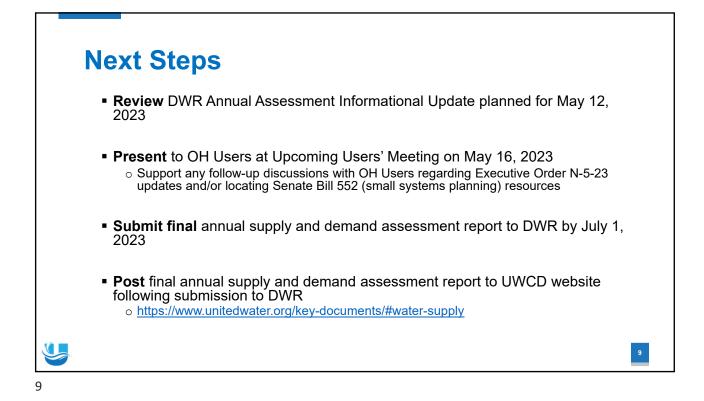


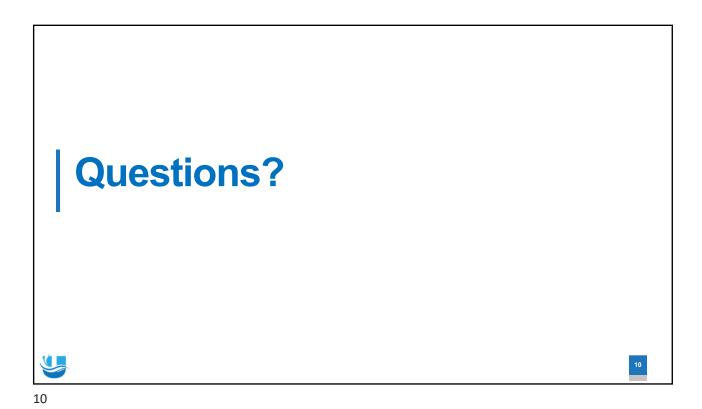


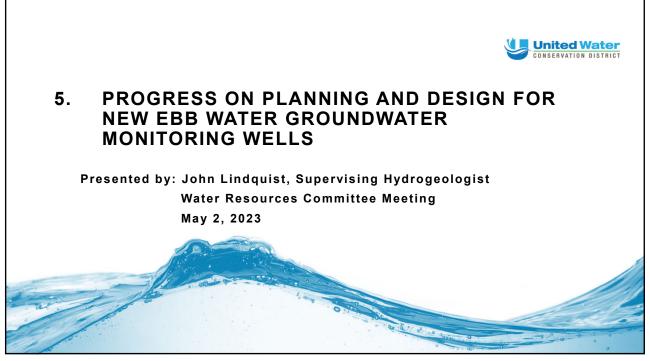


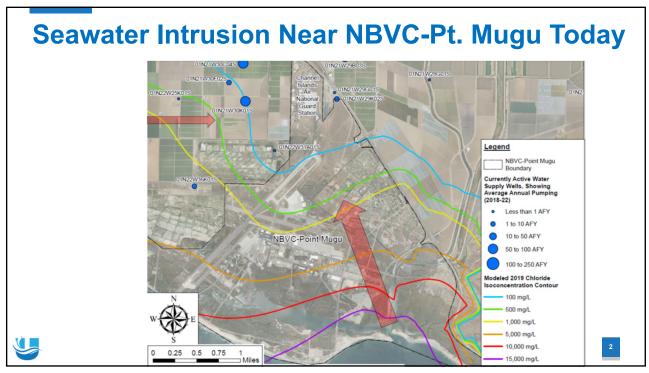


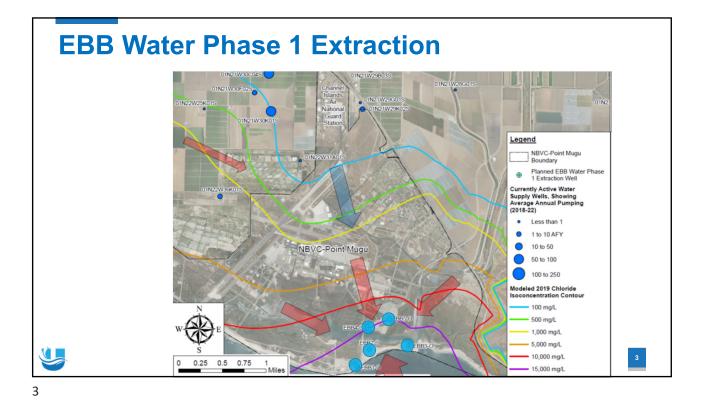


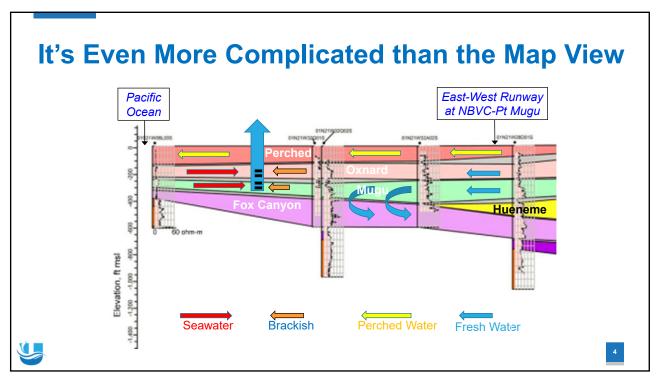


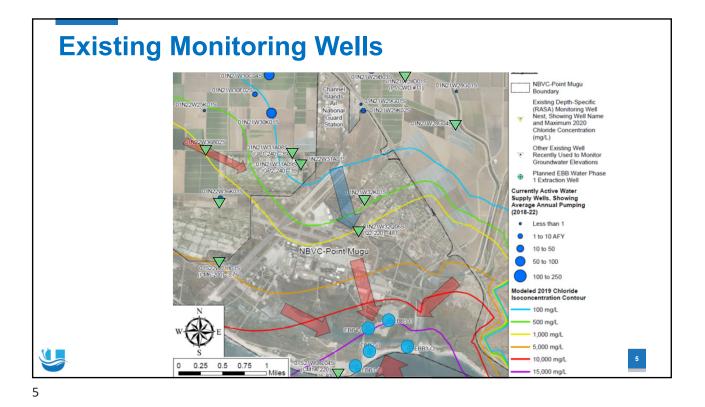


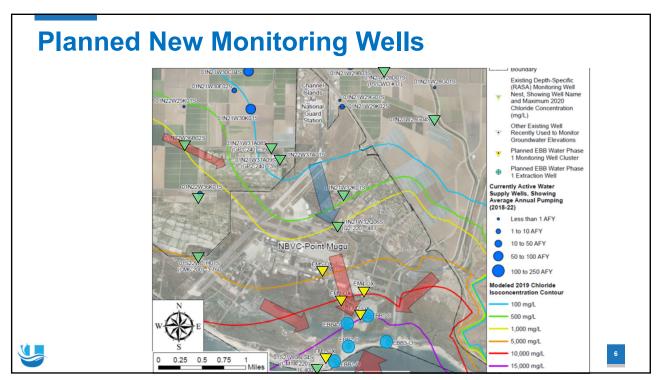












Monitoring Objectives Initial—provide more data to inform EBB Water design Improve local understanding of hydraulic conductivities (horizontal and vertical) Provide local geochemical information Establish baseline groundwater level and quality information before EBB Water begins operation Longer-term—confirm EBB Water is working as expected Verify modeled groundwater elevations and gradients Not drawing in fresh groundwater earlier than anticipated Detect potential problems (e.g., unexpected constituents) before they reach the extraction wells



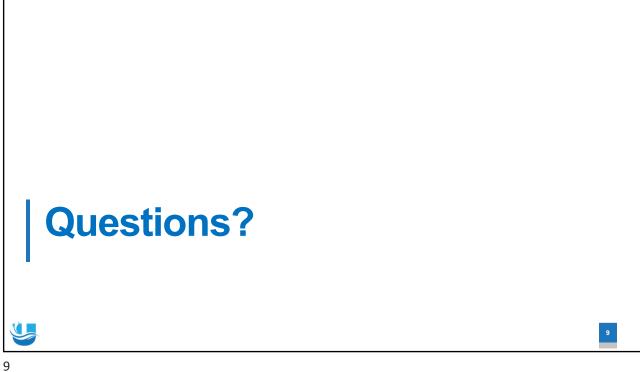
Current Status

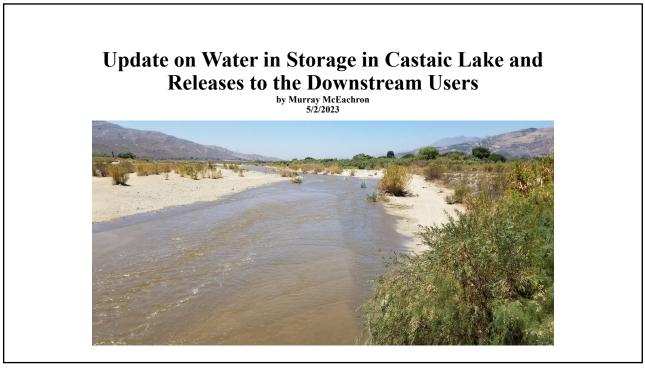
- Progress to date:
 - We know where and to what depth we would like the new monitoring wells
 - Navy working on monitoring well license amendment
- Schedule:
 - Staff will recommend a design and construction oversight consultant to your Board in June
 - Plan to install wells in late 2023 through early 2024

Budget:

- \$1.3 million from SGM grant, \$0.9 million from United
- At this time, no budget overruns forecasted
 - The most expensive budget items (monitoring wells) have yet to be bid
 - Number and depths of planned wells can be adjusted to stay within budget







1

Original Terms of the 1978 agreement:

- When inflows to Castaic Lake exceed 100 CFS the DWU's may request that DWR stores all runoff
 The stored water can later be released from Castaic Lake at a prescribe rate and duration designed to maximize percolation in the downstream aquifers.
- If the stored water is not released by May 1 of each year, then the water is appropriated by DWR.

	NATURAL INFLOWS AC-FT	Releases to match Inflow (not stored water releases)	Stored water release (mostly flood flows) AC-FT	Appropriate By DWR AC-FT
1998	96.972	49,193	0	47,779
1999	8.611	8.373	238	0
2000	8,419	4,309	4.110	0
2001	13,778	5,799	7.979	0
2002	720	720	0	0
2003	4,336	3,082	1,254	0
2004	1,934	1,067	867	0
2005	133,811	93,413	0	40,398
2006	17,735	9,314	8,421	0
2007	1,042	1,042	0	0
2008	13,155	4,514	8,641	0
2009	4,099	3,062	1,037	0
2010	14,916	4,716	10,200	0
2011	20,805	9,805	11,000	0
2012	1,423	1,423	0	0
2013	188	188	0	0
2014	3,166	3,166	0	0
2015	279	279	0	0
2016	713	713	0	0
2017	12,219	7,219	5000	0
2018	1,322	1.322	0	0
2019			15,000+-	0
Averages	17,126	10,129	3,352	4,008

2023 Total Flood Flows released to date:
26,100 AF

2023 Total Flood Flows Release to the end of May: 55,700 AF

2



Staff Report

То:	Water Resources Committee	
Through:	Mauricio E. Guardado, Jr., General Manager Maryam Bral, Chief Engineer	
From:	John Lindquist, Water Resources Supervisor Jason Sun, Supervisory Water Resources Engineer	
Date:	June 28, 2023 (July 5, 2023, meeting)	
Agenda Item:	6. Monthly Water Resources Department Report and update on Activities of local Groundwater Sustainability Agencies (GSAs) <u>Information Item</u>	

Staff Recommendation:

The Committee will receive a summary report on various Water Resources Department activities for the month of June 2023, including a summary of the monthly activities of the three local Groundwater Sustainability Agencies (Fox Canyon Groundwater Management Agency, Fillmore and Piru Basins GSA, and Mound Basin GSA), for which District board members serve as member directors, and the Santa Paula basin (adjudicated) Technical Advisory Committee, for which District staff serve as members.

Discussion:

Staff Activities

Notable efforts and activities conducted by staff during the past month included the following:

- Hydrology:
 - Staff continued to assist with planning and coordination for the purchase and release of Table A water and supplemental State Water Project (SWP) water acquired from other SWP contractors. Staff secured 2,079 acre-feet (AF) of SWP Article 21 water was released from Castaic Lake starting Wednesday, June 21 and received at Freeman Diversion by June 27. Staff continue seeking opportunities to secure additional Article 21 water in the coming months.
 - Staff continued to coordinate the release to captured stormwater from Castaic Lake to the Downstream Users and are actively monitoring several gaging locations to assess flow conditions along the Santa Clara River and major tributaries.

Page 2

- Staff continued to provide input on operational decisions at Freeman Diversion to manage problems with sediment accumulation near the intake structure, maximize diversions, and comply with regulatory requirements to provide bypass flows for fish migration and passage.
- Staff continued to assist Environmental Services and Engineering Departments in evaluating fish passage design modifications under consideration for United's Habitat Conservation Plan (HCP), including assisting with planning and interpretation of physical modeling efforts at the Bureau of Reclamation's facility in Denver and at the University of Iowa.
- Staff continued to provide input to support compliance with *O. mykiss* migration release requirements at Santa Felicia Dam.
- Staff continued to coordinate with recharge operators at Saticoy to measure percolation rates in individual basins and then dry and disc the basins when necessary to maintain optimum percolation rates for the facility.
- Staff continued to assist the Engineering Department in developing a reservoir operations plan and hydrological risk assessment for Lake Piru.
- Staff interviewed candidates for an open position for either a Hydrologist or an Associate Hydrologist position with the District.
- Hydrogeology:
 - Staff continued the District's routine groundwater monitoring and reporting activities.
 - Staff participated in meetings of the Groundwater Sustainability Agencies (GSAs) within the District, as detailed below.
 - Staff coordinated with United's consultant, Earth Systems, to complete a geotechnical evaluation report for the SCR-1 levee adjacent to Ferro Basin. The study focused on levee stability if the basin were to be filled with water to test its potential for recharge operations. Ventura County Watershed Protection District staff will review the report and provide comments to United.
 - Staff met with the City of Oxnard and the FCGMA to aid in finding ways for the City to use its recycled water credits in a manner that supports the sustainability goals for the Oxnard Basin.
 - United staff met with Camrosa MWD's staff and consultants to discuss United's understanding of hydrogeologic conditions in the northeast Pleasant Valley Basin, as Camrosa intends to construct a groundwater flow model in that area. Following the call, United e-mailed available groundwater quality and elevation data to Camrosa's consultant.
 - Staff continued to assist the Engineering and Environmental Services Departments and their consultants on environmental permitting and engineering design efforts for Phase 1 of United's EBB Water Project.

Page 3

- Staff are supporting selection of locations and design specifications for extraction wells to be included as Phase 1 of the EBB Water Project.
- Staff are planning for installation of EBB Water Project Phase 1 groundwater monitoring wells and are managing the SGM Grant activities associated with this effort. Staff recommended selection of a consultant for monitoring well design and construction oversight to United's Board of Directors at the June 14, 2023, meeting; the recommendation was approved by the Board, and staff are supporting contract implementation and execution.
- Staff are developing a monitoring plan for Phase 1 of EBB Water (extraction of brackish water and discharge without treatment), to measure and evaluate potential effects on groundwater elevations, hydraulic gradients, and groundwater quality in the project area. The information collected will be used in support of operation of Phase 1 (if necessary) and provide data to support optimization of design of Phase 2.
- Groundwater Modeling:
 - Staff have updated the Coastal Plain Model as part of the efforts to support FCGMA's GSP update. The updated Coastal Plain Model has two versions based on MDOFLOW-NWT and MODFLOW-USG. The MODFLOW-NWT version simulates the groundwater flow, and the MODFLOW-USG version simulates both the flow and solute transport. Both versions will be available for FCGMA's GSP simulations. Staff held meetings with FCGMA staff and its consultant, DUDEK, to discuss the modeling support efforts.
 - Staff have assisted the City of Ventura and their consultant in modeling travel times and areas of influence for their proposed indirect potable reuse project located near their Golf Course wells in the NW portion of the Oxnard basin. The City of Ventura has extended the professional consulting services agreement with the District to June 30, 2024.
 - Staff started to perform modeling analysis for litigation support.
 - Staff continued to simulate Phase 2 of the EBB Water project to better understand the benefits and limitations of the EBB Water project.
- Outreach and Education
 - Staff attended webinars on "Groundwater Accounting in California," DWR's "Watershed Management Resource Management Strategy," and the North Pleasant Valley Desalter Project.
 - Staff gave a presentation on groundwater conditions in the Santa Paula Basin and adjacent basins at the Santa Paula Basin Pumpers' Association annual meeting.

Page 4

Fox Canyon Groundwater Management Agency (FCGMA)

Staff continue to monitor and, where appropriate, participate in the FCGMA's groundwater sustainability planning and implementation efforts in the Oxnard, Pleasant Valley, and Las Posas Valley Basins. United staff continued to meet periodically with FCGMA staff and other stakeholders to analyze benefits and impacts of water-supply projects and different variations of those projects in support of developing a sustainable, resilient water-supply portfolio for the service areas of both agencies. United staff also attended and, where appropriate, contributed to, FCGMA Board and Committee meetings, as follows:

Board of Directors meetings – The next regular FCGMA Board meeting is scheduled for June 28 at 1:30 pm, which is after the submission deadline for this staff report. Therefore, a summary of the meeting will be included in next month's staff report. Notable agenda items include:

- The FCGMA Board will receive and file a report from Agency staff regarding deliveries of recycled water from the City of Oxnard and usage of Recycled Water Pumping Allocation (RWPA) by the City in accordance with Resolution No. 2013-2.
- The FCGMA Board will receive a presentation on, and potentially adopt, their staff's proposed work plan and budget for fiscal year 2023-24.
- The FCGMA Board will consider authorizing their Executive Officer to:
 - Grant temporary variances for the current water year for agricultural operators in the Las Posas Valley (LPV) Basin with pending variance applications based on the highest reported extractions that did not incur surcharges in Crop Years 2017/18 through 2020/21.
 - Grant temporary variances for the current water year for M&I operators in the LPV Basin with pending variance applications based on Temporary Extraction Allocation (TEA) or prior variance.
- The FCGMA Board will receive a presentation from Agency staff and consider approving the Operations Committee's recommendations for process and criteria for ranking and prioritizing water-supply projects for funding and inclusion in Groundwater Sustainability Plans.
- Receive and file a staff report and presentation on the Notice of Groundwater Adjudication in the Oxnard and Pleasant Valley Groundwater Basins.

The next regular Board meeting is scheduled for July 26 at 1:30 p.m.

Operations Committee meetings – None were held last month.

Executive Committee meetings – There was an Executive Committee meeting held on June 15, focusing on CombCodes--how they are being used in the basin and potential changes that may benefit the basins while still providing needed flexibility for agricultural operations. The Committee directed staff to begin developing new draft language for CombCode application forms explaining owners' responsibilities. The Committee members agreed that the more challenging

Page 5

aspects of CombCodes, such as whether to allow transfer of pumping between management areas, or multi-owner CombCodes, required additional consideration.

Fiscal Committee meetings – There was a Fiscal Committee meeting held on June 9. The main topic of discussion was development of a work plan and budget for FY 2023-24.

OPV Variance Review Committee meeting – None were held last month.

Ad Hoc OPV Projects Committee meetings – None were held last month.

Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA)

Staff continue to participate in FPBGSA activities supporting SGMA compliance and GSP implementation for the Fillmore and Piru basins, as follows:

Board of Directors meetings – The FPBGSA held a regular board meeting on April 20. Notable topics included:

- Daniel B. Stephens & Associates was selected for ongoing technical support services and online groundwater database hosting.
- The Board approved extending the current extraction fee (\$12 per AF) to the next fiscal year, and adopted the proposed budget for FY 2023-24.

The next FPBGSA Board meeting is scheduled for July 20, at 4:00 p.m.

GSP implementation – None this month.

Mound Basin Groundwater Sustainability Agency (MBGSA)

Staff continue to participate in MBGSA activities supporting SGMA compliance and GSP implementation for the Mound basin, as follows:

Board of Directors meetings – The MBGSA Board held a regular meeting on June 26. Notable topics included:

- Executive Director Bryan Bondy provided a briefing on construction of Monitoring Well A (a cluster of three monitoring wells) in 2022 at the Ventura Water Reclamation Facility. This well cluster will be included in United's routine monitoring program for groundwater quality and elevations.
- The Board approved a resolution establishing a groundwater extraction fee of \$97 per AF.

GSP implementation – Staff provide the MBGSA's Executive Director and consultants various groundwater level and quality data periodically, as requested, as part of implementation of the Mound Basin GSP.

Page 6

Santa Paula Basin Technical Advisory Committee (TAC)

Staff continue to participate in the Santa Paula basin TAC in support of the Santa Paula Basin Judgment and in conformance with SGMA reporting requirements for adjudicated basins, as follows:

• Staff are preparing a draft version of the Santa Paula Basin Annual Report for 2022.