

Program Manager Report

June 15, 2020

General Updates:

- Attended the Groundwater Resources Association **Virtual** Groundwater Sustainability Agency Summit on June 10-11 (received a fee waiver to attend and share the experience with others)
 - Sessions included a variety of talks looking back on how SGMA came about, lessons learned, and where we are headed. Many focused on the recent 2020 GSP submittals and how those plans may help the 2022 plans move forward more efficiently. The program is attached. Staff is happy to share additional information about the sessions with interested individuals or as topics become applicable.
- Attended *A Review of San Joaquin Valley Groundwater Sustainability Plans* webinar (PPIC)
- Attended portions of the Online Environmental Engagement Conference: Building our Skills Together (CalEPA/CA Natural Resources Agency)

Administrative Updates:

- Continued coordination with Mary Fahey, Colusa Groundwater Authority (CGA), and others as needed to organize and direct joint tasks and upcoming activities
- Working on updating GIS shapefile for submittal to DWR accounting for the most recent basin boundary modifications
- Various meeting preparations and post meeting tasks
 - Board
 - CGA/GGA Joint TAC
 - CGA/GGA Joint Board Meeting (post meeting tasks only)
 - Project coordination meetings
 - GGA Budget Ad Hoc Committee
 - Executive Committee
- **California Fair Political Practices Commission (FPPC) Statement of Economic Interests (Form 700s)- 2019/2020 Forms were due April 1, 2020.** Due to the COVID-19 pandemic, the FPPC allowed extensions until **June 1, 2020**. If you have not already done so, please complete the Form 700 and send the signed original to Lisa Hunter. Staff will follow up with anyone needing to submit the form.

Mailing address:
Glenn Groundwater Authority
ATTN: Lisa Hunter
PO Box 351
Willows, CA 95988

Hand delivery:
Glenn County Dept. of Agriculture
Lisa Hunter
720 N. Colusa St.
Willows, CA 95988

Forms and guidance documents can be found at the FPPC website at:

<http://www.fppc.ca.gov/Form700.html>

or contact Lisa Hunter to request a paper copy.

- AB 1234 Compliant Ethics Training: Emails were sent to Directors/Alternates that are due to complete the ethics training or will be due soon. Once training is complete, forward certificates of completion to Lisa Hunter.
- Reviewed Revised 2020-2021 Contribution Indication including the Estimated Payroll for 2020-2021 from GSRMA
- Worked with Counsel on requirements for purchasing requirements policy
- Various website updates

Project Updates:

- Outreach (May/June)
 - A modified approach to providing information during permit renewal appointments has been implemented to ensure outreach materials are still distributed, individuals can sign up for interested parties lists, and ask questions
 - Summary of Activities between mid-December and May 28, 2020:
 - **380** individuals received outreach materials through this program
 - **53** new sign-ups for the Interested Parties List to receive information via email
 - Attended Northern California Water Association Groundwater Task Force Meeting
- Colusa Subbasin GSP Development Proposition 1 & Proposition 68 Grant (CGA contracting agency)
 - Nothing new to report; invoicing to CGA for GSP Development tasks will be submitted in early July for invoices received April-June 2020.
- HCM/Water Budget Project Update (GGA contract with Davids Engineering)
 - Continuing bi-weekly meetings with M. Fahey, L. Hunter, and consulting team on project updates
 - The anticipated completion date listed in the contract is April 30, 2020; there may be a need to amend the contract with an updated schedule; staff will work with legal counsel and Davids Engineering staff to determine next steps
 - Contract Amount: \$378,000; Spent: \$197,686
 - Colusa Subbasin ET and Applied Water Discussion (follow up from Joint TAC meeting)
 - Colusa Subbasin Water Transfer Discussion (follow up from the Executive Committee meeting)
- Colusa Subbasin GSP Development (GGA contract with Davids Engineering)
 - Management Team and facilitation lead continue to outline immediate next steps, target meeting dates and topics, and interim milestones
 - Planning for Joint TAC meeting (6/22/20)
 - Coordination on potential notice to proceed for option task: Funding Mechanism Evaluation
 - Northern Sac Valley Inter-Basin Coordination Staff Level Meeting
- Technical Support Services (TSS) Project (CGA is DWR's point of contact)
 - Continue to explore possibility of requesting services for translating materials or other needs
- Facilitation Support Services (CGA lead)
 - Continue to exploring future needs and potential requests for services

- CGA/GGA MOU
 - Finalized MOU, Chairman signed the MOU and it was sent to CGA for signature
- Long-Term Funding
 - Coordination with Provost & Pritchard Consulting Group regarding Tax Year 2020-2021 Direct Charge Preparation contract approval
 - Coordination with Glenn County Department of Finance regarding the direct charge instructions packet for 2020

Attachment

- GSA Summit Program



Day 1 – June 10, 2020

9am - Welcome

Abigail Madrone, GRA President

Lisa Porta, GRA Director and 2020 Summit Chair

- *Instructions around technology use*

9:15am to 10:20 – SGMA: How did we get here, where we are now, and how do we move forward?

Moderator: Lisa Porta, Montgomery & Associates

- 5-Years of SGMA, A Look Back and A Look Forward
Tina Cannon Leahy, State Water Resources Control Board
- Lessons Learned from 2020 GSP Process
Craig Altare, Department of Water Resources
- State Board Updates on Implementation
Natalie Stork, State Water Resources Control Board

10:20–10:40am – Commercial break [you will hear from our sponsors]

10:40 am to 11:40 - Panel Session 1 – Lessons Learned from the 2020 GSPs - Perspectives from California's Critically Overdrafted Basins

Moderator: Bryce McAteer, WestWater Research

SGMA's implementation phase has now begun across California's Critically Overdrafted Basins. Getting here has been an unparalleled journey as communities, farmers, water suppliers, and others navigated through uncharted territory to create new precedents and develop local solutions for sustainable groundwater management. During this session, speakers from some of the state's most dynamic GSAs will share their perspectives and lessons learned on GSP development, from "aha moments" to achievements and things they would do differently.

- *Eric Osterling, Greater Kaweah GSA*

- *Patricia Poire, Kern Groundwater Authority*
- *Deanna Jackson, Tri County Water Authority*
- *Gary Petersen, Salinas Valley GSA*

11:40-12:40 Lunch break with SGMA-themed games to win prizes!

12:40pm to 1:40pm - Panel Session 2 – Outreach Success: From Local Understanding to Basin-wide Consensus

Moderator: Dave Ceppos, Sacramento State, Consensus and Collaboration Program

This panel will explore successful outreach strategies for GSP development and long-term implementation.

- *Piret Harmon, Santa Margarita Groundwater Agency*
- *John Covington, Morongo Band of Mission Indians*
- *Supervisor Kelly Long, Fillmore-Piru Basins GSA*

1:40-2:00pm – Commercial break [you will hear from our sponsors]

2:00pm to 3:00pm - Workshop on Best Practices in Stakeholder Outreach and Engagement

Building the Skills – How to Survive Your Next SGMA Meeting

This workshop will provide participants with applied skills and best practices in outreach and engagement.

Part 1 – Facilitation Methods for Public Meetings

Moderator: Rafael Silberblatt, Kearns & West

In Part 1 of the workshop, participants will learn quick tricks and tools to address common, challenging conditions in public meetings and workshops.

Part 2 –SGMAntics: Building Better Decisions by being SGMA Fluent

Moderator: Dave Ceppos, Sacramento State, Consensus and Collaboration Program

In Part 2 of the workshop, participants will learn about workshop scenarios used by several GSAs to help their Boards practice future decision-making on complex SGMA topics.

3:00pm – Adjourn

5:00pm - 6:00pm Virtual Happy Hour!

Day 2 – June 11, 2020

9am – Welcome

Lisa Porta, GRA Director and 2020 Summit Chair

- *Instructions around technology use*

9:15am to 10:15am- Panel Session 3 – Setting Sustainable Management Criteria – It's Easy, Isn't It?

Moderator: Rob Gailey, R.M. Gailey Consulting Hydrogeologist PC

Implementation details of groundwater sustainability plans stem from the setting of sustainable management criteria (SMC). With several undesirable results to consider, a range of technical analyses to perform, data gaps yet to be filled, and potentially conflicting stakeholder interests, the SMC setting process can be involved and challenging. This discussion panel will review what has occurred in the preparation of GSPs so far and discuss what may happen in the future for setting various SMCs.

- *Briana Seapy, Department of Fish and Wildlife*
- *Jim Blanke, Woodard & Curran*
- *Mike Basial, AECOM*
- *Tess Dunham, Kahn, Soares & Conway, LLP*

10:15–10:35am – Commercial break [you will hear from our sponsors]

10:35am to 11:35pm - Panel Session 4 – Looking Towards SMCs for the 2022 GSPs

Moderator: Rob Gailey, R.M. Gailey Consulting Hydrogeologist PC

As the GSPs due in 2020 were the first of their kind, challenges were encountered and experience was gained. Public review of these GSPs reveals some important points to be considered for preparation of the plans due in 2022. This session will provide perspectives from a group of NGOs that have taken a detailed look at the 2020 GSPs with an emphasis on underrepresented beneficial users (disadvantaged communities and groundwater dependent ecosystems) and stakeholder engagement.

- *Samantha Arthur, Audubon*
- *Sandi Matsumoto, The Nature Conservancy*
- *Jennifer Clary, Clean Water Action*

11:35pm-12:35pm Lunch break with SGMA-themed games to win prizes!

12:35pm to 1:35pm - Panel Session 5 - The Proof is in the Pudding – GSP Implementation and Data Gaps

Moderator: Georgina King, Montgomery & Associates

Proving sustainability twenty years after GSP submission is a long-term commitment that will often require implementing a number of strategies, including filling data gaps and developing appropriate projects and actions, to avoid undesirable results. This panel examines some of these strategies and shares how some GSAs have started implementing their GSPs.

- *Steven Springhorn, Department of Water Resources*
- *Brian Lockwood, Pajaro Valley Water District*

- *Ellen Bruno, UC Berkeley*
- *Aaron Fukuda, Tulare Irrigation District*

1:35-1:55pm – Commercial break [you will hear from our sponsors]

1:55pm to 2:55pm - Panel Session 6 – New Kid on the Block – Collaboration between GSAs and Existing Government Agencies

Moderator: Sierra Ryan, Santa Cruz County

How are GSAs, new governmental agencies, going to interface and coordinate with existing government agencies, such as counties, cities, planning agencies, etc. in complying with SGMA? This session will explore various issues related to coordination and planning during GSP implementation.

- *Lance Eckhart, Mojave Water Agency*
- *Stephanie Anagnoson, Madera County Water & Natural Resources*
- *Peter Martin, City of Santa Rosa*
- *Judy Corbett, Chair of the Water Committee of the CA Economic Summit*

2:55pm – Summit recap and adjourn

COOPERATING ORGANIZATIONS:

Association of California Water Agencies (ACWA)
Maven's Notebook
Northern California Water Association (NCWA)

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THANK YOU TO OUR AMAZING PLANNING TEAM!

Fun Squad

Emily Honn
Lindsay Martien

Moderators

Bryce McAteer
Dave Ceppos
Georgina King
Raphael Silberblatt
Rob Gailey
Sierra Ryan

Planning Committee

Abhishek Singh
Adam Hutchinson
Andy Rodgers
Ann DuBay
Lisa Hunter
Marcus Trotta
Mark Nordberg
Matt Kennedy
Pat Vellines

SPEAKER BIOGRAPHIES

Moderator: Lisa Porta, Montgomery & Associates

Lisa Porta is a professional civil/water resources engineer with over a decade of experience working on groundwater resources management in California and the Western US. Ms. Porta has worked on large-scale groundwater modeling projects in California and assisted several local agencies with groundwater management challenges. She has technical expertise in groundwater modeling, water supply planning, impacts analysis and water resources management. Over the last few years, Ms. Porta has developed groundwater models and planning documents for several state and local agencies that are helping water and irrigation districts to better manage their groundwater supplies and to navigate an increasingly complex regulatory environment (related to SGMA and the Irrigated Lands Program). Ms. Porta has been an active GRA member since 2011, has served on a workshop planning committee, has planned and moderated sessions at 3 GRA events and is the current Chair of the Technical Committee. Ms. Porta also brings diverse leadership skills (team management, strategic planning, committee leadership), excellent communication skills (conference presentations, article writing), and organizational skills (team coordination, task leadership).

Tina Cannon Leahy, Senior Staff Counsel, State Water Resources Control Board

Tina Cannon Leahy is a Staff Counsel IV with the State Water Resources Control Board Office of the Chief Counsel. Her primary areas of focus are the Bay-Delta Water Quality Control Plan updates and Sustainable Groundwater Management Act (SGMA) implementation. Before coming to the State Waterboard, she was the Principal Consultant for the California Assembly Water, Parks and Wildlife Committee where, from 2010 through 2015 she served as the Assembly's water law and policy expert, including helping to draft SGMA. Prior to the Assembly, Ms. Leahy was Senior Staff Counsel at the California Department of Fish and Wildlife specializing in Sacramento-San Joaquin Delta water operations and management, endangered species, and other water-related issues and permitting and an associate attorney with the law firm of Somach, Simmons, and Dunn counseling clients and litigating on water and natural resources matters including California Environmental Quality Act compliance and challenges. She is Chair of the California Lawyers Association (CLA) Governance Committee, an Advisor to the CLA Environmental Law Section, and Co-Chair of the Alumni Advisory Board for the California Environmental Law and Policy Center at her alma mater, the UC Davis School of Law.

Craig Altare, Supervising Engineering Geologist, Department of Water Resources

Mr. Altare is chief of the Groundwater Sustainability Plan Review Section in the Department of Water Resources' Sustainable Groundwater Management Office. He has 14 years of experience in groundwater resources planning, management, and modeling in California. Mr. Altare has a BS in Geology from Virginia Tech and a MS in Hydrology from New Mexico Tech.

Natalie Stork, Senior Engineering Geologist, State Water Resources Control Board

Natalie Stork, P.G., is a Senior Engineering Geologist with the State Water Resources Control Board Office of Research, Planning, and Performance. She is currently the unit chief for the Groundwater Management Program, which is responsible for the Board's implementation of the Sustainable Groundwater Management Act (SGMA). Prior to working on SGMA implementation, Natalie investigated water rights compliance issues for the Board's Division of Water Rights. Before working at the Board, Natalie worked as a geologist in the private sector. She holds B.S. and M.S. degrees from UC Davis and the University of Connecticut. Natalie is currently a member-at-large for the GRA Sacramento Branch.

Moderator: Bryce McAteer, WestWater Research

Bryce G. McAteer is an Associate at WestWater Research's Sacramento, California location. He assists public, private, and NGO clients in addressing their strategic challenges related to water resources supply and management. Mr. McAteer's areas of expertise include water supply planning, transfers, acquisitions, deal origination, groundwater market development and facilitation, project

valuation, and project funding.

Eric Osterling, Greater Kaweah GSA

Patricia Poire, Kern Groundwater Authority

Patricia Poire, of Bakersfield, was appointed to the California Partnership for the San Joaquin Valley Board in July 2017. She is the Planning Manager at the Kern Groundwater Authority. Poire was corporate and public affairs at Grimmway Farms from 2008 till 2018. Prior to that, she was special projects manager for the City Shafter from 2006 to 2008 and land project manager at Lennar Homes from 2002 to 2006.

Poire is a member of the Kern County Farm Bureau, Kern Economic Development Corporation and Kern Council of Governments' Regional Planning Advisory Committee.

Deanna Jackson, Tri County Water Authority

Gary Petersen, Salinas Valley GSA

Gary Petersen serves as a Senior Advisor for Salinas Valley Basin Groundwater Sustainability Agency. As an employee of Regional Government Services (RGS), a provider of public agency consulting services, Gary is currently assigned by RGS to the Salinas Valley Basin Groundwater Sustainability Agency (SVBGSA) to assist in meeting the responsibilities of the agency.

Moderator: Dave Ceppos, Sacramento State, Consensus and Collaboration Program

Dave Ceppos is the Managing Senior Mediator of the Consensus and Collaboration Program (CCP) of California State University Sacramento. He is also CCP's Sustainable Groundwater Management Act (SGMA) Program Manager, overseeing CCP's work with the Department of Water Resources (DWR), State Water Resources Control Board (State Board) and numerous and numerous local agencies in this role, he managed the CCP Local Assistance Team, facilitating Groundwater Sustainability Agency (GSA) formation efforts in 35 groundwater basins around the State. Currently, he and CCP's staff is working with 8 GSAs throughout California as they prepare their Groundwater Sustainability Plans to comply with SGMA.

Piret Harmon, Santa Margarita Groundwater Agency

Piret has been the General Manager of Scotts Valley Water District since July of 2013 and a staff representative at Santa Margarita Groundwater Agency since its inception. She is passionate about understanding how always-changing technological, social, and financial landscapes impact the way public agencies are run and turning challenges into opportunities. Prior to that she carried the role of a Business Manager at Santa Cruz Water Department overseeing strategic planning, rate design analysis, operations and capital improvement program budgets, and succession planning efforts. She has an undergraduate degree in Civil Engineering with a major in Water and Wastewater from Tallinn University of Technology, supplemented by a graduate degree in International Business Administration. She serves on the Boards of California Utilities Executive Management Association, Regional Water Management Foundation, Scotts Valley Chamber of Commerce and Bay Federal Credit Union. Time is very valuable resource for Piret and achieving the objectives is always supported by straightforwardness, efficiency, and good judgement. Piret loves to travel, learn, connect with interesting people and collect new experience

John Covington, Morongo Band of Mission Indians

John L. Covington Administrator/Water Dept. Manager, Morongo Band of Mission Indians Mr. Covington has been employed by the Morongo Band of Mission Indians since 2005. He was hired to manage the Tribes Water and Wastewater Departments, and implement all water resource management activities. He also serves in the capacity of an Administrator which oversees numerous other tribal departments. His professional career started at the Beaumont Cherry Valley Water District in 1987 thru 2000 as a water distribution system operator/supervisor. He then moved onto the Yucaipa Valley Water District in 2000 as a water distribution operator III and left in 2005 to manage the Morongo Band of Mission Indians Tribal Water Resource Departments. His expertise lies

in the areas of potable and non-potable water systems, design and distribution, water supply operations, water supply hydraulics, water treatment, quality, and water rights management. He also has extensive knowledge related to Tribal water rights (Federally Reserved) state water rights, and statewide resource water management

Supervisor Kelly Long, Fillmore-Piru Basins GSA

Kelly Long was elected Ventura County Supervisor District 3 in 2016 and re-elected to a second term in March 2020. Kelly Long has over 25 years of combined experience as an entrepreneur, business executive, and school board trustee. She held the office of the Pleasant Valley School Board of Trustees from 2012–2016. She has a degree in Mechanical Engineering from California State University, Long Beach and holds six patents. She comes from a family of small business owners, educators, and community volunteers. She currently serves as Chair of the Fillmore & Piru Basins Groundwater Sustainability Agency and brings a skill set that includes management and leadership, budgeting and fiscal accountability, collective bargaining and negotiation, policy development and process improvement. Kelly Long has two children and her family loves volunteering within the community and enjoys living in the district, taking full advantage of the weather and outdoors spaces

Moderator: Rob Gailey, Consulting Hydrogeologist

Rob Gailey has been a practicing hydrogeologist since 1985. His work ranges from performing field investigation and quantitative analysis to regulatory negotiation and expert witness engagements. He is active on both environmental and water supply projects. Rob has contributed to Groundwater Sustainability Plans and other evaluations regarding Sustainable Management Criteria and potential impacts to water supply well operations. He is also active implementing managed aquifer recharge and a member of DWR's Flood MAR Research Advisory Committee for economics and water equality. Rob is licensed in California as a Professional Geologist and Certified Hydrogeologist. He holds degrees in geology, hydrogeology, civil engineering, and business.

Briana Seapy, Department of Fish and Wildlife

Briana Seapy is Water Program Supervisor for California Department of Fish and Wildlife's North Central Region. Prior to working at the Region, she served as CDFW's statewide groundwater coordinator. While fascinated by subsurface water, she prefers to recreate on above-surface water and is delighted to work on the nexus of both and their importance to vibrant ecosystems.

Jim Blanke, Woodard & Curran

Jim Blanke is a senior principal and senior hydrogeologist with Woodard & Curran with 20 years of experience. By bringing together the latest innovations in hydrogeology, water resources, permitting, and groundwater management, Jim provides input to solve complex water resources and groundwater problems in regions and communities across California. His broad-based understanding extends beyond technical knowledge, including experience with CEQA and permitting, as well as a highly successful track record with grant applications, allowing ideas and plans to move to real world solutions. Jim holds a BS and MS from Stanford University in Geological and Environmental Sciences and is a California Professional Geologist, Certified Hydrogeologist, and Professional Engineer

Mike Basial, AECOM

Mr. Basial has been applying quantitative analysis methods to hydrogeological problems for 25 years (also at CH2M/Jacobs and HLA), and would like to remind you that when something isn't working, it's always the water budget at the root of the problem. He has worked for a variety of governmental and private-sector clients addressing water-supply and groundwater contamination issues throughout California, the United States, and most continents. His SGMA work has included preparing and submitting a GSP, and reviewing several draft GSPs for their handling of a client's specific technical concerns

Tess Dunham, Kahn, Soares & Conway, LLP

Theresa "Tess" Dunham is a partner in KSC. Her practice has been laser-focused on California and

federal water quality laws for more than 20 years, during which she has become known statewide for expertise on the Porter Cologne Water Quality Control Act, the Clean Water Act, and other related regulatory schemes. Tess works closely with agriculture, publicly owned treatment works, stormwater agencies, industry and others on a variety of water quality issues. She appears regularly before the State Water Resources Control Board, and the state's regional water quality control boards on various and complex water quality issues. Tess' water quality law practice also carries over to the state and federal courts where she has represented clients at all levels.

Moderator: Rob Gailey, Consulting Hydrogeologist

Rob Gailey has been a practicing hydrogeologist since 1985. His work ranges from performing field investigation and quantitative analysis to regulatory negotiation and expert witness engagements. He is active on both environmental and water supply projects. Rob has contributed to Groundwater Sustainability Plans and other evaluations regarding Sustainable Management Criteria and potential impacts to water supply well operations. He is also active implementing managed aquifer recharge and a member of DWR's Flood MAR Research Advisory Committee for economics and water equality. Rob is licensed in California as a Professional Geologist and Certified Hydrogeologist. He holds degrees in geology, hydrogeology, civil engineering, and business.

Samantha Arthur, Audubon

Samantha Arthur is Working Lands Program Director of Audubon California, leading Audubon's work with farmers and wetland managers in the Central Valley to increase the scope and scale of bird-friendly management practices and restoration. She also oversees Audubon California's campaign to recover the Tricolored Blackbird and efforts to protect managed wetlands in the implementation of California's Sustainable Groundwater Management Act. Samantha has been with Audubon since 2014. She has a Masters of Environmental Science and management from the Bren School at the University of California, Santa Barbara and a Bachelors in Biology and Environmental Studies from Whitman College. Prior to Audubon, Samantha worked with the California Association of Conservation Districts to support private lands stewardship across the state. She was also previously a Land Protection Specialist for the Big Sur Land Trust where she worked with landowners in Monterey County on conservation easements and land management.

Sandi Matsumoto, The Nature Conservancy

Jennifer Clary, Clean Water Action

Jennifer Clary has served as the water program manager for Clean Water Action's California program since 2003. She works to advance key water quality and funding policies in California; address barriers to safe drinking water in California communities; and serves on key stakeholder committees that advise state agencies on actions to monitor and protect groundwater quality and invest in water infrastructure. She currently coordinates the NGO Groundwater Collaborative, a coalition of groups that are working together to ensure successful implementation of California's 2014 Sustainable Groundwater Management Act. Jennifer holds a bachelor's degree in Chemistry from the University of California at Berkeley.

Moderator: Georgina King, Montgomery & Associates

Steven Springhorn, Department of Water Resources

Steven Springhorn is a Supervising Engineering Geologist with the California Department of Water Resources (DWR) in Sacramento. Steven has 15 years of experience working on a variety of groundwater related programs and projects for the State, including the Sustainable Groundwater Management Act, Integrated Regional Water Management (IRWM) technical assistance, IRWM grant administration, evaluation of stream depletion impacts, and groundwater substitution transfer and conjunctive use programs. Steven received an M.S. in Geology from California State University (CSU), Sacramento and a B.S. in Geology from CSU, Chico. Steven is a California Professional Geologist

Brian Lockwood, Pajaro Valley Water District

Brian Lockwood, is the General Manager of the Pajaro Valley Water Management Agency, where he leads a dedicated team of water resource enthusiasts working tirelessly to achieve a sustainable Pajaro Valley Groundwater Basin. Water management activities include the implementation of PV Water's GSP-Alternative, which focuses conserving existing water supplies, recycled water production and delivery, managed aquifer recharge and recovery, hydrologic monitoring and modeling, and more. Stakeholder outreach, engagement, and education is a key component of PV Water's activities. Brian earned BS and MS degrees in the Earth Sciences from the University of California, Santa Cruz. He is a California Professional Geologist and Certified Hydrogeologist.

Ellen Bruno, UC Berkeley

Ellen Bruno is an Assistant Cooperative Extension Specialist in the Department of Agricultural & Resource Economics at UC Berkeley. She is an environmental and agricultural economist researching the potential for different policies to improve the management of water resources. Ellen received her Ph.D. and M.S. degrees in Agricultural and Resource Economics from UC Davis and her B.S. degree in Management Science from UC San Diego.

Aaron Fukuda, Tulare Irrigation District

Aaron Fukuda was born and raised in Hanford, California. Mr. Fukuda graduated from Hanford High in 1995 and continued his education at the California Polytechnic State University, San Luis Obispo. Mr. Fukuda obtained his Bachelor of Science, cum laude in Civil Engineering from Cal Poly, San Luis Obispo in 2000. After college, he began working for Summers Engineering, Inc. in Hanford where he spent six years as an associate engineer specializing in agricultural hydraulic design. During his career at Summers Engineering, Inc. he attended California State University, Fresno where he obtained his Masters in Public Administration, with Honors. Mr. Fukuda is also a registered Professional Engineer with the state of California

Moderator: Sierra Ryan, Santa Cruz County**Lance Eckhart, Mojave Water Agency**

Lance Eckhart is the Director of Basin Management and Resource Planning for the Mojave Water Agency (State Water Contractor) and has been with the Agency since 2001. Mr. Eckhart has worked in the public and private sectors during his approximate 20 years of experience in Water Resources management. Prior to his employment at Mojave Water Agency, Mr. Eckhart worked for a variety of consulting firms focusing on groundwater remediation and assessment. His responsibilities include leading a team of scientists, engineers, data analysts, technicians and planners to manage the water resources for the approximately 5,000 square mile MWA service area. Examples of duties include directing work associated with major scientific studies, monitoring programs and planning documents in order to manage the water resources and related issues within the region. Recent major works have consisted of the directing the Agency's Urban Water Management Plan, the Integrated Regional Water Management Plan, Salt and Nutrient Management Plan, Groundwater Management Plans, Basin Conceptual Model and direct input regarding water policies for the region

Mr. Eckhart received his Bachelor of Science degree in in Geology and a Master of Science degree in Environmental Science from California State University, Fullerton. He is a licensed Professional Geologist and Certified Hydrogeologist in the State of California

Stephanie Anagnoson, Madera County Water & Natural Resources

Stephanie Anagnoson is the director of water and natural resources for Madera County. She is also the plan manager for the joint GSP in the Madera Subbasin, a plan that represents 95% of the Madera Subbasin. She is a geologist.

Peter Martin, City of Santa Rosa

Peter Martin recently joined the City of Santa Rosa Water Department as the Deputy Director of the Water Resources Division. He currently is a member of the Advisory Committee for the Santa Rosa Plain GSA. While working for the Calaveras County Water District he served on the Technical

Advisory Committee of the Eastern San Joaquin Groundwater Authority in the development of the Groundwater Sustainability Plan for the critically overdrafted Eastern San Joaquin Groundwater Subbasin. He obtained his Bachelor's Degree in Earth Systems, Science and Policy with a focus on Watershed Management from California State University Monterey Bay. Peter has had the opportunity to work on several multi-jurisdictional planning efforts throughout his career and brings unique perspectives from his experience working with both large and small water agencies with diverse stakeholders.

Judy Corbett, Chair of the Water Committee of the CA Economic Summit

Judy Corbett retired after 35 years as the Founder and Executive Director of the Local Government Commission. While still a student in the UCD Davis Ecology Graduate Group, she worked with her husband to design and develop the highly acclaimed Village Homes, a model for sustainable development. She has co-authored three books related to sustainability, including *Designing Sustainable Communities*, *Learning from Village Homes*. While at the Local Government Commission, she wrote or edited multiple guides and fact sheets for city and county officials on policies that implement multiple aspects of sustainable communities. For the past four years, she has organized annual symposiums addressing Land Use and Groundwater Recharge for the CA Economic Summit and UC ANR. She is the 2019 recipient of the League of California Cities Lifetime Achievement Award; other honors include the American Planning Association's annual award to a Citizen Planner, another APA award for Public Education, and "Hero for the Planet" designation by Time Magazine.

THANK YOU FOR ATTENDING!

All attendees will receive an email within the next 2 weeks with an event evaluation, an attendee list and a link to speaker presentations.

Thank you for your continued support of GRA!

Technical Advisory Committee Report

June 15, 2020

Recommendations from the CGA/GGA Joint TAC regarding:

1. Approach to Monitoring Network Development
2. Approach and Assumptions for Water Budget Future Scenarios
3. Approach to Establish Minimum Thresholds and Measureable Objectives

Background

A Joint CGA/GGA Technical Advisory Committee meeting was held on May 11. At this meeting, the Consultant team presented information on the following topics: GSP Development Overview; Monitoring Network Review; Model Development; Projected Water Budget Scenarios; Minimum Threshold and Measurable Objective Approach. The Consultant Team asked for feedback from the TAC members and recommendations to go to the CGA and GGA Boards on the following:

1. Approach to Monitoring Network Development

Preparation of the Groundwater Sustainability Plan (GSP) for the Colusa Subbasin requires establishment of a monitoring network for data collection to support understanding of the current conditions of the groundwater basin and to monitor the effectiveness of projects implemented to meet sustainability goals for the basin. In the Colusa Subbasin, monitoring must be adequate to evaluate five of the six sustainability indicators under SGMA. The six sustainability indicators are:

1. Chronic lowering of groundwater levels;
2. Reduction in groundwater storage;
3. Seawater intrusion (not applicable);
4. Degradation of groundwater quality;
5. Land subsidence; and
6. Depletion of interconnected surface waters.

In 2018, the consultant team completed an evaluation of existing county monitoring networks for the counties of Colusa and Glenn under the Proposition 1 Counties with Stressed Basins Grant Program. A report was prepared evaluating the existing monitoring networks covering the Colusa Subbasin as well as portions of neighboring basins within each county in the context of technical adequacy and SGMA compliance. Specifically, existing groundwater level, groundwater quality, land subsidence, and surface water monitoring programs were evaluated using criteria listed in the California Department of Water Resources (DWR) SGMA Groundwater Sustainability Plan (GSP) Regulations and DWR's Best Management Practices (BMPs) for the Sustainable Management of Groundwater.

The existing monitoring networks were deemed adequate for GSP preparation, with some recommendations for modifications and refinements that could be made over time. It is anticipated that these could be addressed during initial GSP development or as part of GSP implementation.

The full 2018 monitoring report is available at the following links:

- [Monitoring Network Main Report](#)
- [Appendix A - Groundwater Contours and Hydrographs](#)
- [Appendix B - Extensometer Measurements](#)
- [Appendix C - Technical and Reporting Standards](#)
- [Appendix D - Well Completion Reports](#)

Schedule

Groundwater conditions, including groundwater levels in the existing networks, are being documented as part of the Basin Setting portion of the GSP, with planned completion of a draft GSP chapter in Fall 2020. Initial efforts have begun to establish Sustainable Management Criteria (SMC), including quantitative Minimum Thresholds and Measurable Objectives tied to individual monitoring sites, with planned completion of a draft GSP chapter in Spring 2021.

Joint TAC Recommendation

Direct Consultant Team to proceed with GSP development using the monitoring networks identified in the 2018 Monitoring Network Assessment Report, recognizing that Sustainable Management Criteria may not be developed for each existing monitoring location, and additional monitoring locations may be added during GSP development and implementation with TAC and stakeholder input.

2. Approach and Assumptions for Water Budget Future Scenarios

Preparation of the Groundwater Sustainability Plan (GSP) for the Colusa Subbasin requires development of water budgets quantifying all inflows to and outflows from the basin, as well as change in storage. Water budgets must be quantified for three separate time frames:

- Historical, based on at least 10 past years
- Current, based on most recent available information
- Projected, based on
 - 50-years historical hydrology
 - Most recent land use and crop coefficient information
 - Projected changes in land use planning, population, and climate
 - Projected surface water supply based on the most recent water supply information

Draft historical water budgets have been developed using DWR's C2VSim Fine Grid integrated hydrologic model for the Central Valley, a tool intended by the state to support GSAs in developing water budgets for their GSPs. The available model has been updated by DWR through water year 2015.

Based on a review of water budget development to date elsewhere in the state and in neighboring basins (Butte, North Yuba, South Yuba, Vina, Wyandotte Creek), the consultant team has prepared the following proposed assumptions and approach for developing projected water budgets for the Colusa Subbasin:

1. Historical hydrology from 1966 to 2015
2. Recent historical land use, mapped to curtailment/non-curtailment years
3. Urban demands based on projected population and per capita use

4. Climate change based on central tendency scenarios developed by DWR for SGMA, centered around 2030 and 2070
5. Water supply based on recent historical use, mapped to curtailment/non-curtailment years

The proposed approach will result in two projected water budget scenarios, corresponding to the 2030 and 2070 climate change scenarios. Preliminary review of the scenario results suggests the following:

- For the 2030 scenario, there is a modest increase in precipitation (~4%) and slight increase in evapotranspiration (~1%) within the subbasin, with a slight increase in Lake Shasta inflows (~2%)
- For the 2070 scenario, there is greater increase in precipitation (~7%) and greater increase in evapotranspiration (~9%) within the subbasin, with a modest increase in Lake Shasta inflows (~4%)

Schedule

Development of historical water budgets and preparation of datasets for projected water budget scenarios are underway with completion of a draft GSP chapter planned in late 2020/early 2021.

Joint TAC Recommendation

Approve the consultant team to proceed with development of proposed projected water budget scenarios for initial GSP development, recognizing that further refinements may be made within the proposed general framework with TAC and stakeholder input.

3. Approach to establish Minimum Thresholds and Measurable Objectives

Preparation of the Groundwater Sustainability Plan (GSP) for the Colusa Subbasin requires establishment of Sustainable Management Criteria. In particular, quantitative Minimum Thresholds (MTs) and Measurable Objectives (MOs) must be established for monitoring locations within the GSP monitoring network to evaluate whether Undesirable Results have occurred over time. Examples of MTs and MOs for individual monitoring locations include groundwater elevations, water quality parameters, and measurements of land subsidence. It is anticipated that MTs and MOs for groundwater storage and stream depletions would rely on integrated hydrologic model scenarios, coupled with available monitoring data, as appropriate.

The range and distribution of existing well depths based on well completion reports; water quality thresholds indicating the suitability of groundwater to meet agricultural, drinking water, and other beneficial uses; land subsidence magnitudes likely to result in damage to critical infrastructure; and streamflows required to prevent Undesirable Results (URs) for beneficial uses of surface water will also be relied upon.

Establishment of MTs and MOs will consider the expected impact of Projects and Management Actions (PMAs) evaluated for inclusion in the GSP. For example, desired MOs may guide the schedule for implementation of Projects and Management Actions.

MTs will be refined through iterative discussions and supporting technical analysis.

Schedule

Development of MTs and MOs is beginning through the compilation of relevant information and review of historical groundwater conditions in the basin and is being informed by information gathered through

stakeholder outreach in Fall 2019. Upcoming work includes developing initial analysis of potential MTs and MOs by summer/early fall 2020.

Joint TAC Recommendation

Approve the consultant team to proceed with initial development of Minimum Thresholds (MTs) and Measurable Objectives (MOs) which will be refined through iterative discussions and supporting technical analysis.

Note: The Joint TAC recommendations were approved at the May 26 CGA Board.

Attachments

1. Presentation from May 8, 2020 Joint CGA/GGA TAC meeting



COLUSA AND GLENN GROUNDWATER AUTHORITIES

Colusa Subbasin

Joint Technical Advisory Committee

GSP Development

5/8/2020

May 8, 2020

1

Discussion Topics

- GSP Development Overview
- Monitoring Network Review
- Model Development
- Projected Water Budget Scenarios
- Minimum Threshold and Measurable Objective Approach
- Next Steps

5/8/2020

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GSP Development Overview



5/8/2020

Joint TAC

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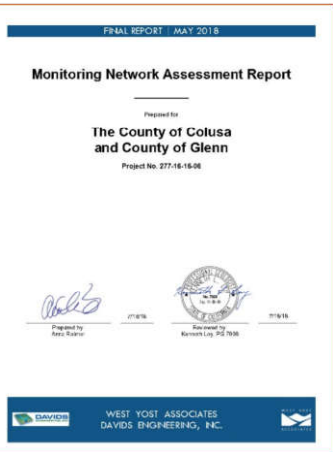
Monitoring Network Review (Potential Action Item)

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Monitoring Network Review



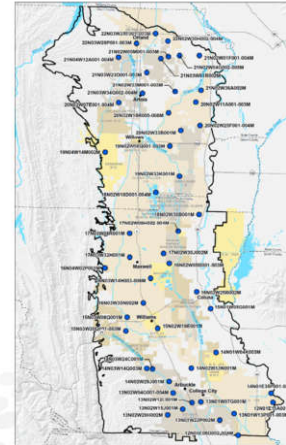
- Preliminary Assessment Completed July 2018, per SGMA Regulations and DWR Guidance Documents
- Builds on Existing Networks and Programs:
 - County Monitoring Well Networks
 - DWR Land Subsidence Networks
 - Irrigated Lands and Other Water Quality Monitoring Programs
 - USGS, DWR and Local Agency Stream Gages
- Vetted with DWR and Published on County Websites (download links also included in Staff Report in Meeting Packet)

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Monitoring Network Proposed Recommendation



- Request Formal Action by TAC to Recommend CGA and GGA Boards:
 - Direct Consultant Team to Proceed with GSP Development Using Networks Identified in 2018 Monitoring Network Assessment Report
- While Recognizing:
 - Not all Locations will be used for Development of Sustainable Management Criteria (SMC)
 - Locations may be added during GSP Development with TAC and Stakeholder Input

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Proposed Action (Agenda Item 4.a)

The TAC recommends that the CGA and GGA boards approve the consultant team to proceed with the existing monitoring networks for initial GSP development, recognizing that SMC may not be developed for each existing monitoring location, and additional monitoring locations may be added during GSP development and implementation with TAC and stakeholder input.

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Model Development (Information Item)

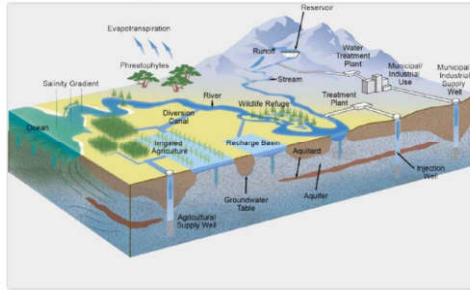
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What is an Integrated Hydrologic Model?

- Simplification of the real world
- Numerical computer model
- Performs hydrologic calculations over space and time
- Represents land surface, surface water, and groundwater systems
- Inputs consist of available data and parameters (and estimates)
- Calculates interactions within and between systems



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How Are Models Used in SGMA?

- Develop estimates of flows, groundwater levels, change in groundwater storage, etc.
- Improve understanding of how the system behaved historically across a range of hydrology and supplies
- Develop understanding of how the system may behave in the future under potential changes from historical conditions
- Support the development of Sustainable Management Criteria (though monitoring data is critical)
- Support the evaluation of Projects and Management Actions

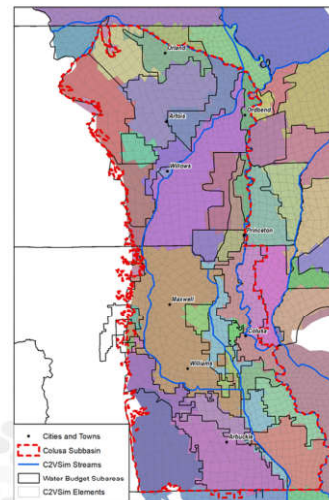
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California Central Valley Groundwater-Surface Water Simulation Model (C2VSim)

- Widely Used for SGMA
- Fine Grid Beta 2 Released April 2019
- Local Refinements to Date
 - Land Use
 - Diversions
 - Evapotranspiration
 - Soils
 - Irrigation Operations and Efficiency
 - Urban Demands

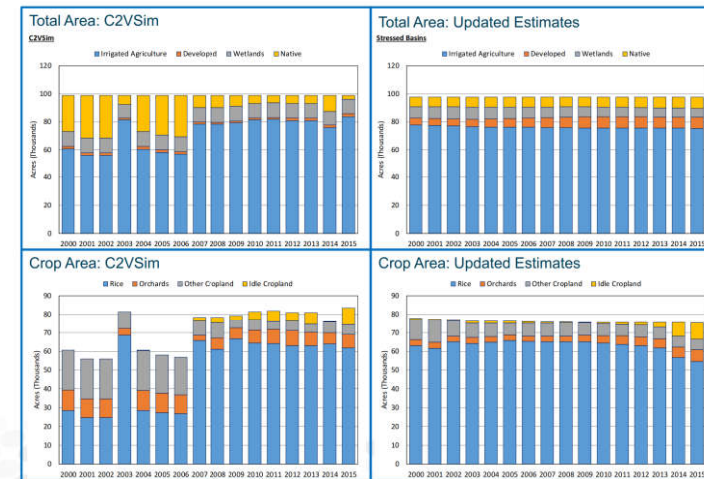


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Land Use Refinements

- Example: Glenn County Settlement Contractor Area
- Observations
 - Overestimation of Native Vegetation
 - Underestimation of Rice Acres
 - Overestimation of Orchard Acres
- Refinements Made for Full Subbasin



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Diversion Refinements

- Historical Diversions Originally Spread over Entire Surface Water Area Equally
- Need to More Precisely Designate Surface Water Use
- Refinements
 - 26 New Historical Diversion Records Created
 - Based on Monthly USBR Delivery Records and Local Data (e.g. Winter Non-Contract Use)
 - Diversions Assigned to Unique Supplier Service Areas

Div ID	Description
444	CVP to OUWUA South Canal
445	Colusa County WD
446	Orland-Artois WD
447	Glenn-Colusa ID (TC)
448	Westside WD
449	Kanawha WD
450	Glide WD
451	La Grande WD
452	Davis WD
453	4-M WATER DISTRICT
454	Holthouse WD
455	Glenn Valley WD
456	Cortina WD
457	Myers-Marsh MWC
458	Glenn-Colusa ID
459	Reclamation District #108
460	Princeton-Codora-Glenn Irrigation District
461	Provident Irrigation District
462	Sycamore MWC
463	Maxwell Irrigation District
464	Carter Mutual Water Company
465	Misc Sac River Riparian Diversions
466	Misc Sac River Riparian Diversions
467	Misc Sac River Riparian Diversions
468	Andreotti, Arnold and Arthur, et al

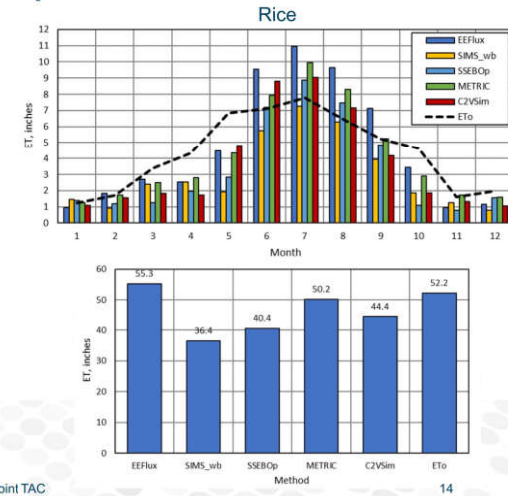
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Evapotranspiration (ET) Refinements

- Comparison of C2VSim ET to Satellite Estimates
- Four Independent ET Sources
- Adjustments to Monthly C2VSim ET Inputs
- Generally Relied on METRIC Estimates
- Examples
 - Rice
 - Almonds
 - Alfalfa
 - Tomatoes

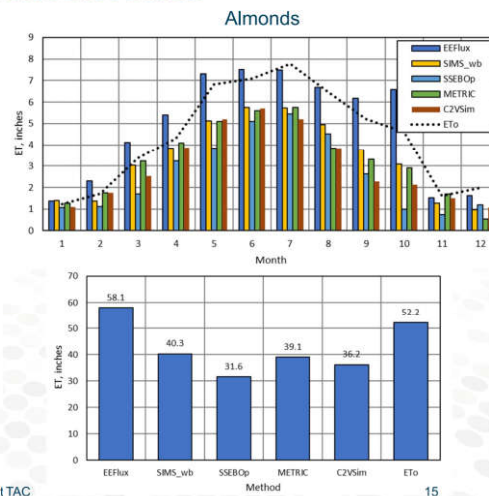


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Evapotranspiration Refinements

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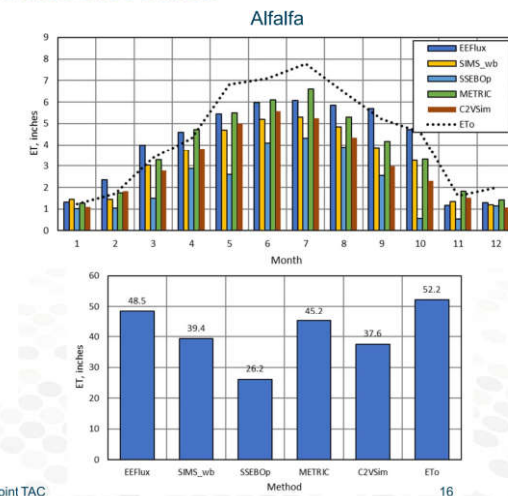
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Evapotranspiration Refinements

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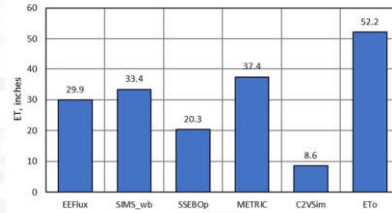
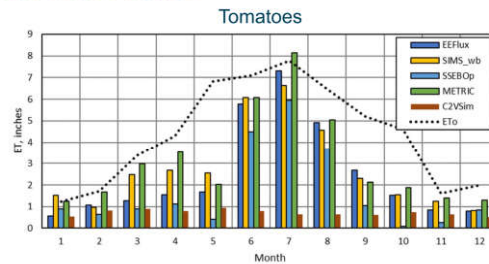


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Evapotranspiration Refinements

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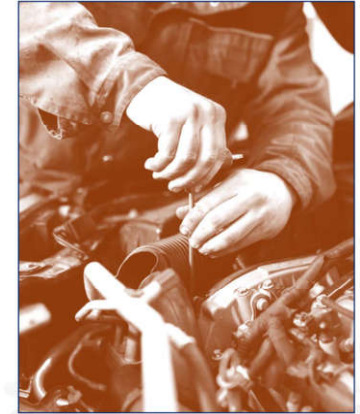
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Other Refinements

- Rice Percolation Rates
- Irrigation Operations and Efficiency
 - Refined Pond Depths, Tailwater, and Reuse
 - Increased Irrigation Efficiency for Other Crops to Better Match Current Understanding of Grower Practices
- Urban Demands
 - Created Urban Demand Areas
 - Orland, Willows, Williams, Colusa, Arbutle
 - Updated Population and Per Capita Water Use
 - Willows UWMP
 - Department of Finance
 - SWRCB Water Supplier Reporting Data



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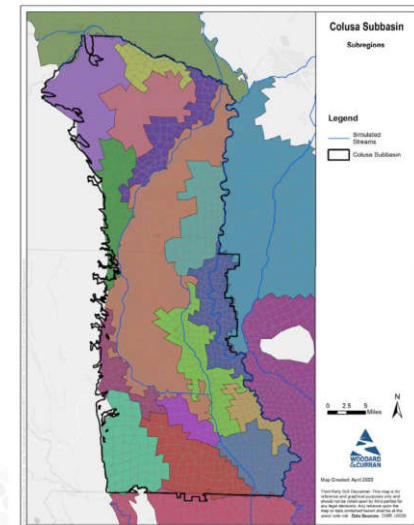
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Model Calibration Status (Information Item)

Model Calibration

- Calibration of Colusa Subbasin Area of DWR C2VSimFG Model With Refinements
 - 1839 Individual Elements
 - 389 Acres, on Average
- Calibration Areas of Focus
 - Streamflow gages
 - Groundwater wells
 - Model subregion water budgets
 - Colusa Subbasin water budgets



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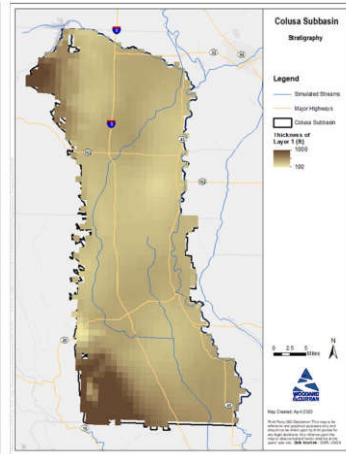
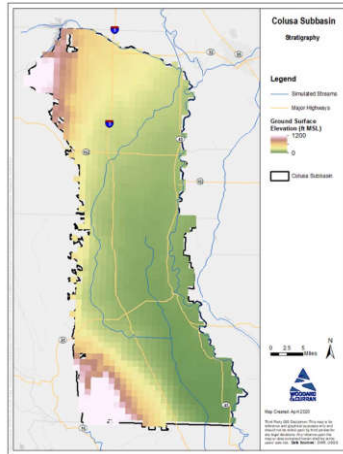
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Model Layering

- **Layer 1:** Top unconfined portion of the aquifer. Ground surface elevation (top of Layer 1) is from USGS data at a resolution of 10 meters.



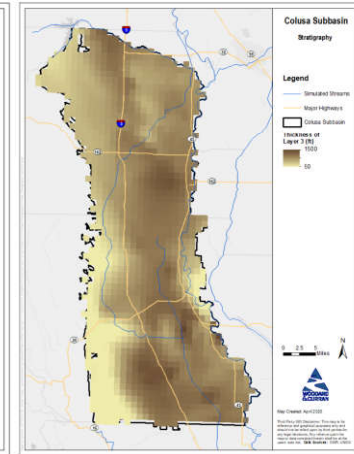
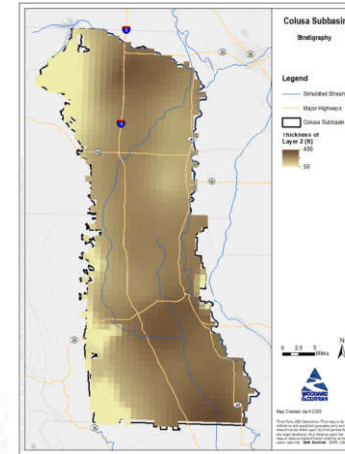
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Model Layering

- **Layer 2:** Primary pumping layer.
- **Layer 3:** Extends to the base of fresh water. Information used to develop the bottom of Layer 3 includes data from Steven Springhorn (DWR), and Williamson et al. 1989.



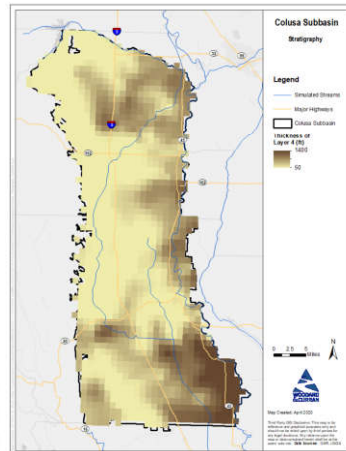
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Model Layering

- **Layer 4:** Saline water ranging from the base of fresh water to the base of continental deposits and is a current non-production zone. Information used in developing the bottom of Layer 4 includes Page's 1974 *Base and Thickness of the Post Eocene Continental Deposits in the Sacramento Valley* and thickness of the aquifer developed by Williamson et al. 1989.



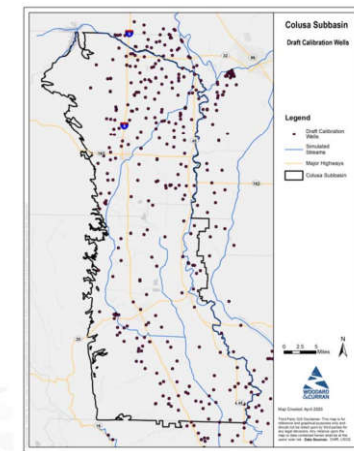
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Calibration Wells

- 740 wells in DWR Water Data Library (WDL) within 5-mile radius of Subbasin
- Filtered out wells based on:
 - No known well depth
 - No measurements between 1990-2015
 - No Spring measurement(s) available (defined as March, April, or May)
- 519 potential calibration wells remaining



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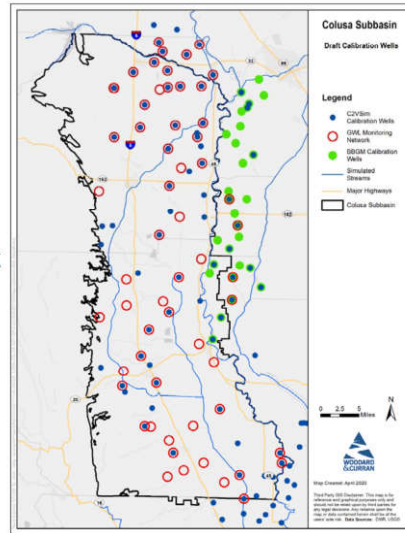
24

Calibration Wells

- Keep Wells Included in Overlapping Networks:
 - BBGM calibration wells*
 - C2VSim calibration wells*
 - Colusa Subbasin GWL Monitoring Network
- Results in 247 calibration wells

Well Network	Total Wells within 5 mi
GWL Monitoring Network	141
BBGM	47
C2VSim	212

*If within 5-mile radius



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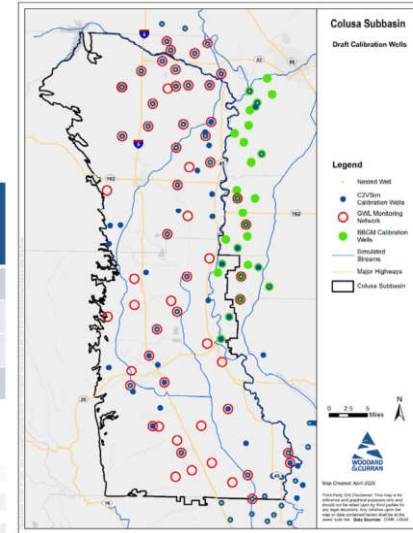
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Calibration Wells

- Calibration Wells Will Continue to Change as Calibration Continues

Draft Calibration Wells	Inside Colusa Subbasin	Outside Colusa Subbasin
Nested Wells	86	89
GWL Monitoring Network	108	33
BBGM	4	43
C2VSim	112	100



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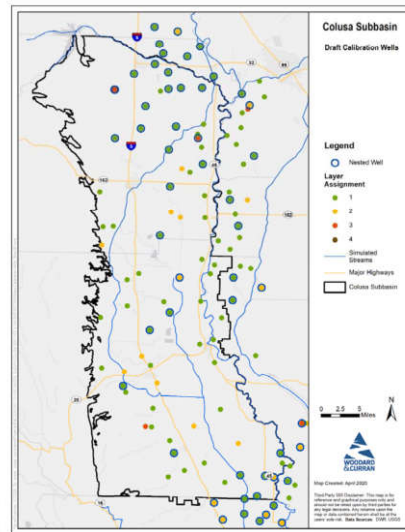
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Calibration Wells by Layer

- Assigned to Model Layer Based on Well Top/Bottom Perforations or Total Well Depth

Model Layer	Layer 1	Layer 2	Layer 3	Layer 4
# Wells	135	66	45	1



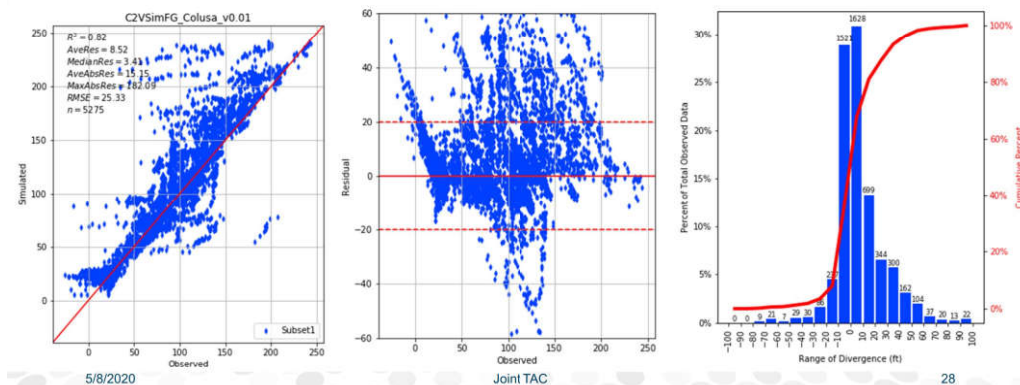
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Calibration Statistics

- Statistics Based on Spring Observations (March, April, or May, 1985-2015) for All 247 Wells (Includes Wells outside Colusa Subbasin)

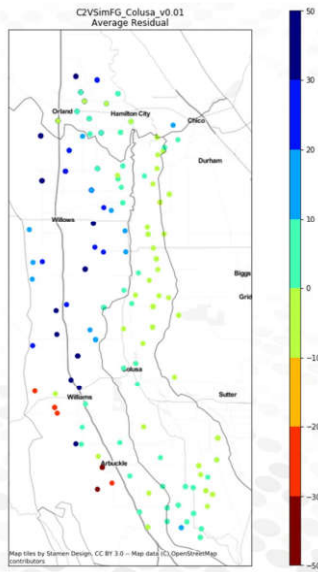


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Calibration Residuals



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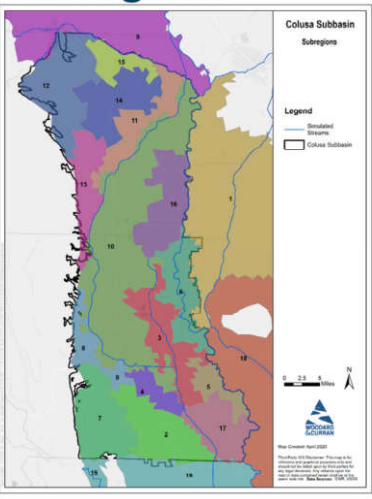
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Colusa Subbasin Model Subregions

Subregion ID	Subregion Name
1	Butte
2	CCWD
3	Colusa Drain Maxwell
4	Colusa Groundwater South
5	Colusa GW Southeast
6	Colusa Sac River
7	Colusa Southwest
8	Colusa Westside Area
9	Corning
10	GCID
11	Glenn GW Middle
12	Glenn Northwest
13	Glen Westside
14	OAWD
15	OUWUA
16	Prov Prince Willow
17	RD108
18	Sutter
19	Yolo

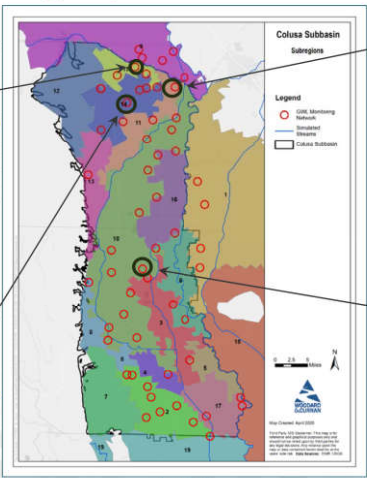
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Example Hydrographs

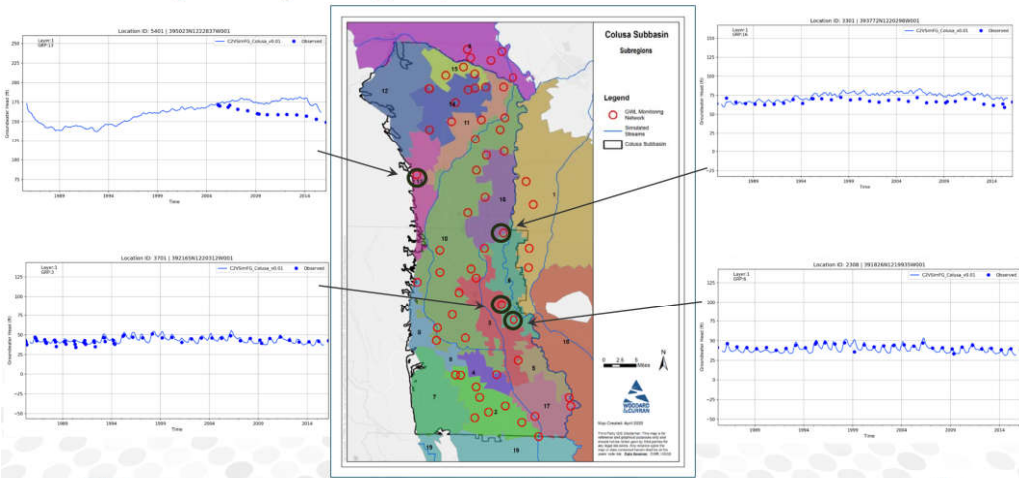


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Example Hydrographs

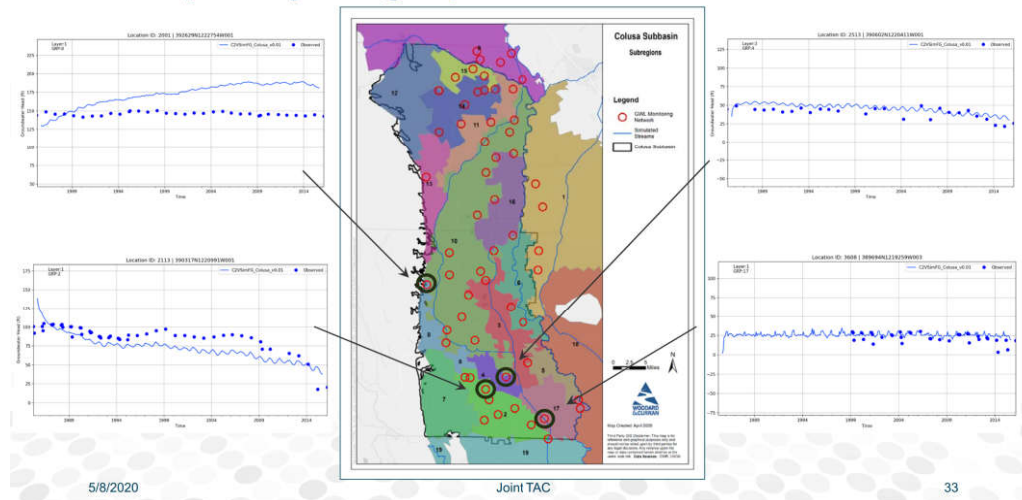


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Example Hydrographs



Google Earth Demo (Time Allowing)



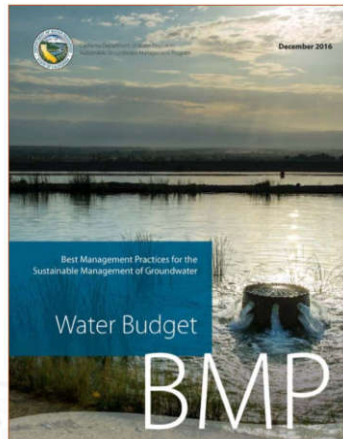
Future Water Budget Assumptions (Potential Action Item)

Why Develop Future Water Budgets?

- Regulatory Requirement (but they do have value)
- Help Understand Potential Changes and Uncertainty in the Future
- Support Development of Sustainable Management Criteria
- Support Evaluation of Projects and Management Actions
- Considerations
 - Not a Certainty, Rather an Uncertainty
 - Undesirable Results Based on Actual Monitoring
 - Opportunity/Requirement for Adaptive Management over Time

Projected (“Future”) Water Budget Components

- 50 Years Historical Hydrology (precipitation, evapotranspiration, streamflow)
- Most Recent Land Use and Evapotranspiration
- Climate Change
- Most Recent Water Supply Information
- Projected Population and Per-Capita Urban Water Use



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Proposed Approach

- Refined C2VSimFG Model
- 50 Years of Hydrology from 1966 – 2015
- Recent Historical Land Use Mapped to “Normal” vs. Shasta Critical Years
- DWR 2030 and 2070 Central Tendency Climate Scenarios
- Water Supply from Recent Historical Use
- Urban Demands from Projected Population and Per-Capita Use

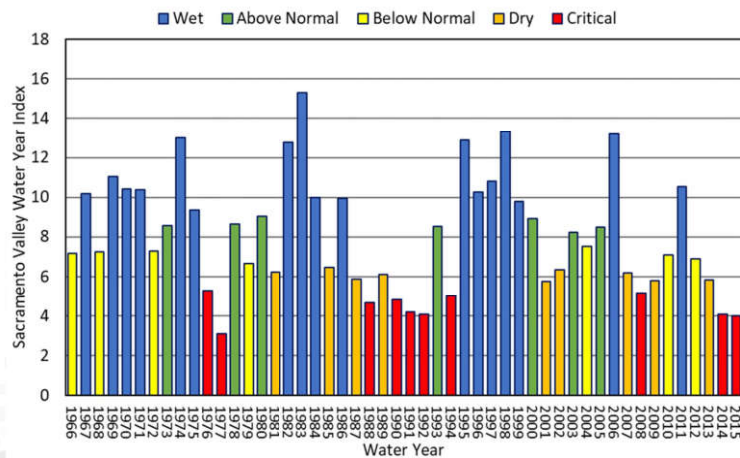
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Historical Hydrology

- Sacramento Valley Index
 - 1906 to 2018
avg. = 8.1
 - 1966 to 2015
avg. = 8.0
- Precipitation
 - 1906 to 2018
avg. = 18.0 in
 - 1966 to 2015
avg. = 19.4 in



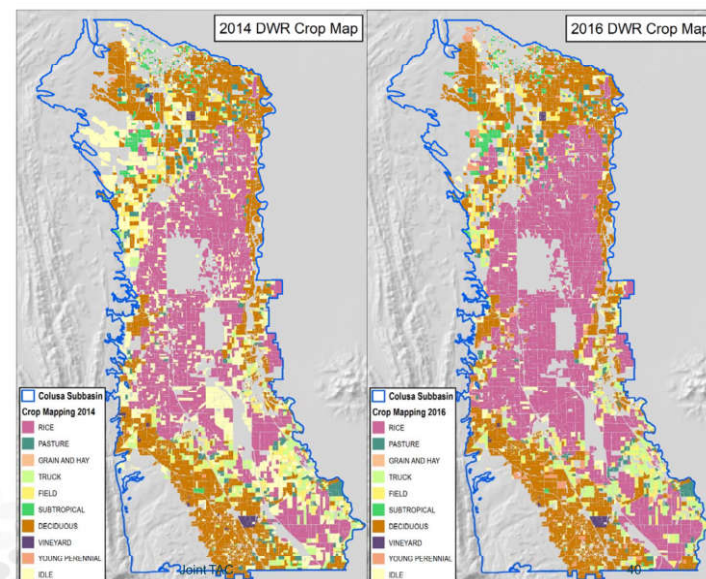
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Land Use

- DWR Land Use Mapping
- Curtailment Year
 - 2014
- Non-Curtailment Year
 - 2016
 - (2018 if available)

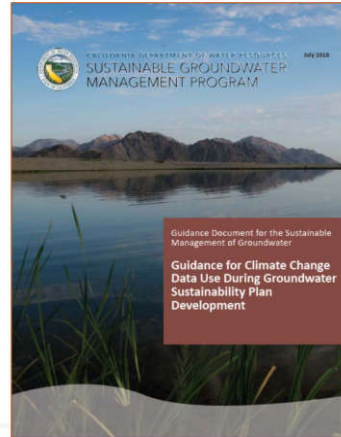


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Climate Change

- Four Scenarios from DWR
 - 2030 Central Tendency
 - 2070 Central Tendency
 - 2070 Drier with Extreme Warming
 - 2070 Wetter with Moderate Warming
- Used to Modify Historical Hydrology and Surface Water Supplies
- Select up to Two Scenarios



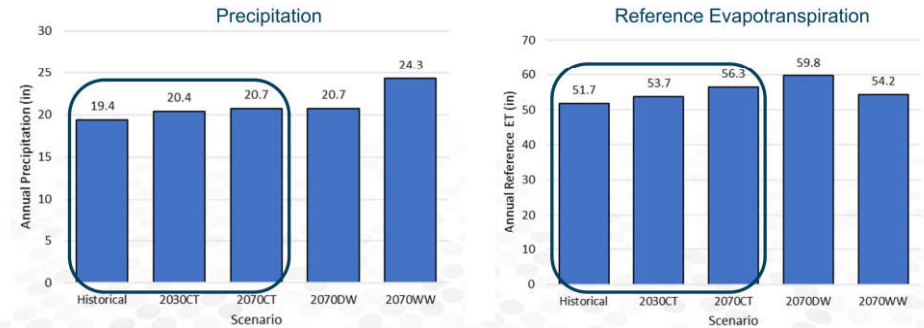
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Valley Floor Climate Change Effects

- Annual Average Precipitation and Reference Evapotranspiration



2030CT – 2030 Central Tendency
2070CT – 2070 Central Tendency

2070DW – 2070 Drier with Extreme Warming
2070WW – 2070 Wetter with Moderate Warming

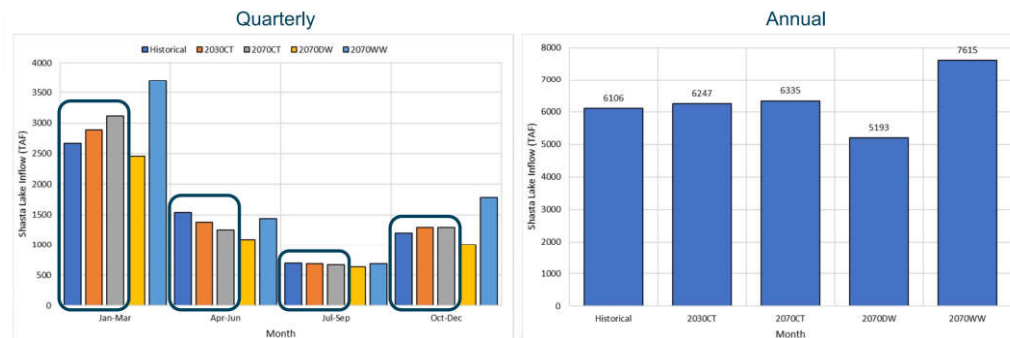
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Lake Shasta Climate Change Effects

- Quarterly and Annual Reservoir Inflows



2030CT – 2030 Central Tendency
2070CT – 2070 Central Tendency

2070DW – 2070 Drier with Extreme Warming
2070WW – 2070 Wetter with Moderate Warming

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Climate Change Scenarios in Other GSPs

- Performed Inventory of Scenarios Selected in 12 Other GSPs
- Observations
 - Almost all rely solely on central tendency scenarios
 - Most only including one scenario

2030CT – 2030 Central Tendency
2070CT – 2070 Central Tendency
2070DW – 2070 Drier with Extreme Warming
2070WW – 2070 Wetter with Moderate Warming

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Basin	Climate Change Scenario(s)
Butte	2030CT, 2070CT
Chowchilla	2030CT
Delta-Mendota	2030CT, 2070CT
East Kaweah	2030CT, 2070CT
Eastern San Joaquin	2070CT
Kings	2030CT, 2070CT
Madera	2030CT
Merced	2070CT
North Yuba	2030CT
South Yuba	2030CT
Westside	2030CT
Yolo	2030CT, 2070CT, 2070DW, 2070WW

Surface Water Supplies

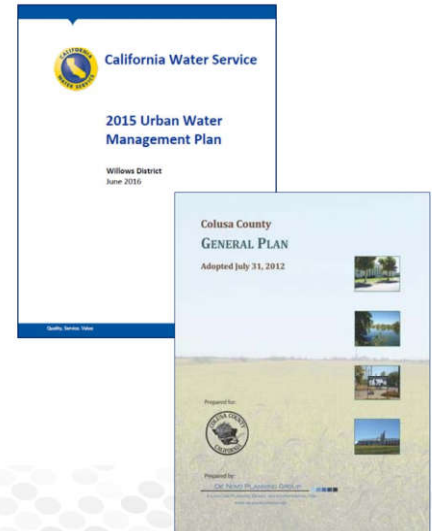
- Largely Dependent upon Lake Shasta Annual Inflows
- Proposed Approach
 - Map/Correlate Recent Diversions Based on Lake Shasta Inflows
 - “Normal” (i.e. Non-Shasta Critical) Years
 - Shasta Critical Years
 - Consult with SW Suppliers
- Additional Details to be Worked Out



Source: USBR

Urban Demands

- Small Portion of Colusa Subbasin Groundwater Demands
- Population Projections
 - CA Department of Finance
 - Urban Water Management Plans
- Per-Capita Water Use
 - Urban Water Management Plans
- Urban Land Use
 - County General Plans



Proposed Action (Agenda Item 4.c)

The TAC recommends that the CGA and GGA boards approve the consultant team to proceed with development of proposed projected water budget scenarios for initial GSP development, recognizing that further refinements may be made within the proposed general framework with TAC and stakeholder input.

Approaches to Minimum Thresholds and Measurable Objectives (Potential Action Item)

Approaches for Minimum Thresholds and Measurable Objectives

- Content to be Added

Proposed Action (Agenda Item 4.d)

The TAC recommends that the CGA and GGA boards approve the consultant team to proceed with initial development of MTs and MOs, which will be refined through iterative discussions and supporting technical analysis.

Additional Discussion