

AGENDA
WATER RESOURCES COMMITTEE
Tuesday, June 1, 2021 at 9 a.m.
UNITED WATER CONSERVATION DISTRICT
Boardroom, 1701 N. Lombard Street, Oxnard CA 93030

Meeting attendees should be aware that the meetings of the Committee are, as required by law, open to the public and the District has very limited powers to regulate who attends Committee meetings. Therefore, attendees must exercise their own judgement with respect to protecting themselves from exposure to COVID-19, as the District cannot ensure that all attendees at public meetings will be free from COVID-19.

In addition to its public Water Resources Committee Meeting, people may choose to participate virtually using the Webex video conferencing application.

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Meeting number: 126 808 7595

Password: H2O1 (4261 from phones)

Join by phone (audio only) call +1-408-418-9388 (toll rates apply)

Access code: 126 808 7595

OPEN SESSION:

Committee Members roll call

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 April 12, 2021.

3. Initial Modeling Results for the Suite of Proposed Water-Supply Projects Recommended by OPV Stakeholder Projects Committee

(40 minutes: Dr. Sercu and Mr. Lindquist).

4. Recent Progress on Feasibility Demonstrations for Coastal Brackish Water Project

(20 minutes: Dr. Bral and Dr. Sun)

5. Update on Reports Documenting Expansion and Application of United's Regional Groundwater Flow Model (10 minutes: Dr. Hanson)



6. **Resolution 2021-05 Adopting the 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the Oxnard Hueneme Pipeline** (5 minutes: Dr. Hanson)
Based on public comments received during the review period and the Public Hearing (held during the May 12 Board Meeting), the committee will now consider recommending approval of Resolution 2021-05, formally adopting the 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the Oxnard Hueneme (OH) Pipeline system, to the full Board.
7. **Water Resources Department Update** (10 minutes: Mr. Detmer)
Staff is available to provide updates to the Committee on recent Water Resources Department activities and projects.
8. **Groundwater Sustainability Agencies Update** (10 minutes: Mr. Detmer)
The Committee will receive a presentation on GSA activities and schedules for the Fillmore and Piru Basins, Mound Basin and Fox Canyon Groundwater Management Agency (Oxnard, Pleasant Valley and Las Posas Valley basins).

FUTURE AGENDA ITEMS

ADJOURNMENT

Committee Members:

Edwin T. McFadden III, Chair
Lynn E. Maulhardt
Daniel C. Naumann

Staff:

Mauricio E. Guardado, Jr., General Manager
Maryam Bral, Chief Engineer
Dan Detmer, Supervising Hydrogeologist
Eric Elliott, Associate Hydrogeologist
Dr. Zachary Hanson, Hydrogeologist
Kathleen Kuepper, Hydrogeologist
John Lindquist, Senior Hydrogeologist
Murray McEachron, Principal Hydrologist
Dr. Bram Sercu, Senior Hydrologist
Dr. Jason Sun, Senior Hydrogeologist/Modeler

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Approved: _____

Mauricio E. Guardado, General Manager

Dr. Maryam Bral, Chief Engineer

Posted (Date): May 28, 2021

(time) 5:00pm

(attest) Eva Ibarra

At: UWCD Headquarters, 1701 N. Lombard Street, Oxnard, CA 93030

Posted (Date): May 28, 2021

(time) 5:15pm

(attest) Eva Ibarra

At: www.unitedwater.org



Board of Directors
Michael W. Mobley, President
Bruce E. Dandy, Vice President
Sheldon G. Berger, Secretary/Treasurer
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Lynn E. Maulhardt
Edwin T. McFadden III
Daniel C. Naumann

General Manager
Mauricio E. Guardado, Jr.

Legal Counsel
David D. Boyer

MINUTES
WATER RESOURCES COMMITTEE
Monday, April 12, 2021 at 11 a.m.
UNITED WATER CONSERVATION DISTRICT
Boardroom, 1701 N. Lombard Street, Oxnard CA 93030

Committee Members Present:

Chair Edwin McFadden
Director Maulhardt
Director Naumann – arrived 11:39 am

Staff Present:

Dr. Maryam Bral, Chief Engineer
Dan Detmer, Supervising Hydrogeologist
Anthony Emmert, Assistant General Manager
Dr. Zachary Hanson, Hydrogeologist
Eva Ibarra, Administrative Assistant
Kathleen Kuepper, Hydrogeologist
John Lindquist, Senior Hydrogeologist
Murray McEachron, Principal Hydrologist
Zachary Plummer, IT Administrator
Robert Richardson, Senior Engineer
Dr. Bram Sercu, Senior Hydrologist
Dr. Jason Sun, Senior Hydrogeologist/Modeler

Public Present: (via WebEx)

Frank Bromenschenkel, Frank B & Associates
Jurgen Gramckow, Southland Sod Farms
Burt Handy
James Maxwell
Tony Morgan, DBS&A
Monica Noeng, Ventura Water

OPEN SESSION: 11:05am

Chair McFadden
Director Maulhardt

Committee Members roll call

Director Maulhardt and Director Naumann were in attendance in the Boardroom, although Director Naumann arrived at the meeting about 40 minutes late. Chair McFadden joined remotely.



1. Public Comment

Chair McFadden asked if there were any public comments for the Water Resources Committee; none were offered.

2. Approval of Minutes - Motion

Motion to approve the February 2, 2021 Water Resources Committee meeting minutes, Director Maulhardt; Second, Director McFadden. Roll call vote: two ayes (McFadden and Maulhardt); none opposed; one absent (Naumann), motion carries 2/0/1.

3. Draft Urban Water Management Plan Dr. Hanson presented (see slides)

Dr. Hanson summarized content and conclusions from the March 2021 Draft Urban Water Management Plan and Water Shortage Contingency Plan for the Oxnard Hueneme public water supply system.

Director Maulhardt asked if the Urban Water Management Plan was a document for United Water staff to follow, or a plan for United Water and Stakeholders to all followed?

Dr. Hanson stated it is prepared by United Water and is open for reviewer comments from the public.

Director Maulhardt and Dr. Hanson continued their discussion on the plan. Director Maulhardt reiterated the importance of building relationships with all the constituents that have an impact on usage and water supply to eliminate any surprises.

Chair McFadden and Mr. Dan Detmer both stated that United is doing its part in working with the GSAs to ensure they are fully informed in order to avoid surprises.

Jurgen Gramckow from the public asked if United had a role in the cutbacks the City of Oxnard is imposing for ramp downs on the agricultural water?

Dr. Hanson replied that he is aware of the Ocean View lateral area that was absorbed into Oxnard's distribution and cannot say much more about that and requested someone come forward if they had information on the subject.

Mr. Detmer and Director Maulhardt confirmed that United is aware of agricultural water use on the Ocean View line and would support efforts to amend water use records, as necessary.

4. Reports on Groundwater Flow Model Expansion and Application Dr. Sun presented (see slides)

Dr. Sun provided a presentation on recent efforts to convert United's 2018 groundwater flow model to a newer version, and shared initial results of that work.



Director Maulhardt agreed with Dr. Sun's recommendation that United invest in the newer ModFlow USG model instead of the older SEAWAT model and requested the expert panelists be listed in future slide presentations, as questions may arise asking who are the experts behind the model review. This will help show the public United is investing the time and money to provide the best possible model for the project.

Director Naumann asked Mr. Detmer about the different layers or projected depth of the wells.

Mr. Detmer said the District intends to have distinct wells for both the Mugu and Oxnard aquifers in the Coastal Brackish Project area. The Oxnard wells will be as close to the coast as possible, and the Mugu wells will be slightly more inland.

5. Summary of Drought Conditions Dr. Bram Sercu presented (see slides)

Director Naumann asked when the District has a release from Pyramid to United, is there a cap at 3,100 acre feet? Dr. Sercu replied that the District is currently limited to 3,150 acre feet. Director Naumann asked if there is still Proposition 1 grant money available. Dr. Bral mentioned that she is aware of grant funding availability now.

Chair McFadden asked if anyone had any further questions for Dr. Sercu, none were offered.

6. Water Resources Department Update Mr. Dan Detmer presented (see slides).
There was no discussion, comments or questions for Mr. Detmer.

7. Groundwater Sustainability Agencies Update Mr. Dan Detmer presented (see slides).
There was no discussion, comments or questions for Mr. Detmer

FUTURE AGENDA ITEMS

None were mentioned.

ADJOURNMENT

Chair McFadden adjourned the meeting at 12:50 pm.

I certify that the above is a true and correct copy of the Minutes of the UWCD Water Resources Committee Meeting of April 12, 2021.

Chair Edwin McFadden



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There are several new requirements since 2015 UWMP

- The California legislature passed numerous additional requirements for the 2020 Urban Water Management Plans Updates, including:
 - **Water Shortage Contingency Plan (WSCP)**
 - Now required to be adopted and submitted as a separate document
 - Summary Section still located in UWMP
 - **Groundwater Supplies Coordination**
 - 2020 UWMPs to be consistent with Groundwater Sustainability Plans (GSP);
 - Fox Canyon GMA's Oxnard Basin GSP

UWMP

2020 Urban Water Management Plan for United Water Conservation District

Public Draft

March 12, 2021

United Water

CONSERVATION DISTRICT

Stantec

Prepared for:
United Water Conservation District

Prepared by:
Stantec Consulting Services Inc.

WSCP

Water Shortage Contingency Plan

Public Draft

March 12, 2021

United Water

CONSERVATION DISTRICT

Stantec

Prepared for:
United Water Conservation District

Prepared by:
Stantec Consulting Services Inc.

4/12/2021

Drafts available at: <https://www.unitedwater.org/key-documents/#water-supply>

3

Other notable additions for 2020 Update include

- **Other Notable Items:**
 - Lay Descriptions
 - Five Consecutive Dry-Year Water Reliability Assessment
 - Drought Risk Assessment
 - Seismic Risk (Water Shortage Contingency Plan)
 - Energy Use Information
 - Water Loss Reporting for Five Years
- UWMP: Beginning 2023, annual updates between 5-year updates related to Water Availability Assessment
- WSCP: Can be updated anytime between 5-year updates

UWMP

2020 Urban Water Management Plan for United Water Conservation District

Public Draft

March 12, 2021

United Water

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Prepared for:
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WSCP

Water Shortage Contingency Plan

Public Draft

March 12, 2021

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4/12/2021

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Coordination with stakeholders is ongoing

- Stakeholders notified during the process:
 - O-H System pipeline customers
 - Cities and County
 - Other agencies within the region
 - Public
- Public Hearing set for May 12, 2021

December 3, 2020	March 12, 2021	March 19, 2021
UWMP Update Notices sent to Customers, Cities, County, Agencies	UWMP and WSCP Public Hearing and Draft availability Notices sent; 1 st Public Hearing Notice posted (VC Star)	2 nd Public Hearing Notice posted (VC Star)

Customers

- 1 City of Oxnard
- 2 Cypress MWC
- 3 Dempsey Road MWC
- 4 E & H Land
- 5 Port Hueneme Water Agency
- 6 Rio Real and Rio Del Valle Schools
- 7 Saviers Road MWC
- 8 Vineyard Avenue Estates MWC

Legend

- LAS Well
- UAS Well
- Recharge Basin
- Operational Area

Stantec United Water Conservation District

Oxnard Basin

4/12/2021

5

Projecting water use in five-year increments through 2045

➤O-H System Pipeline UWMP Supply and Demand projections are based on:

- Fox Canyon Groundwater Management Agency (FCGMA) Groundwater Sustainability Plan (GSP) for the Oxnard Subbasin
- FCGMA's *Ordinance to Establish an Allocation System for the Oxnard and Pleasant Valley Groundwater* (October 2019)

Supply

=

Demand

4/12/2021

6

Projections are based on known FCGMA GSP and allocations

Item	Value	Source
GSP Future Sustainable Yield	39,000 AFY	FCGMA Oxnard GSP (2019)
Total Oxnard Basin Initial Allocation	79,957 AFY	FCGMA (2020; United communication)
Estimated date cutbacks estimated to begin	October 2021	United's current working estimation
Estimated date sustainability estimated to be met (cutbacks cease)	October 2040	FCGMA Oxnard GSP (2019)
Estimated annual cutback rate	~2.6%/year from Initial	United's current working estimation
OH System Initial Allocation	14,337 AFY	FCGMA Oxnard Allocation Ordinance, using 2005-2014 average use (2019)
Estimated annual cutback volume	372 AFY	United's current working estimation

Groundwater Elevations (ft MSL)

Date: 2020 to 2040

Source: FCGMA GSP (2019; Figure 3-12)

OH System Projections (AFY, Supply = Demand)

4/12/2021

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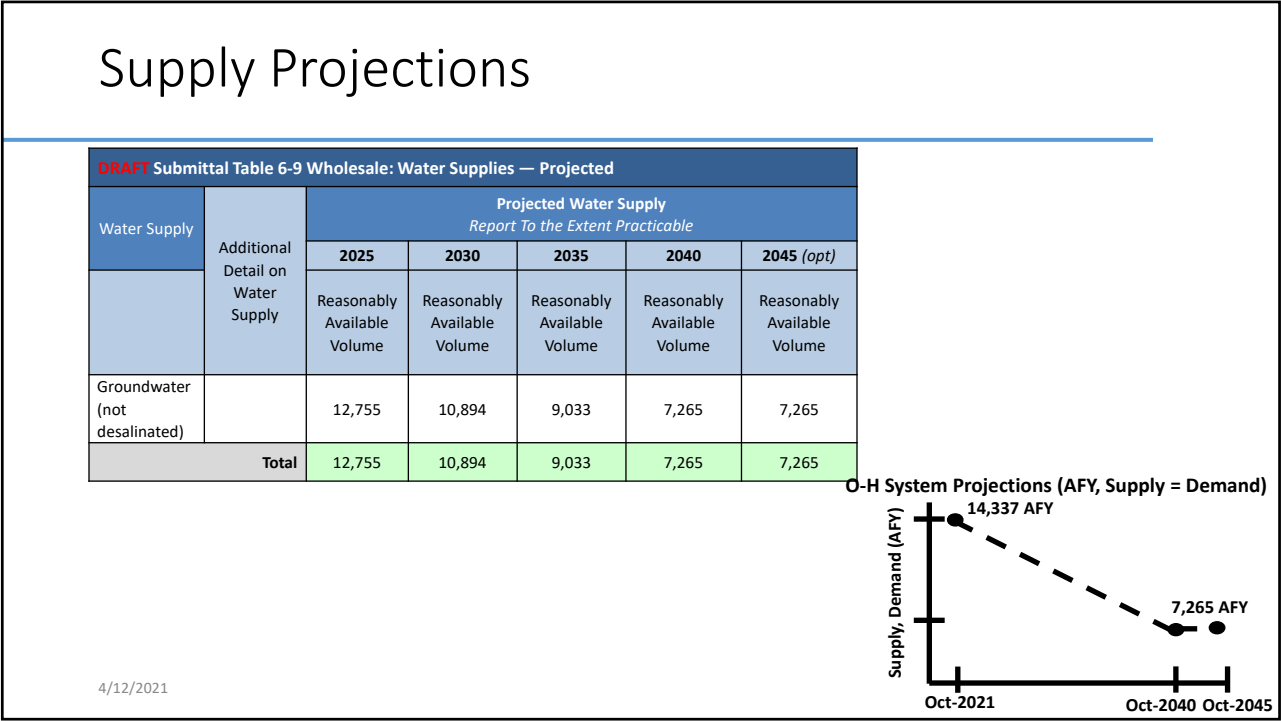
Demand Projections

DRAFT Submittal Table 4-2 Wholesale: Use for Potable and Raw Water - Projected						
Use Type (Add additional rows as needed)	Additional Description (as needed)	Projected Water Use Report To the Extent that Records are Available				
		2025	2030	2035	2040	2045 (opt)
Sales to other agencies		12,397	10,588	8,778	7,060	7,060
Retail demand for use by suppliers that are primarily wholesalers with a small volume of retail sales	Rio Real and Rio Del Valle School, E&H Land Company	4	4	4	4	4
Losses		354	302	251	201	201
TOTAL		12,755	10,894	9,033	7,265	7,265

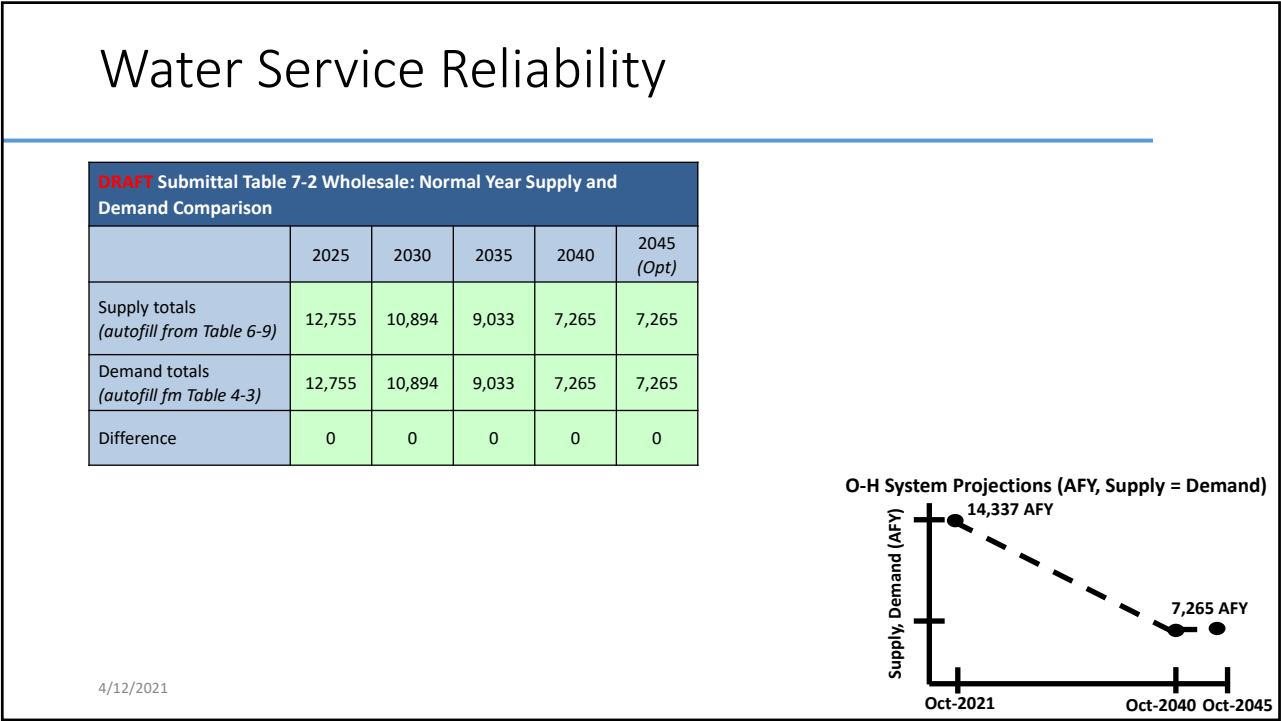
OH System Projections (AFY, Supply = Demand)

4/12/2021

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Potential future water projects and ongoing planning are described in the UWMP

- Oxnard Plain and Pleasant Valley (OPV) Core Stakeholders Group, Projects Committee
 - Potential projects that were investigated during 2016-2020
 - Projects currently being implemented, discussed, investigated
- Iron and Manganese Treatment Plant (water reliability)
- Pumping Trough Pipeline recycled water from Oxnard
- Coastal Brackish Groundwater Extraction and Treatment Project
- Freeman Expansion Project
- Expanded State Water (SWP) Project purchases
- Recharge from SWP Interconnect Project
- Alternative Supply Assurance Pipeline Project (2016-2020, not currently planned)
- Anacapa Project Report (2016-2020, not currently planned)
- Other Regional Projects (Conejo Creek Storage Expansion, Water Market)

Supply = Demand

MORE Projects

Less

O-H System Projections (AFY, Supply = Demand)

Date	Demand (AFY)	Supply (AFY)
Oct-2021	14,337	14,337
Oct-2040	-	-
Oct-2045	7,265	??,???

4/12/2021

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2020 Urban Water Management Plan Schedule

March 12, 2021	April 12, 2021	May 6, 2021	May 12, 2021	June 9, 2021	July 1, 2021
Available for Public Comment On District's Website, Notices Sent	Presentation to WR Committee	Presentation to E&O Committee	Public Hearing for	Board to Adopt	Submit to DWR
Draft UWMP & Draft WSCP	Highlights of Draft UWMP & Draft WSCP	Updated UWMP & WSCP in response to Public comments	UWMP & WSCP to receive additional public comments	Final UWMP & WSCP	Final UWMP & WSCP


4/12/2021

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Thank you

Questions/Comments?

4/12/2021



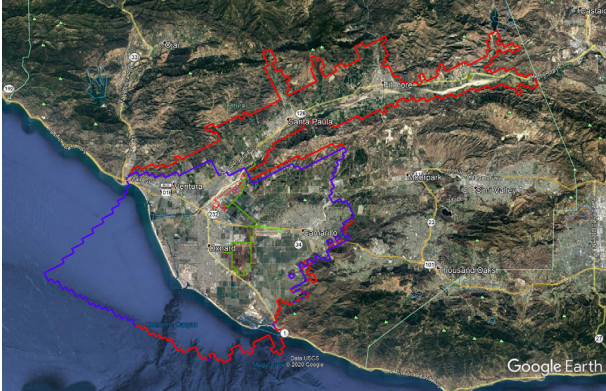
Reports on Groundwater Flow Model Expansion and Applications

Jason Sun, PhD, PE
Monday, April 12, 2021

1

Model Development Recap

- Model expansion (1985-2015) completed in August 2020
- Model validation (2016-2019) completed in September 2020



- The 2018 Model in BLUE.
- The 2020 Model in RED.

2

From October 2020 to February 2021

- Model cleanup (1985-2019) in October 2020
- Prepared input data for future GSP runs with the 1943-2019 climate data (October 2020 – Dec 2020)
- Ran GSP simulations for Fillmore Piru GSA and Mound GSA (Nov 2020 – Feb 2021)
- Gave presentations on the UWCD Model in GSA Board meetings
- Prepared model documentation (full time after February 2021)

3

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UWCD Model Reports

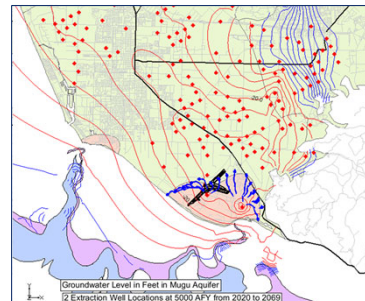
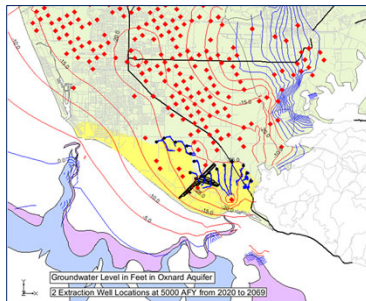
- **Report on model expansion**
 - GW Model completed in 2020
 - Draft report is completed
 - Sensitivity analysis
 - Review by Expert Panel
 - Planned to release in April
- **Model validation report**
 - Validation completed in 2020
 - Draft in progress
- **GSP Simulation report**
 - GSP runs completed in Feb 2021
 - Draft report in review

Credits: Dr. Zach Hanson, Dr. Bram Sercu, Eric Elliot, Dan Detmer, Murray McEachron,...

4

Coastal Brackish Water Treatment Plant Basin Impacts and Benefits Analysis

- Prop 1 Groundwater Grant Program (GWGP)
- Extraction barriers in Point Mugu
- Collaboration with the Navy



Simulation result with the UWCD Model. **Salinity is NOT simulated**

5

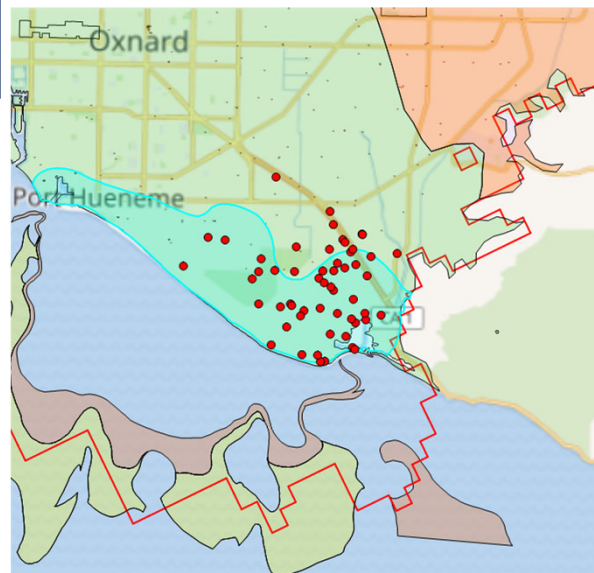
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Data Collection at Point Mugu

- Eric Elliot and Dan Detmer have produced a refined conceptual model in Point Mugu with new data shown in **red dots (32 well logs + 23 test boring data)**
- The Navy at Point Mugu provides valuable assistance

Seawater Intrusion Model

- Incorporate the refined conceptual model into the numerical model
- Add the **salinity** in the simulation
- Build the model in 4 weeks
- Show progress for a May meeting

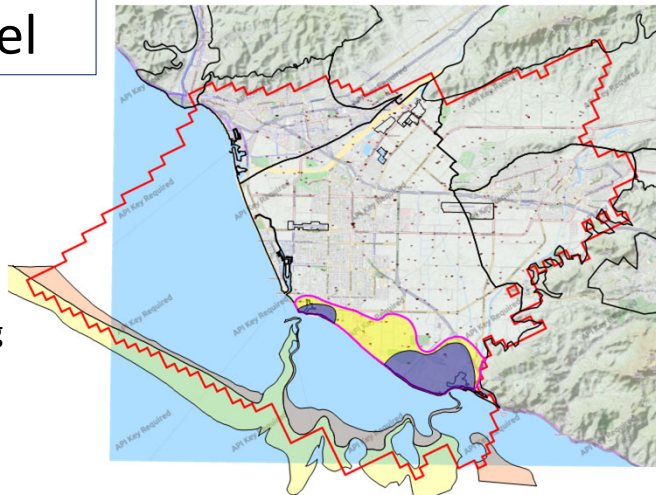


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Salinity Transport Model

- This salinity transport model can simulate the brackish water study and beyond including regional seawater intrusion
- Transport model capable of simulating salinity, chloride, TDS,...other chemicals



This transport model will be the 2nd critical tool for Ventura County in addition to the GW model completed in 2020

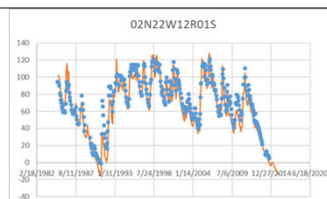
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Salinity Transport Model Selection

SEAWAT

- Last update in 2012
- May not handle efficiently the seasonal variation in water level
- Little to no technical support



MODFLOW-USG-TRANSPORT

- New software
- Handle well the seasonal variation in water level
- Good technical support
- Model review expert, Dr. Sorab Panday, is the developer
- Steep learning curve

8

8

Basin Optimization Study for OPV

- Led by John Lindquist, Dan Detmer
- Modelers:
 - Dr. Zach Hanson (Groundwater)
 - Dr. Bram Sercu (Surface Water)

9

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Thank you

Questions/Comments/Discussion?

10

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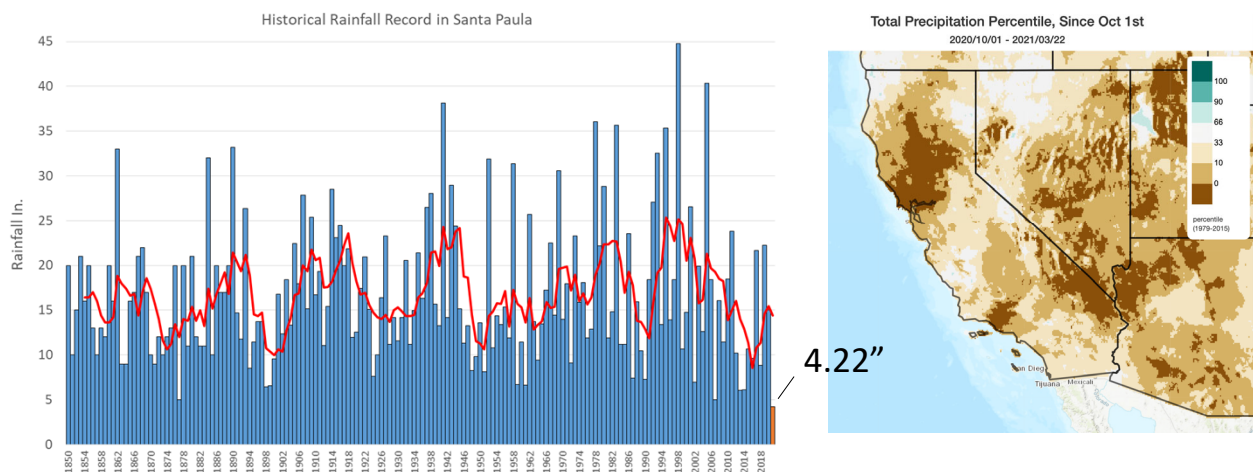
Summary of Drought Conditions

Water Resources Committee Meeting
April 12, 2021

Bram Sercu, PhD

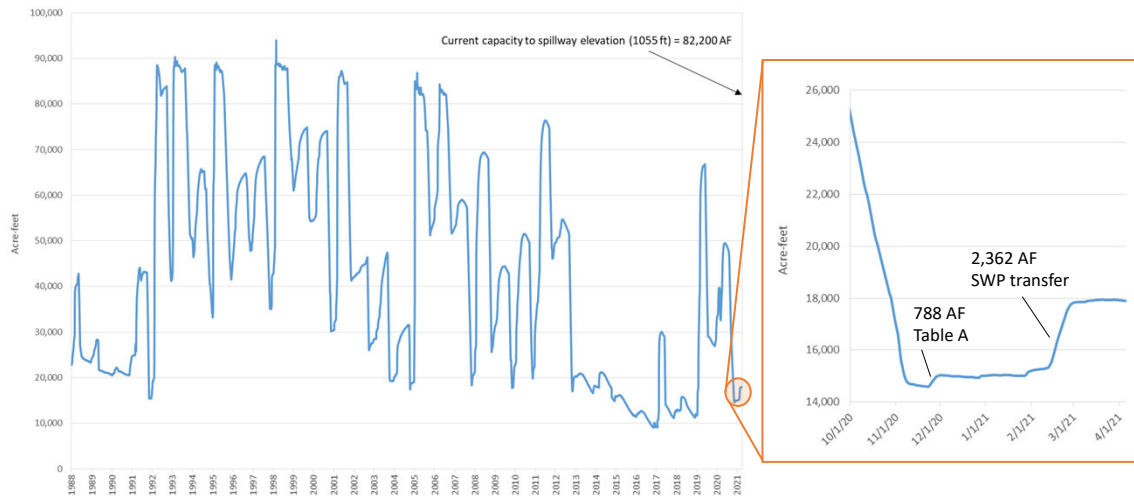
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Historic Low Rainfall for WY 2021



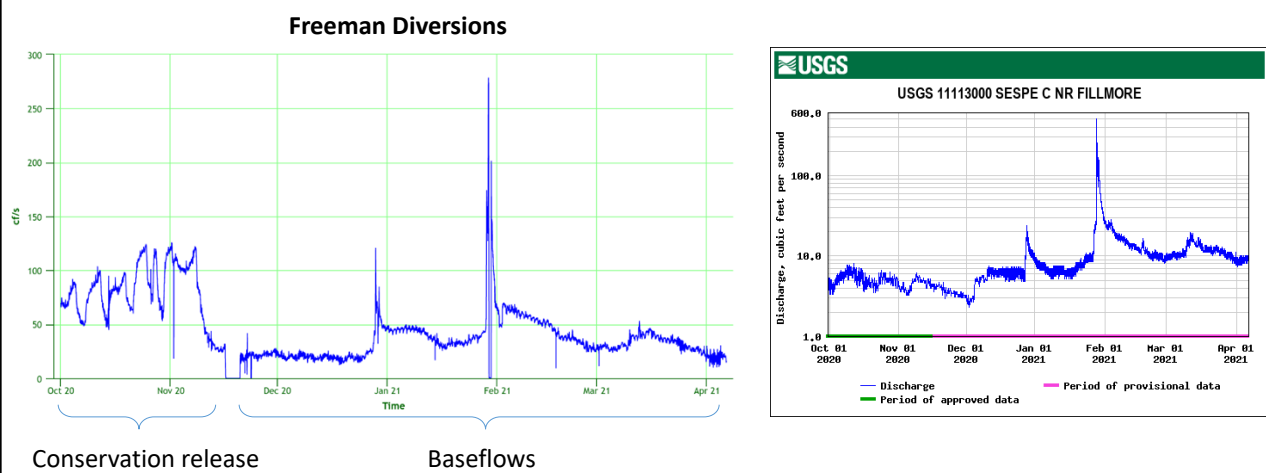
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Low water levels in Lake Piru after dry winter



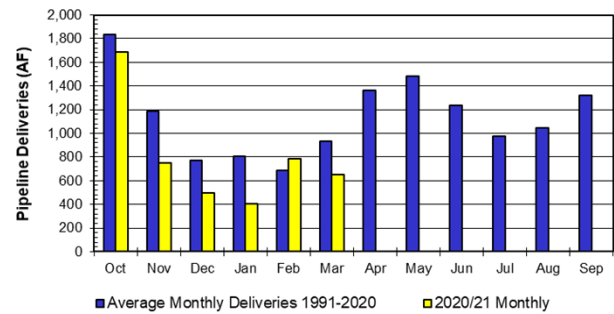
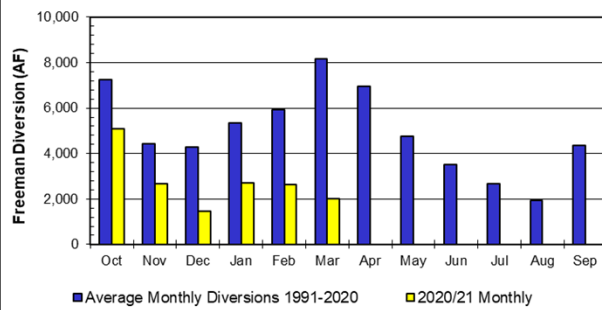
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Continued diversions at Freeman... for now



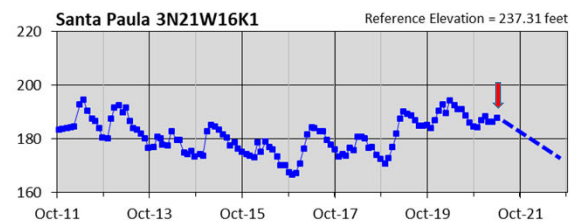
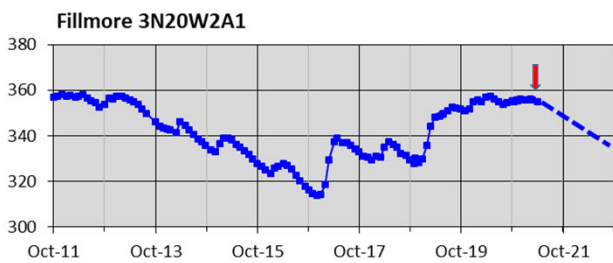
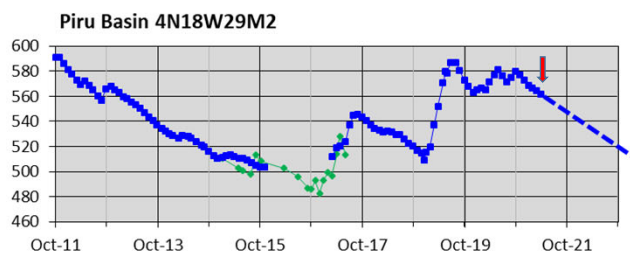
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Diversions and surface water deliveries



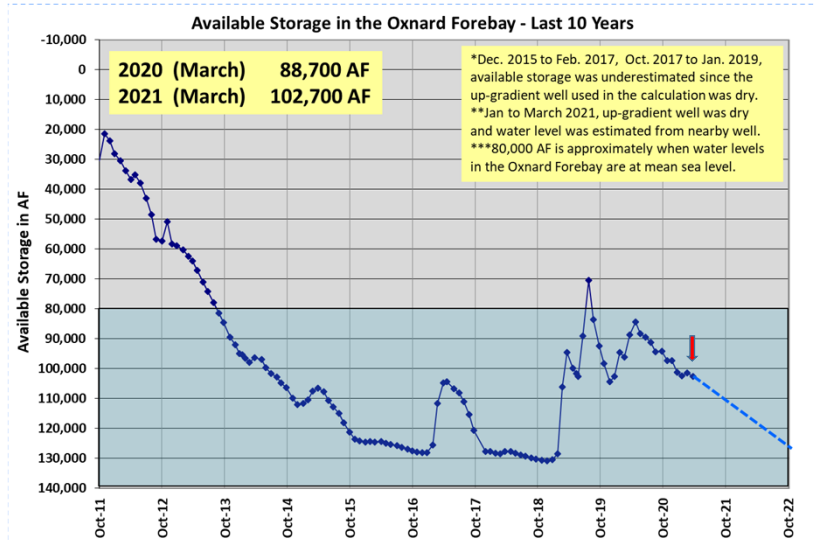
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Groundwater basins - Upper



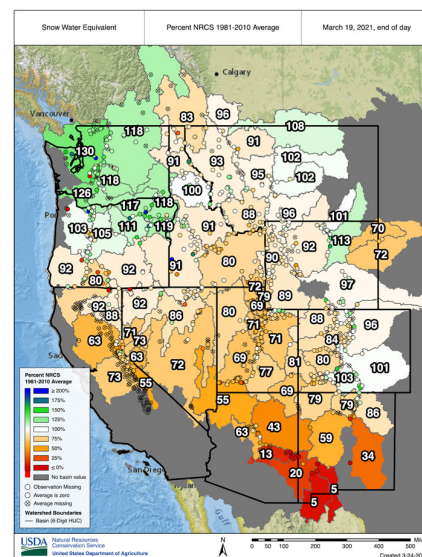
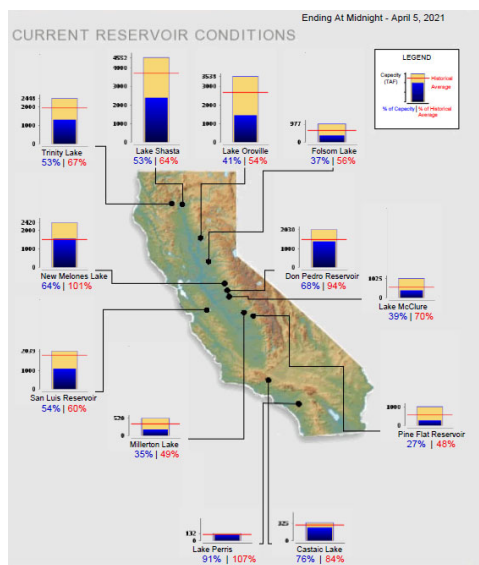
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Groundwater basins - Forebay



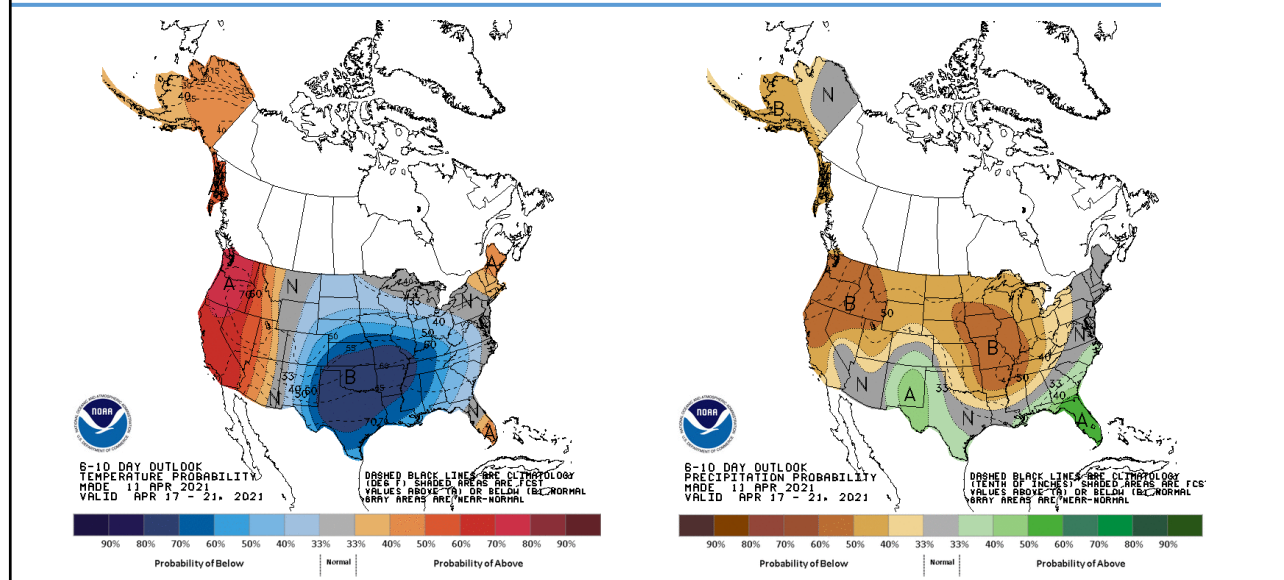
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California reservoirs and snowpack



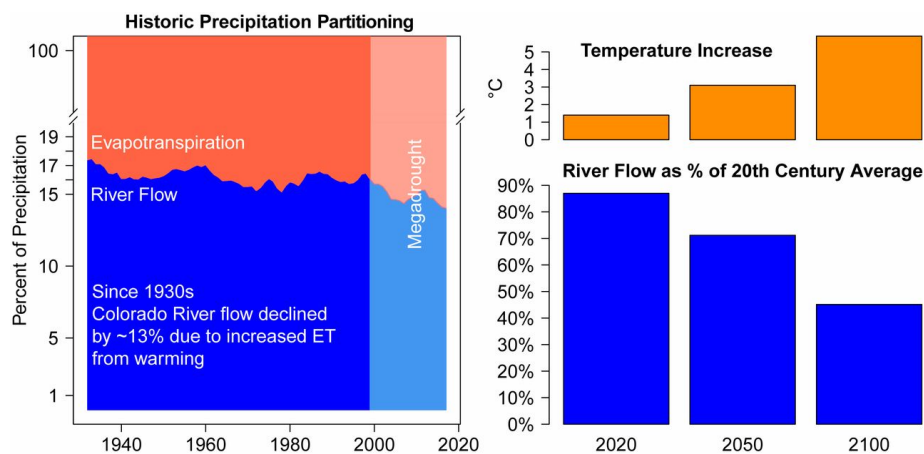
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Warm and dry conditions will persist



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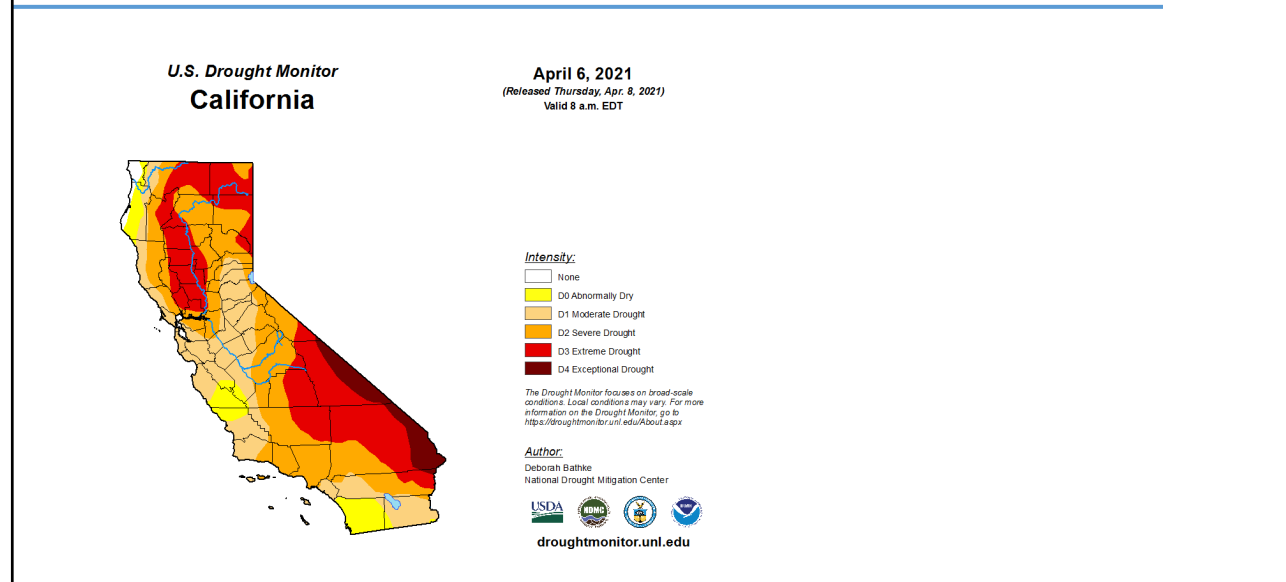
Don't underestimate impact of temperature increases (even without reduction in rainfall)!



Source: Overpeck and Udall, 2020, Climate change and the aridification of North America, PNAS 117 (22), 11856-11858

10

Are we in a drought?



11

Water Rights Drought Effort Review (WARDER)

“How to administer California’s complex water rights system during times of water shortage?”

Issues:

- Riparian/pre-1914 claims vs. post-1914 appropriative water rights
- Water availability analyses/curtailment notices

Process:

- Interviews with water users/managers/NGOs
- Gather inputs on Water Rights Division’s actions during 2012-2016 drought
- Solicit recommendations for priorities during future drought

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Water Rights Drought Effort Review (WARDER)

Communication

- Earlier and more frequent
- Increased regulatory certainty before drought
- Establish clear drought protocols far in advance
- Use visual tools, graphics, and narratives to explain complex analyses
- Prioritize relationship building

California Water Boards

April 16 State Water Board webinar on supply/demand visualization tools & water demand data assessment

SB 88 Compliance (2019)

Diversion Size Bin Acre Feet (AF)	Submittals Expected	Submittals Received	Percentage
0 - 10 AF	0	162	N/A
10 - 100 AF	5,424	599	11
100 - 1000 AF	4,679	426	9.1
1,000 - 10,000 AF	2,359	403	17
10,000+ AF	1,374	376	27
Not Determined	0	41	0
TOTAL	13,836	1,804	13

California Water Boards

Data

- Data is an issue for everyone
 - Data quality
 - Timeliness
 - How data is communicated and made available
 - How data informs methods, regulatory actions
 - "Curtailment triggers"
- Work with stakeholders so that methods are transparent

California Water Boards

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Water Rights Drought Effort Review (WARDER)

Legal and Policy

- Resolve uncertainties regarding riparian and pre-1914 claims
- Increase regulatory collaboration on water transfers
- Better integrate surface and groundwater management
- Take meaningful action during drought conditions

California Water Boards

Collaboration

- Bridge data, resource, and experience gaps through partnerships
- Begin planning an interagency drought protocol with sister agencies

California Water Boards

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Information Item 6:

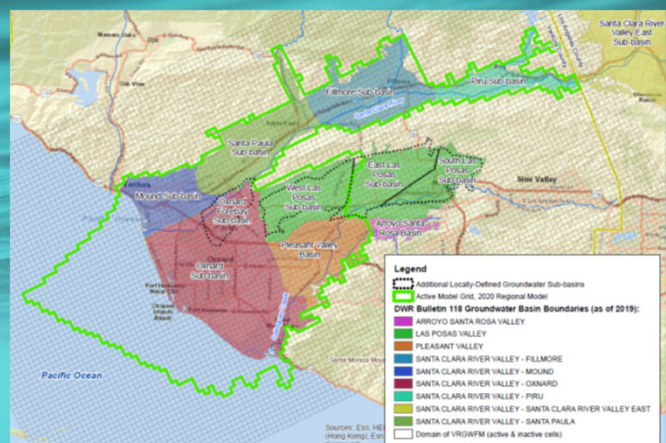
Water Resources Department Updates

1

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Groundwater Model Update

- Model documentation in progress:
 - Model expansion and calibration
 - 2016-2019 update and validation
 - Future conditions, climate factors for GSPs
- Model application:
 - GSP modeling for Mound basin is complete
 - GSP modeling for Fillmore and Piru basin is complete
 - Oxnard/Pleasant Valley basin modeling of water-supply projects for FCGMA is in progress
- Brackish-water model refinements are under way

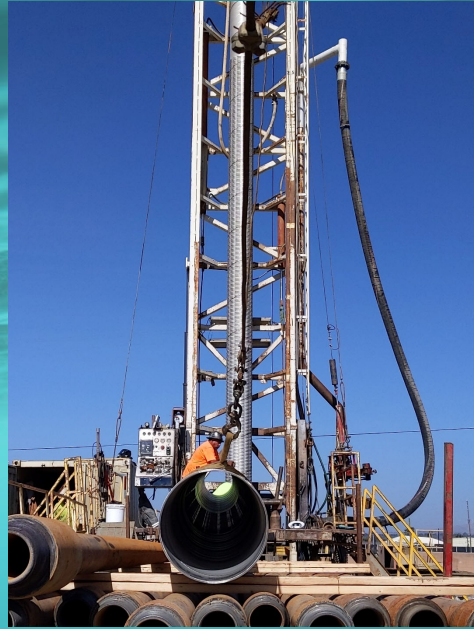


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Other Activities (non-SGMA related)

- Assist with oversight of drilling and design of El Rio well #19
- Support fish passage and flow design for Freeman Diversion
- Assist with purchase and release of supplemental SWP water
- Complete draft Urban Water Management Plan
- Complete and submit 2020 water rights reporting
- Submit report on 2020 conditions in Oxnard basin related to recycled-water pumping allocations
- Continue optimizing potential water-supply projects
- Conduct routine WQ and WL monitoring
- Lead virtual field trip to Freeman Diversion



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QUESTIONS?

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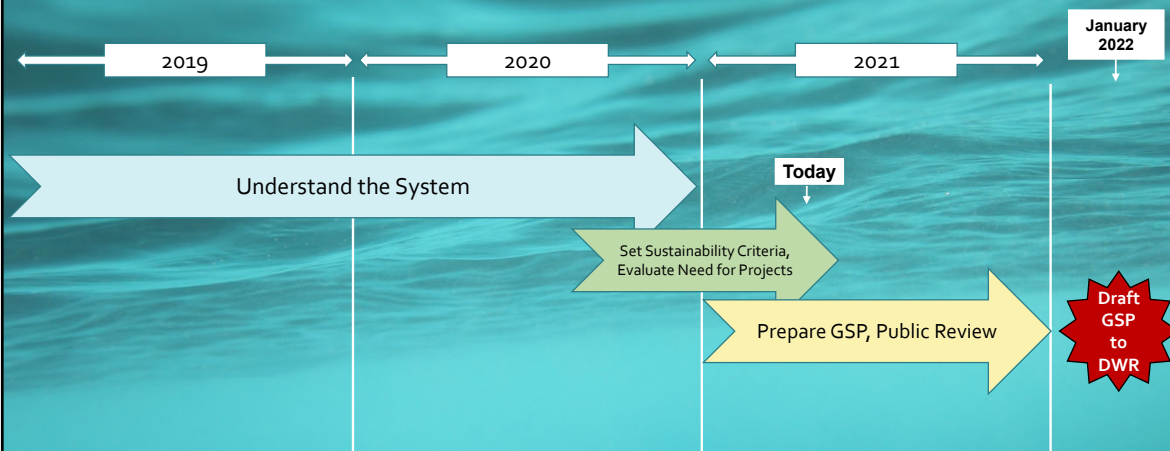
Information Item 7:

**Update on Groundwater Sustainability Agencies (GSAs)
and Sustainable Groundwater Management Act (SGMA)**

5

5

Fillmore and Piru Basins GSP Schedule



6

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Notable Fillmore-Piru Basins GSA Activities

- February Board meeting:
 - Consultant presented a draft matrix for Sustainable Management Criteria (SMCs)
- March Board meeting/Stakeholder workshop:
 - Draft criteria for SMCs presented by consultant
 - Draft report detailing riparian vegetation communities and potential Groundwater Dependent Ecosystems (GDEs) in Piru and Fillmore basins presented by consultant
- April 1 Workshop/Special Board meeting
 - Additional SMC and GDE discussion, adopted some SMCs
- Upcoming events:
 - April 15—Regular Board meeting (5:00 pm)

7

7

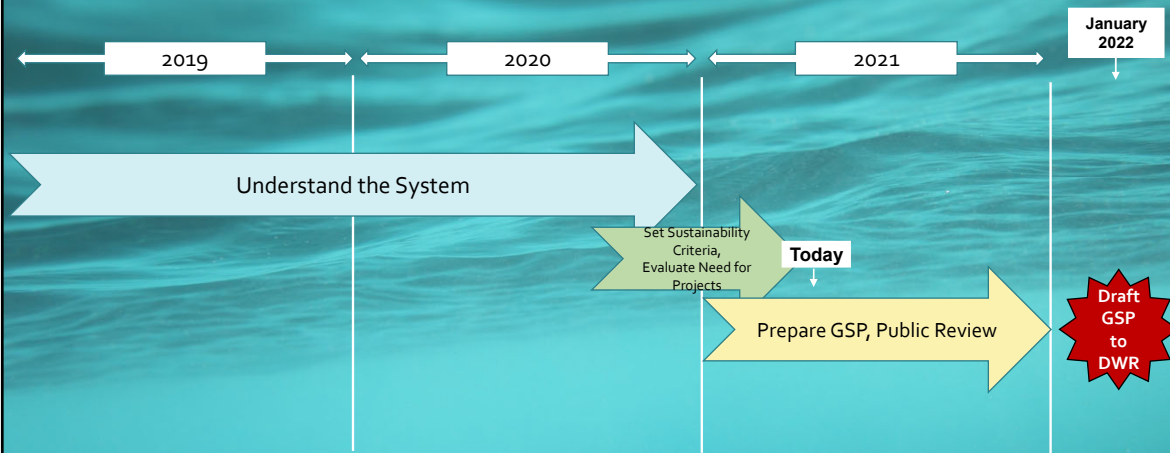
Notable Santa Paula Basin TAC Activities

- Staff submitted 2019 Santa Paula Basin Annual Report to DWR
 - Required under SGMA for adjudicated basins by April 1
- Staff are preparing the draft 2021 Santa Paula Basin Annual Report
 - Will be reviewed by TAC before finalization and submittal
- Upcoming events:
 - Summer 2021—TAC meeting

8

8

Mound Basin GSP Schedule



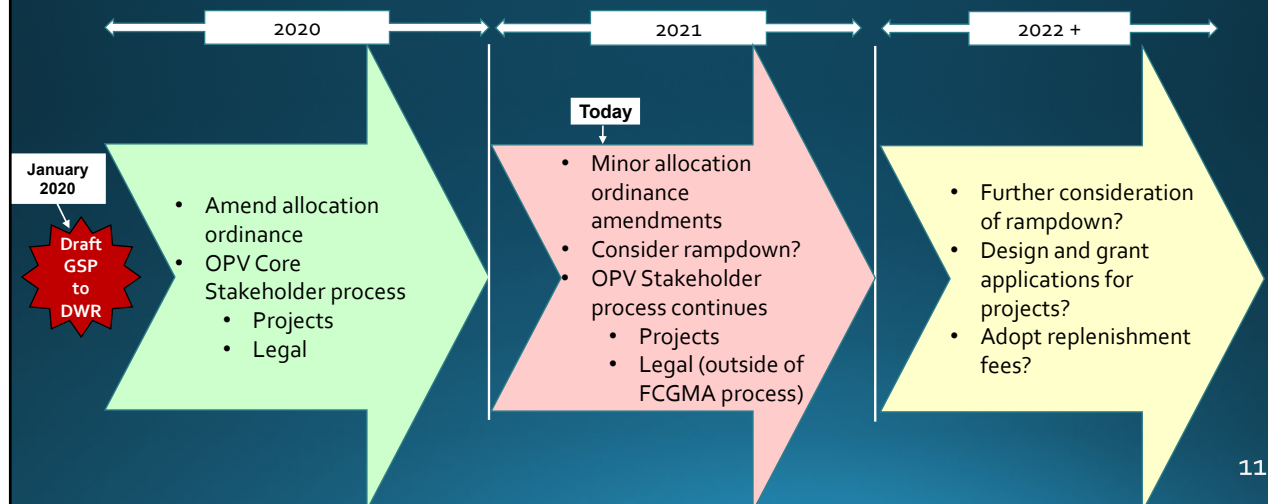
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Notable Mound Basin GSA Activities

- February Board meeting:
 - Update on modeling of future groundwater conditions and GSP progress
- March 4 Stakeholder workshop:
 - Proposed sustainable management criteria presented by MBGSA's Executive Director
 - Basin water budgets (historical, current, and future) presented by United staff
- March Board meeting:
 - Board directed staff to prepare GSP section on Sustainable Management Criteria as presented in the workshop and in the Executive Director's staff report
- Upcoming events:
 - April 15—Regular Board meeting (1:00 pm)
 - United staff developing revised draft text, tables, and figures for selected GSP sections

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Oxnard and PV Basins GSP Implementation Process and Schedule



11

Notable FCGMA Activities—February

- Board directed staff to continue working with Executive Committee on policy issues related to replenishment fees
- OPV Core Stakeholders began working with new facilitators, discussed
 - Starting allocations
 - Rampdowns
 - Minimum allocations

12

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Notable FCGMA Activities—March

- Board directed Operations Committee to explore importing water from Calleguas MWD for “in-lieu replenishment” of Las Posas Valley basin
- Board approved ordinances
 - Eliminating some water-use-reporting requirements for certain pumpers exporting groundwater from Oxnard basin
 - Exempting domestic well owners/operators from requirement to install advanced metering (AMI) equipment

13

13

OPV Core Stakeholder Activities

- OPV Core Stakeholders continued discussions regarding starting allocations, rampdown, minimum allocations, and legal “fenceposts”
 - Some stakeholders suggested extending the facilitation process, since parties seem to be working toward achieving a compromise solution. A draft report by the facilitators is due to Executive Committee on April 15, and to full Board on April 28.
 - Initial meeting of the OPV Variance Review Committee took place on April 6
 - United representatives continue to stress the need for additional water supply projects and seek to avoid difficult decisions related to “final” allocations.
 - City of Oxnard representatives have also expressed an interest in new projects, working with United and others to develop projects, and a coordinated regional effort seeking federal funding for new projects.

14

14

QUESTIONS?

*An exposure of the
Las Posas Sands,
which comprise part
of the Fox Canyon
Aquifer, in a road cut
along Grimes Canyon
Road north of
Moorpark, CA.*

Photo by United staff.



15



To: UWCD Water Resources Committee

Through: Mauricio E. Guardado, Jr., General Manager

From: Maryam Bral, Chief Engineer
Zachary Hanson, Hydrogeologist

Date: May 25, 2021 (June 1, 2021 Board Meeting)

Agenda Item: 6. (Board Motion Item 4.5) Resolution 2021-05 Adopting the 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the Oxnard Hueneme Pipeline Motion

Staff Recommendation:

The Committee will consider recommending approval of Resolution 2021-05, formally adopting the 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the Oxnard Hueneme (OH) Pipeline system, to the full Board.

Discussion:

The Urban Water Management Planning Act requires all urban water suppliers that provide water, directly or indirectly, to 3,000 or more customers (or more than 3,000 acre-feet annually) to develop, adopt, and implement an Urban Water Management Plan (UWMP) every five years. The District as a wholesale supplier of water to the Oxnard Hueneme Pipeline (OH) System falls under this requirement. The General Manager awarded a contract to Stantec to prepare the District's UWMP update on November 9, 2020. The UWMP update must be adopted by the Board of Directors and submitted to the California Department of Water Resources (DWR) by July 1, 2021. The UWMP encompasses the OH service area and includes the following customers:

- City of Oxnard (Oxnard)
- Port Hueneme Water Agency (PHWA), consisting of City of Port Hueneme, Naval Base Ventura County and Channel Islands Beach Community Services District
- Dempsey Road Mutual Water Company
- Cypress Mutual Water Company
- Saviers Road Mutual Water Company
- Vineyard Avenue Estates Mutual Water Company
- Rio Del Valle and Rio Real Schools
- E & H Land Company

Since 2015, several amendments have been made to the Urban Water Management Planning Act resulting in significant changes in the Act including Drought Risk Assessment and the Five Consecutive Dry-Year Water Reliability Assessment, Water Shortage Contingency Plan, which

6. Resolution 2021-05 Adopting the 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the Oxnard Hueneme Pipeline Motion

draws on lessons learned from the 2012-2016 drought, California's driest period on record, Seismic Risk Analysis to the water system facilities and associated mitigation plans should seismic events occur, Consistency with Groundwater Sustainability Plans and Lay Description which includes a brief conclusion regarding water service reliability, challenges ahead and reliability risks management strategies.

The Draft UWMP Update and Draft WSCP were posted on the District's website on March 12, 2021. Notice of Public Hearing and availability of the Draft UWMP Update and Draft WSCP was distributed to the OH customers and stakeholders on March 12, 2021, and again on April 28, 2021. Notice of Public Hearing and availability of the Draft UWMP Update and Draft WSCP was published in the Ventura County Star on March 12, 2021, March 19, 2021, and again on April 29, 2021. The public, OH customers, and stakeholders were invited to provide comments and ask questions on the plan or its development, either in writing by 5 P.M. on May 11, 2021, or orally to staff through a Public Hearing which was held during the UWCD Board of Directors meeting on May 12, 2021. In total, two entities provided public comments related to the Draft documents: (1) a comment letter was submitted to Staff from Ventura County staff that contained several comments, and (2) one minor comment from the public was made to Staff related to the presentation of draft figures in the Draft UWMP Update. No comments required any substantial changes to the Plans. Staff has worked with Stantec to address the comments, and all comments were addressed where necessary with additional background and informational text as well as modifications to the final map figures. For reference, the Final UWMP Update document now includes an appendix that contains the comments received.

Fiscal Impact:

Adoption of the Urban Water Management Plan Update is mandated by the California Water Code. Failure to adopt the update could render the District ineligible for future grants and financial assistance. In accordance with Section 10656 of the California Water Code, an urban water supplier that does not prepare, adopt, and submit its urban water management plan to the California DWR is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

Attachment: A – Resolution 2021-05

RESOLUTION 2021-05

**A RESOLUTION OF THE BOARD OF DIRECTORS OF
UNITED WATER CONSERVATION DISTRICT
ADOPTING THE DISTRICT'S 2020 URBAN WATER MANAGEMENT PLAN
AND WATER SHORTAGE CONTINGENCY PLAN FOR THE
OXNARD HUENEME (OH) PIPELINE SYSTEM**

WHEREAS, Section 10610 of the Water Code of the State of California as amended by legislation requires the urban wholesale water suppliers to prepare an Urban Water Management Plan and update it every five years, and prepare a Water Shortage Contingency Plan: and

WHEREAS, United Water Conservation District as a wholesale supplier of water to the Oxnard Hueneme Pipeline (OH) System falls under this requirement; and

WHEREAS, the current revision of its Urban Water Management Plan and Water Shortage Contingency Plan is due by July 1, 2021 and;

WHEREAS, the District's revised 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the OH Pipeline system has been posted on the District's website for at least 60 days, comments have been invited from a diverse group of United's customers and constituents, and a public hearing was held on May 12, 2021 at which public comments were invited.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of United Water Conservation District adopts its 2020 Urban Water Management Plan and the Water Shortage Contingency Plan for the OH Pipeline system, subject to any non-substantive changes required to incorporate any comments received at or prior to the public hearing.

PASSED, APPROVED AND ADOPTED this 9th day of June 2021.

ATTEST: _____
Michael W. Mobley, President

ATTEST: _____
Sheldon G. Berger, Secretary/Treasurer

Staff Report

To: Water Resources Committee

Through: Mauricio E. Guardado, Jr., General Manager

From: Maryam Bral, Chief Engineer
Dan Detmer, Supervising Hydrogeologist

Date: May 24, 2021 (June 01, 2021, meeting)

Agenda Item: 7. **Update on Groundwater Sustainability Agencies (GSAs) and Sustainable Groundwater Management Act (SGMA) Information Item**

Staff Recommendation:

Receive a summary report of Water Resources Department activities related to the Sustainable Groundwater Management Act (SGMA) and Groundwater Sustainability Agencies (GSAs) for the groundwater basins within District boundaries.

Discussion:

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 (Western Management area) basins, as follows:

Board of Directors meetings – The FCGMA Board held a regular meeting online on April 28. Notable topics included:

- Board received a presentation from Dudek staff regarding GSP Annual Reports for water year 2019/2020.
- Board received a presentation from FCGMA staff on stakeholder engagement in the Oxnard and Pleasant Valley (OPV) basins. This item included a report and presentation from facilitator Jim Beck on the facilitation effort. The presentation and report summarized OPV stakeholder engagement activities, and potential approaches and methodologies for allocation reductions, minimum allocations, and ending allocations.

The FCGMA held a special Board meeting on May 14. It was a closed session meeting that focused on legal discussions about existing litigation.

Agenda Item: 7. Update on Groundwater Sustainability Agencies (GSAs) and Sustainable Groundwater Management Act (SGMA)
Information Item

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The next regular FCGMA Board meeting is scheduled for May 26 at 1:30 pm. The agenda includes presentations on potential water supply and infrastructure projects in the Las Posas Valley basin and for the Oxnard and Pleasant Valley basins.

OPV Variance Review Committee meeting – The FCGMA OPV Variance Review Committee held a meeting online on May 6. This meeting focused on continuation of orientation of Committee members regarding their purpose and charge (including the Brown Act and Political Reform Act) and selection of future meeting dates.

Fiscal Committee meeting – The FCGMA Fiscal Committee held a special meeting online on May 18 that focused on developing a budget for fiscal year 2021-22.

Operations Committee meeting – The FCGMA Operations Committee held a meeting online on May 19. Notable topics included:

- Review of water-supply and infrastructure projects included in the Las Posas Valley (LPV) GSP, including a presentation from Calleguas MWD staff on potential opportunities to import additional water into the basin.
- Summary of projects included in the Oxnard and Pleasant Valley basins GSPs, including a presentation by United staff on preliminary results of water-supply-distribution and groundwater modeling of the suite of projects recommended by the former OPV Stakeholder ad-hoc Projects Committee.

A meeting of the Legal *Ad Hoc* Committee of the OPV Core Stakeholder Group scheduled for June 11. Discussions by this committee are subject to a non-disclosure agreement.

Fillmore and Piru Basins Groundwater Sustainability Agency (FPBGSA)

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

Board of Directors meetings – The FPBGSA held a special Board meeting on May 6, at 5:00 pm. Notable topics included:

- Board consideration of the proposed Sustainable Groundwater Management Criteria matrix, with a focus on finalizing the criteria related to land subsidence and surface water/groundwater interaction near the basin boundaries. Some board members expressed a want for more information before adopting criteria.
- United staff summarized recent work towards securing access agreements with landowners for new monitoring well locations and the modification of existing shallow wells to allow the collection of water level data.

A regular FPBGSA Board meeting was held on May 20, at 5:00 pm. Notable topics included:

Agenda Item: 7. Update on Groundwater Sustainability Agencies (GSAs) and Sustainable Groundwater Management Act (SGMA)
Information Item

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- Continued stakeholder input and board discussion on the draft Sustainable Groundwater Management Criteria matrix. Much of the discussion centered on potential future impacts to surface water flows and Groundwater Dependent Ecosystems at the basin boundaries, and whether these potential impacts would be “significant and unreasonable.”
- The Board approved filing a notice of exemption from the California Environmental Quality Act for work related to the construction of new monitoring wells.

The next regular FPBGMA Board meeting is scheduled for June 17 at 5:00 pm.

GSP preparation – Consultant DBS&A has reported progress on various work products in support of GSP development. A web-based data management and mapping system that includes well construction information and available water level and water quality records for wells within the Piru and Fillmore basins remains available on the agency website.

Modeling – Staff has completed the work required to apply climate change factors to historical streamflow and rainfall records, as required to simulated future hydrology in the study area. The initial future runs applying 2030 and 2070 climate change factors, forecasted groundwater pumping and base flows from Los Angeles County have been completed and provided to the technical consultant for the GSA. Additional scenarios with reduced pumping near riparian areas have been provided to help assess impacts associated with pumping compared to drought.

New Monitoring Wells – Staff is helping coordinate land access agreements area landowners in opportune locations for new monitoring wells funded by a DWR Technical Support Services grant.

Mound Basin Groundwater Sustainability Agency (MBGSA)

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

Board of Directors meetings

The MBGSA Board held a regular meeting on May 20. Notable topics of discussion included:

- The Board received a status update from Executive Director Bryan Bondy on GSP development and schedule. Staff are working towards submission of the draft GSP to the Board for possible approval for public review and comment at the June 2021 MBGSA meeting.
- MBGSA continues to pursue installation of monitoring wells through DWR’s technical Support Services (TSS) grants program for GSP development and implementation. Executive Director Bryan Bondy provided the Board a draft access agreement for the planned monitoring well at the Ventura Water Reclamation Facility. The Board reviewed the draft agreement and authorized the execution of a final access agreement.

The next regular MBGSA Board meeting is scheduled for June 17, at 1:00 pm.

Agenda Item: 7. Update on Groundwater Sustainability Agencies (GSAs) and Sustainable Groundwater Management Act (SGMA)
Information Item

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GSP preparation – United staff continue to compile and review data to support preparation of the Mound basin GSP, in general accordance with United’s agreement with the MBGSA. United has delivered draft text, tables, and figures in support of the water-budget and monitoring sections of the GSP. United staff are currently updating text, tables, and figures for Sections 2 and 5 (Administrative Information and Monitoring, respectively), and will continue to provide review and other support as requested to assist the MBGSA with preparation of a complete public-review draft GSP.

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 2020.
- TAC meetings have been postponed since last year; preparation and review of annual reports for the basin have been conducted via e-mail. It is anticipated that the Technical Working Group of the TAC will meet prior to the next TAC meeting (sometime this summer), to discuss the current status of United’s groundwater flow model expansion and how the effectiveness of the proposed yield-enhancement measures might be forecasted using the model. The Technical Working Group is also expected to discuss the “Triggers” proposal/memorandum at an upcoming meeting.

Staff Report

To: Water Resources Committee

Through: Mauricio E. Guardado, Jr., General Manager

From: Maryam Bral, Chief Engineer
Dan Detmer, Supervising Hydrogeologist

Date: May 24, 2021 (June 1, 2021, meeting)

Agenda Item: 8. **Monthly Water Resources Department Report**
Information Item

Staff Recommendation:

Receive a summary report on various Water Resources departmental activities.

Discussion:

As noted in our previous staff reports, the majority of Water Resources Department staff worked from home through May 31 and communicated via teleconferencing during the Covid-19 pandemic. Most staff will return to the office on June 1.

Staff Activities

In addition to the Department's routine, ongoing groundwater monitoring and reporting programs and its support of Groundwater Sustainability Agencies (summarized in a separate staff report), notable efforts and activities conducted by staff during the past month included the following:

- Groundwater Modeling:
 - Staff has completed expansion of the active domain of United's numerical groundwater flow model to incorporate the Piru, Fillmore and Santa Paula basins, updated the model for the years 2016-2019, and validated the calibration of the expanded model. Staff completed documentation of the expanded model and input required for forward-looking projections conducted for the Mound and Fillmore-Piru basins groundwater sustainability agencies (GSAs). Staff is in the process of completing documentation of the model update and validation effort. The independent Expert Panel will review all three of these modeling documents this summer.
 - Staff continue the process of converting the 2018 version of the groundwater flow model (coastal plain basins) to a new software version that allows for the simulation of
-

Agenda Item: 8. Monthly Water Resources Department Report
Information Item

Page 2

salinity changes associated with saline intrusion in the coastal areas surrounding Pt. Mugu and Port Hueneme, as part of the Coastal Brackish Project Prop 1-funded feasibility study.

- Staff has entered available lithologic information from wells in the Mugu area into a RockWorks database and has constructed cross-sections in order to map the continuity of confining units in the vicinity of the proposed Coastal Brackish Groundwater Extraction and Treatment Project. The lithologic picks in individual boreholes were converted to surfaces for the model refinements in this area.
- Staff continue to help the Environmental Services Department (ESD) evaluate effects of existing and potential future surface water flow conditions at the Freeman Diversion.
 - Staff are assisting ESD in evaluating fish passage modifications under consideration for United's Habitat Conservation Plan (HCP).
- Staff continue to assist with planning and coordination for release of Table A water and supplemental State Water Project water acquired from the Santa Clarita Valley Water Agency and the City of San Buenaventura. 3,150 AF has been received and we have the option to purchase an additional 1,260 AF.
- Staff continue to collaborate with the Engineering Department with development and design of a portfolio of new or improved water-supply projects within the District's service area. Staff are meeting biweekly (sometimes with consulting engineers from Kennedy-Jenks) to refine estimates of project yields and costs, and to better optimize planned projects so that they yield the best value in terms of sustainable yield for the groundwater basins in United's service area.
- Staff supported the Engineering Department and a consultant in developing the 2021 updates to United's Urban Water Management Plan for its OH and Lake Piru water-supply systems. Few comments were received on the draft document and responses to those comments have been prepared.
- Staff supported the Engineering Department by providing oversight of pumping development and analysis of aquifer testing for new El Rio water well #19 (replacing El Rio #6).

Outreach and Educational Activities:

- Staff attended an April 28 webinar on the differing approaches to groundwater basin management in Orange and Los Angeles Counties.
- Senior Hydrologist Bram Sercu attended a webinar titled *Think Outside the Meter Box: How combining legacy AMI with the Internet of Things is bringing cost-effective, holistic solutions to water systems management.*