

EKI TECHNICAL PRESENTATION #37

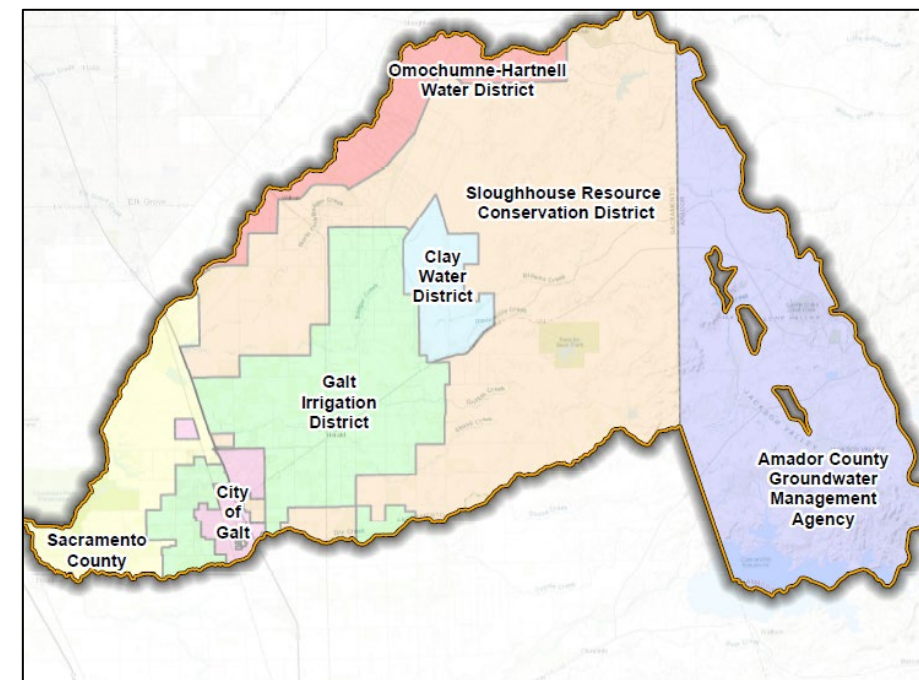
COSUMNES SUBBASIN GSP IMPLEMENTATION

23 JANUARY 2023

COSUMNES GROUNDWATER AUTHORITY BOARD OF DIRECTORS MEETING

OUTLINE

- EKI Re-Introductions
- SGMA Planning and Implementation in the Cosumnes Subbasin (2017-2022)
- Water Year (WY) 2022 Annual Report
 - Timeline
 - Information Received
 - Monitoring Update
 - Report Outline and Preparation
 - Next steps



EKI RE-INTRODUCTION



Anona Dutton, PG, CHg
Vice President

- ✓ Leader in California water issues
- ✓ Extensive experience in groundwater and surface water data and policy (e.g. SGMA), including in the Cosumnes since 2017
- ✓ Led technical communication and coordination efforts for the Cosumnes GSP
- ✓ Provides on-going strategic guidance



John Fio
Principal Hydrogeologist

- ✓ Project Manger for Cosumnes work efforts
- ✓ Led development of the Cosumnes GSP
- ✓ Extensive experience in groundwater-flow, chemical transport and groundwater surface-water interaction modeling
- ✓ Experienced in basin-wide water planning and data analysis



Kristyn Lindhart
Hydrogeologist

- ✓ Deputy PM for Cosumnes project
- ✓ Supported development of the Cosumnes GSP
- ✓ Grant initiative leader
- ✓ Experienced in water supply assessments and planning
- ✓ Farming background

8/2017 – 9/2018

Contracted with Water Forum as a Strategic Technical Advisor and for Grant application technical support

9/2018 – 2/2022

Contracted with Sacramento County for Groundwater Sustainability Plan (GSP) development

10/2021 – 3/2022

Contracted with Cosumnes Groundwater Authority (CGA) for WY 2021 Annual Report development

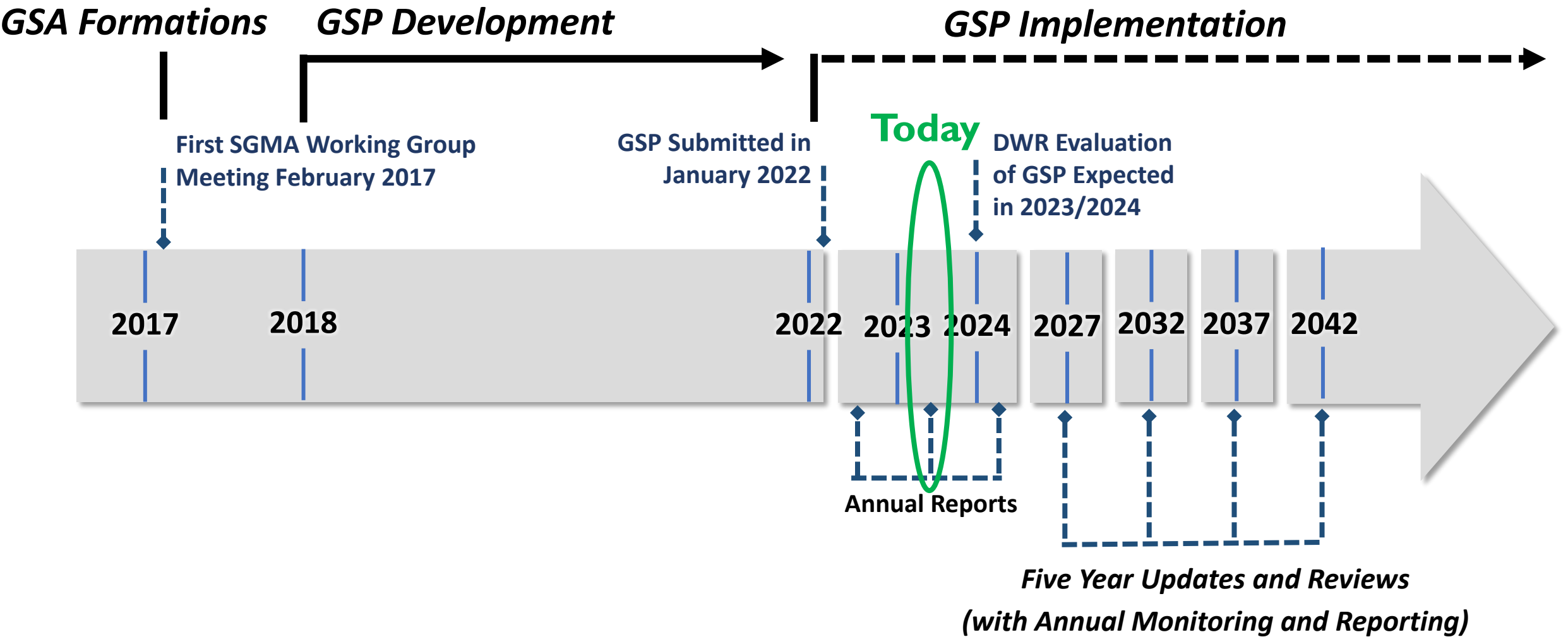
9/2022 – 12/2022

Contracted with CGA for Projects & Management Actions (PMAs)/Grant application support

10/2022 – Current

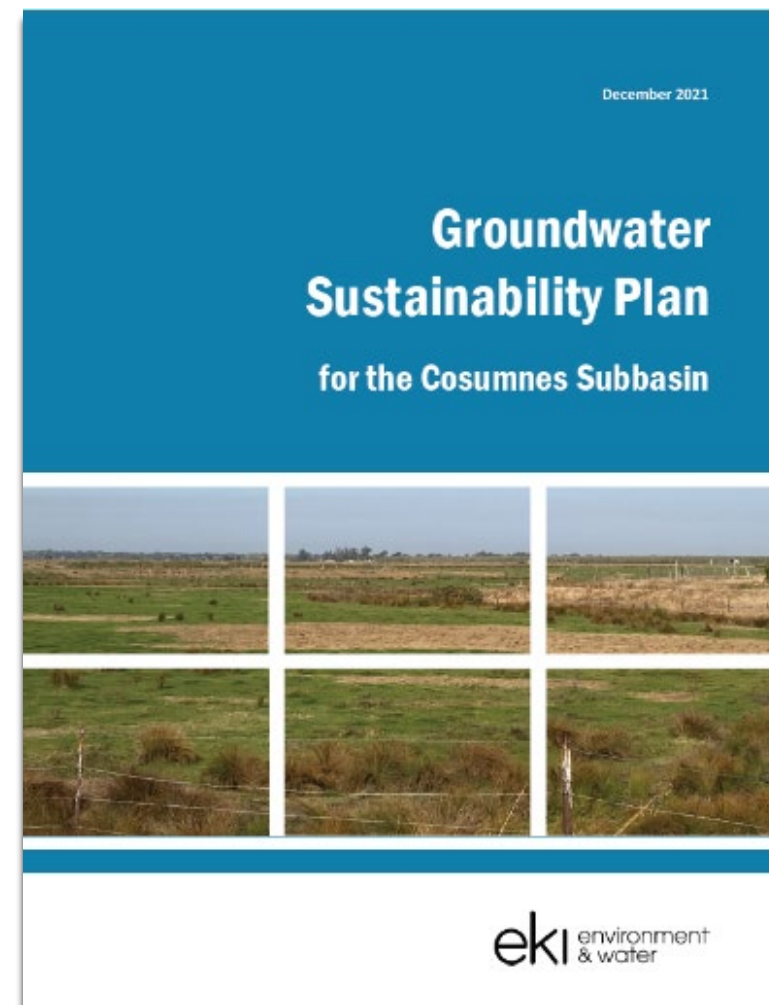
Contracted with CGA for GSP implementation support (includes preparing WY 2022 Annual Report)

EVOLUTION OF SGMA IN THE COSUMNES SUBBASIN



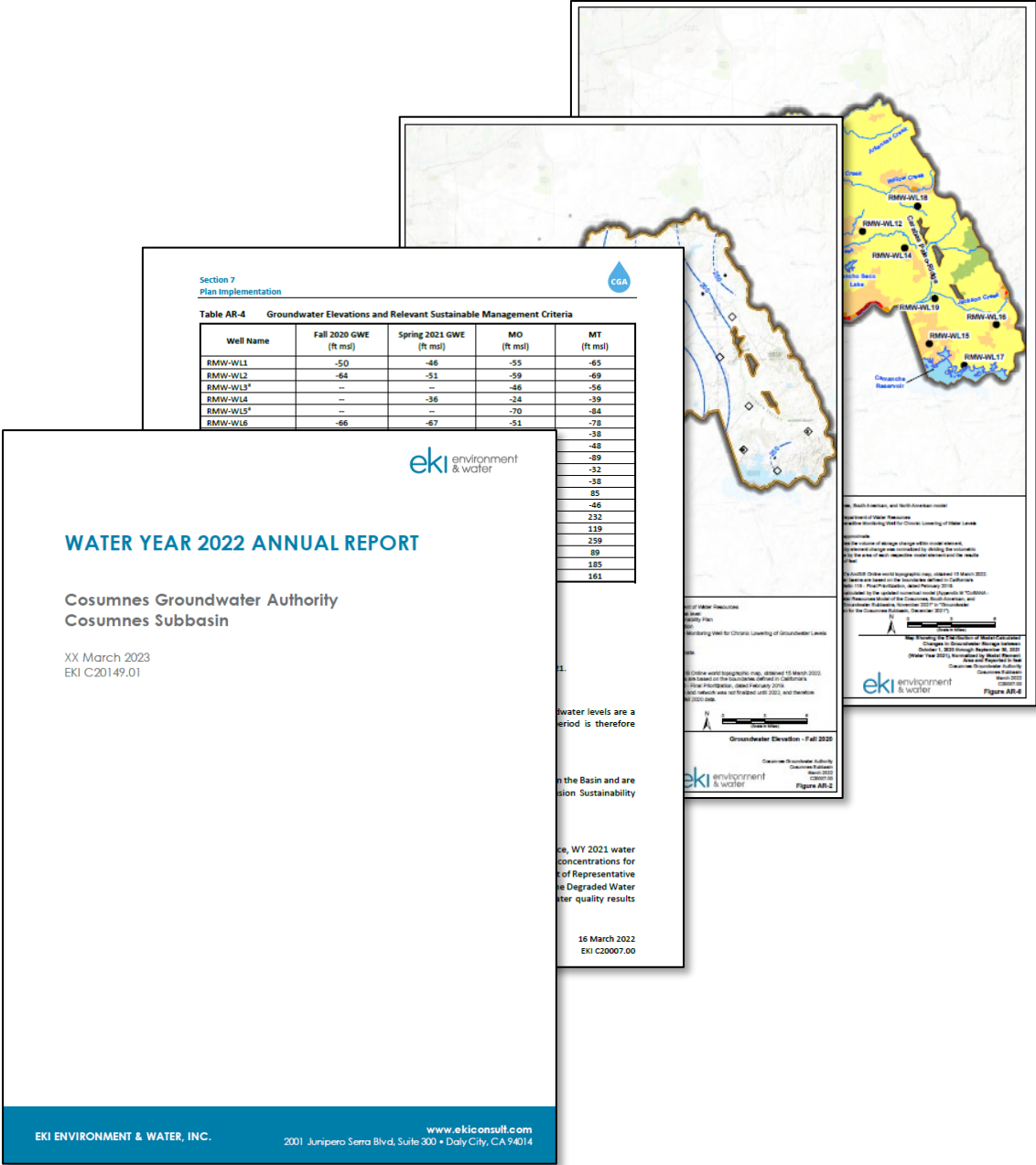
COSUMNES SUBBASIN SUCCESSES TO DATE

- ✓ Secured Prop 1 and Prop 68 grant funding to prepare Groundwater Sustainability Plan (GSP).
- ✓ First TSS wells installed in California.
- ✓ Developed basin-wide Data Management System (DMS).
- ✓ Extensive Stakeholder outreach: Technical Workshops (Groundwater Classroom & Geophysical Workshop); Stakeholder Surveys (received more than 210 responses); Created Surface Water Advisory Group (SWAG) and hosted 4 meetings; Hosted 8 Public Workshops; Monthly Working Group meetings open to the public, 36 technical presentations.
- ✓ Developed projects and management actions (PMA), long-term governance, outreach & engagement, and citizen advisory committees.
- ✓ Conducted Basin-wide groundwater dependent ecosystem (GDE), geophysical, and isotopic surveys.
- ✓ Designed SGMA compliant monitoring networks for groundwater levels, -storage, -water quality, land subsidence, and interconnected surface water sustainability indicators.
- ✓ Constructed Cosumnes Subbasin input data sets for integration into the regional groundwater surface-water model (CoSANA model).
- ✓ Prepared single GSP for the Basin and submitted to DWR.
- ✓ Prepared first Annual Report and submitted to DWR.
- ✓ Submitted SGM Implementation Round 2 grant application to fund 5 projects.

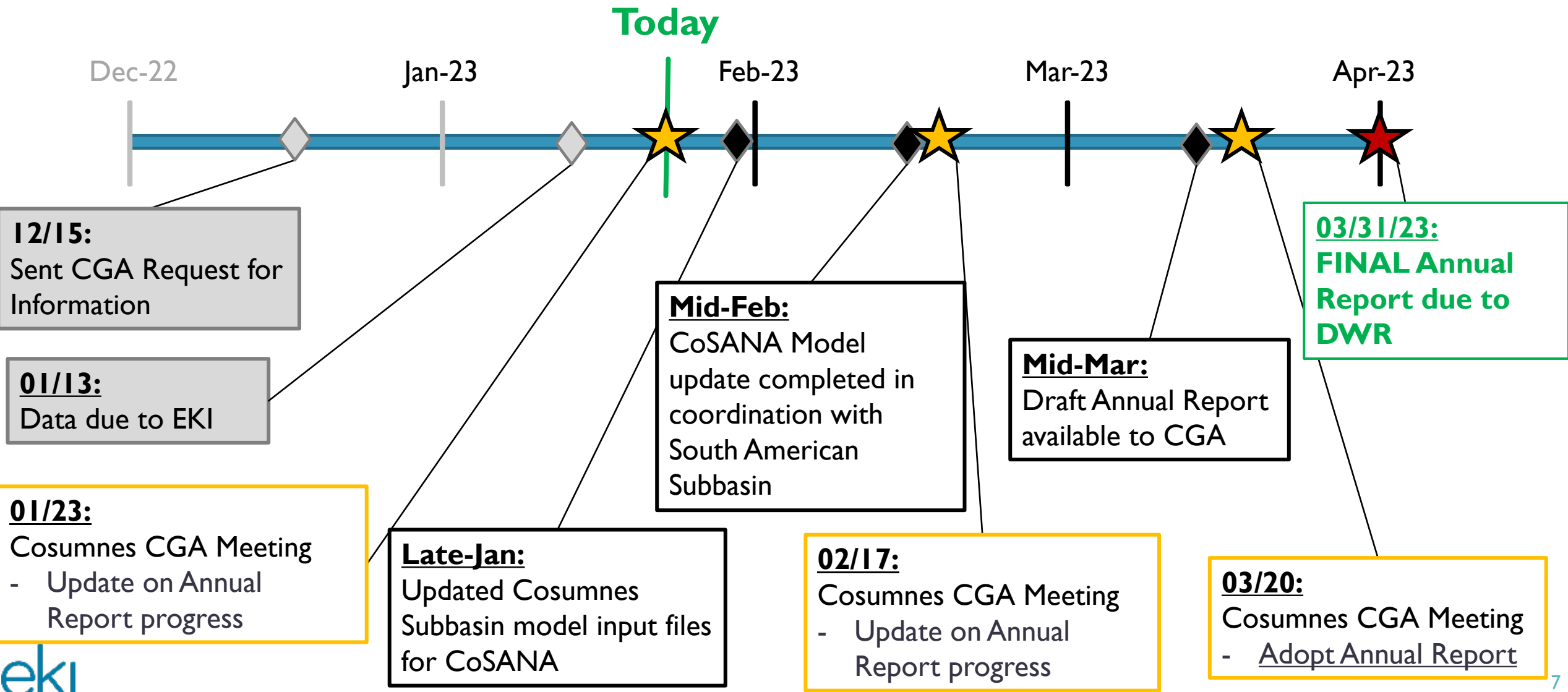


WY 2022 ANNUAL REPORT

- “Each Agency shall submit an annual report to the Department by April 1 of each year following the adoption of the Plan” § 356.2.
- Water Year 2022 Annual Report provides information on groundwater conditions and implementation of its GSP over the time period of 1 October 2021 through 30 September 2022

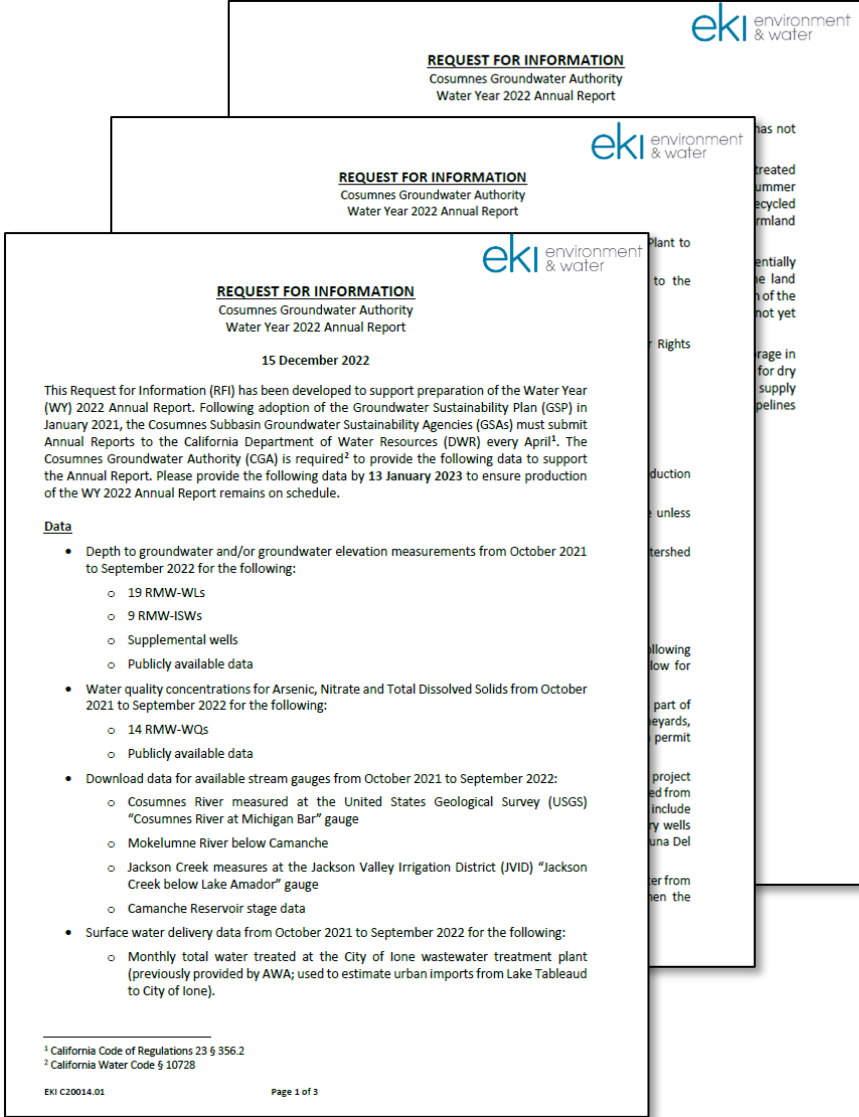


ANNUAL REPORT 2022- 3 MONTH LOOK AHEAD














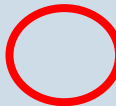


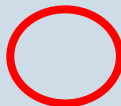
ANNUAL REPORT – REQUEST FOR INFORMATION





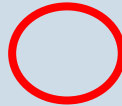
- Request for Information sent to Cosumnes Groundwater Authority (CGA) in December
- Data to support the 2022 Annual Report (1 October 2021 through 30 September 2022)
 - Groundwater elevation
 - Water quality
 - Stream gauge
 - Surface water delivery
 - Stream diversions
 - Pumping data



DATA RECEIVED TO DATE

Requested Data	
Groundwater Elevation Data	
	RMW-WL*
	RMW-ISW*
	Supplemental Wells
	Publicly available data
Water Quality Data	
	RMW-WQ*
	Publicly available data
Stream Gauge Data	
	Cosumnes River
	Mokelumne River below Camanche
	Jackson Creek*
	Camanche Reservoir Stage

Requested Data	
Surface Water Delivery Data	
	City of lone wastewater treatment plant
	Water deliveries from Castle Oaks Water Reclamation Plant to the Castle Oaks Golf Course
	Agricultural diversions from the Folsom South Canal (FSC)
Stream Diversions	
	Reported stream diversions downloaded from the Electronic Water Rights Information Management System (eWRIMs)
	Monthly Cosumnes River diversion by Rancho Murieta

Requested Data	
Pumping Data	
	Public Water Systems
	City of Galt
	AWA – Camanche Village
	AWA – Camanche North Shore
GSP Implementation Text	
	Updates on Projects and Management Actions

Note: * denotes only partial data received

- Received data is being processed and QA/QC'd

MONITORING SUMMARY

- Monitoring is a fundamental component of SGMA and measures the progress towards achieving the Basin’s sustainability goal
- Measurements were not completed in all Representative Monitoring Wells (RMWs)
 - Access limitations
 - Limited communication
 - Pre-existing Monitoring programs terminated (California Groundwater Observatory)
- Recommendations for upcoming Spring sampling event:
 - Review access/monitoring agreements prior to sampling
 - Increase communication between samplers and GSAs including those conducting their own sampling
 - Conduct sampling event no later than the mid-point of the monitoring period to allow time for follow up when needed
 - Utilize monitoring checklist to ensure all wells are visited and sampled
- Consider developing a policy to support mutual accountability and complete reporting

	Fall 2021	Spring 2022	Annual
RMW-WL	68% sampled (13 of 19 wells)	68% sampled (13 of 19 wells)	--
RMW-ISW	55% sampled (5 of 9 wells)	44% sampled (4 of 9 wells)	--
RMW-WQ	--	--	50% sampled (7 of 14 wells)

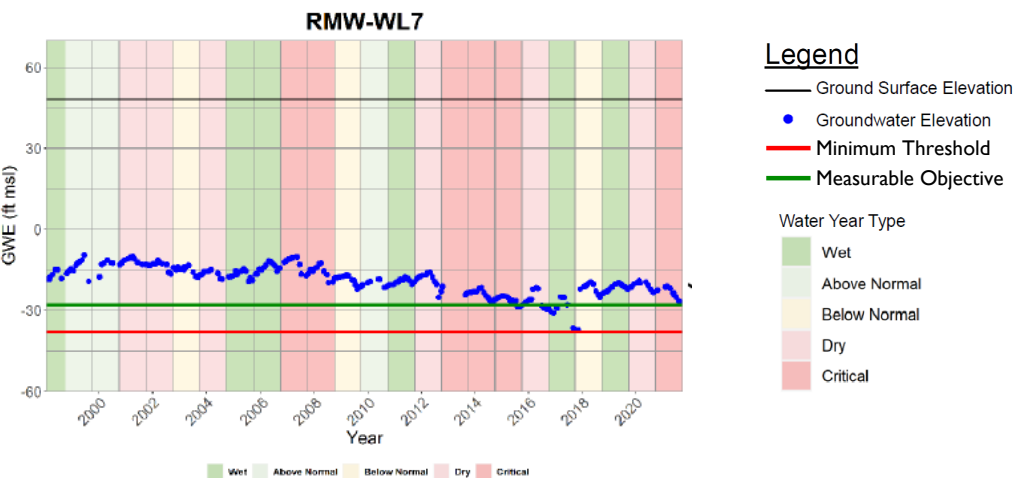
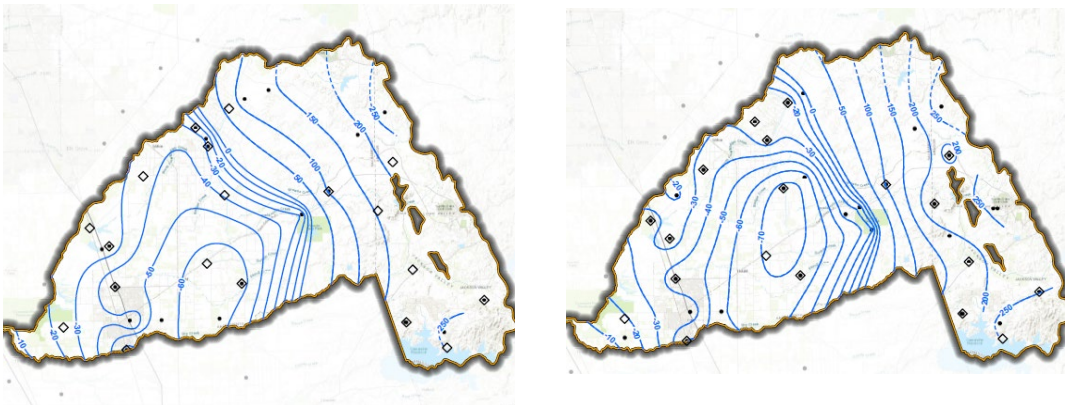
Lack of sampling consistency and completeness may become a significant compliance issue for the Basin!

ANNUAL REPORT - BREAKDOWN

Examples from Cosumnes Water Year 2021 Annual Report

Water Year 2022 Annual Report Chapters

- 1. General Information
- 2. Groundwater Elevation Data: Contour Maps & Hydrographs
- 3. Groundwater Extractions: Summary of metered & estimated extraction data
- 4. Surface Water Supply: Summary of imports and stream diversions



NEXT STEPS

- GSAs to provide all requested data (~~1/13/2023~~ → 1/27/2023)
- Complete QA/QC and evaluation of data received
- Extract and summarize water budget and groundwater level information from updated model
- Draft Annual Report text, tables and figures
- Submit Draft Report to GSAs for review (3/20)
- Finalize Report and Submit to DWR (3/31)

THE END