



Meeting Summary: ECC GSP

East Contra Costa GSP Working Group and Communications Committee Meeting

When: Wednesday February 10, 2021, 10:00 a.m. to 11:40 a.m.

Where: Zoom call

Attendees: Bill Brewster, Dan Muelrath, Debbie Cannon, Eric Brennan, Faithe Lovelace, James Wolfe, Ryan Jill Mosley, Lisa Beutler, Marilyn Tiernan, Nacho Mendoza, Nick Janes, Paul Seger, Ryan Hernandez, Tom Elson, Tracy Shearer, Vicki Kretsinger

ACTION ITEMS February 2021

ITEM	OWNER	DUE
1. Send comments for Section 6 to LSCE.	Work Group Members	February 25
2. GSAs provide outreach updates to Lisa Beutler	All Working Group Members	Monthly
3. LSCE to send monthly newsletter update to Lisa to add to outreach packet	Debbie	February 15
4. Request lead time needed by agencies to adopt the final GSP in November 2021.	Debbie	March 10

Meeting Summary

1. Lisa provided a summary of outreach and communication progress.
 - a. GSA outreach updates should be submitted quarterly.
 - b. Board meetings where GSP work is discussed is considered outreach.
 - c. Outreach can be documented at the following link:
https://www.surveymonkey.com/r/ECC_GSP_Coms
2. Ryan informed the group that the EIR for the Byron Airport has still not been released. They are finalizing the traffic portion and are expecting it to be released at the end of February.
 - a. Group asked if the EIR will include a water supply assessment and Ryan confirmed there will be a water supply assessment.
3. Debbie reviewed the schedule for adopting and finalizing the GSP.
 - a. Ryan requested the GSP be sent to the board before December as he is concerned that the timing will be difficult for his board members to meet. He will get back to the group regarding how much time he thinks his board will need to review the GSP package.
 - b. Dan commented that the group should consider hosting GSP board specific meetings to reduce last minute issues, especially for bigger agencies that have responsibilities other than solely water supply.
4. Bill Brewster, DWR, provided the following updates:
 - a. On February 18th from 10:30 am to 12 noon, DWR will conduct a webinar to provide an update on GSP evaluations.
 - b. The SGMA group is working on how to transition from CASGEM to a GSP data interface.
 - c. Bulletin 118 is still not ready for release.

5. Eric reported that Brentwood had received payments for progress reports 1 through 7 and PR8 has been submitted to DWR.
 - a. Eric believes payment discrepancies with CCWD should be resolved going forward.
6. Dan asked the group whether more frequent monitoring by DWD would potentially affect other GSAs.
 - a. Vicki responded that the GSP is charged with the basin-wide monitoring and subbasin sustainability. Each GSA can implement their own monitoring policies/programs to meet local needs.
7. Dan raised a question about monitoring for sea water intrusion.
 - a. Tom reminded the group that sea water intrusion was not considered as a sustainability indicator due to the lack of mechanism and no historical occurrence. However, salinity is a key monitoring constituent for water quality degradation and the GSP may be updated if a direct connection between baywater and groundwater is identified in the future.
8. New monitoring well locations:
 - a. Paul asked about the location of the new Antioch monitoring well in relation to the intake and discharge points of Antioch desalination plant.
 - b. Tracy let the group know the new Antioch well will be installed closer to outbuildings rather than in the open parking lot as inferred in the PowerPoint presentation.
 - i. Tom indicated that final siting would be conducted in a field meeting to ensure that various criteria, including security and access, are met.
9. Tom's presentation covered Section 6 Monitoring Networks, new monitoring well installations, and introductions to Sustainable Management Criteria and Projects and Management Actions (Sections 7 and 8, respectively). See attached PowerPoint Presentation.
10. Future meetings will center on input solicited from GSAs on:
 - a. Representative monitoring wells selection.
 - b. Definition of undesirable results for the ECC Subbasin.
 - c. Potential projects and management actions for the next 20 years.
 - d. Allocation of GSP costs for the next 20 years.
11. Ryan and Dan suggested more meetings/communication in the next few months for GSAs to provide feedback.
12. Tom reminded the group that the GSP will surely be modified in the future as basin management adapts to new information provided through monitoring networks with the goal of complying with SGMA's sustainability requirements.
13. Next meetings:
 - a. Wednesday February 25, 10 am to 11 am ECC Communications Meeting.
 - b. Wednesday March 10th, 10 am to 11:30 am, ECC GSP Working Group.



Agenda: ECC GSP
East Contra Costa GSP Working Group and
Communications Committee Meeting
When: Wednesday February 10, 2021, 10:00 a.m. to 11:30 a.m.
Where: Zoom call

Purpose

1. Outreach & Communication-GSAs submit outreach since August 2020
2. Presentation: GSP Section 6 Monitoring Network and Section 7 Sustainable Management Criteria

Agenda

#	Item	Presenter
1.	<p>GSP Outreach & Communication:</p> <ul style="list-style-type: none"> • GSA outreach documentation-submit to Stantec • Comments on Section 1, 2, 3, and 4 and survey statistics • DWR extended contract with Stantec through 2021 • Communications meeting Wed. Feb. 24, 10 am to discuss next steps • Byron Airport development status • Website-updates 	<p>Lisa Lisa Lisa Lisa Ryan Jill</p>
2.	<p>GSP Updates</p> <ul style="list-style-type: none"> • Draft Section 5 Water Budget and Groundwater Model-to GSAs April/May • Schedule (see Table 1 below): <ul style="list-style-type: none"> ○ Aim to have all Boards adopt GSP in November/December 2021 ○ Is 3 weeks prior to meeting (mid-October) sufficient for Board package? • Presentation: <ul style="list-style-type: none"> ○ Draft Section 6-Monitoring Network and DMS; out for GSA review. Comments due back by February 25. ○ New Monitoring Well Siting ○ Draft Section 7-Sustainable Management Criteria ○ Draft Section 8-Projects and Management Actions-request input from GSAs 	<p>Debbie Debbie Tom Tom</p>
3.	<p>Grants</p> <ul style="list-style-type: none"> • Status of Prop 1 and 68 Grant funds. COB signed PR8 (3rd quarter 2020) on 12/1/2020. Payment received? • PR9 (4th quarter 2020): submitted January 29. Cost share requirement for the DWR grant has been met through GSAs and LSCE time but will continue to request hours. 	<p>Eric LSCE</p>
4.	<p>DWR Updates</p>	<p>Bill</p>

#	Item	Presenter
5.	<p>Questions/Comments?</p> <p>Next GSP Working Group Conference Call: Wed. March 10th 10-11:30am</p>	

Table 1 Tentative GSP Schedule (2/8/2021)

GSP Section	To GSAs for review	Post to ECC Website	Public Comment Period/ Due Date
1. Introduction to East Contra Costa GSP			
2. Plan Area		April 2020	April to July 2020
3. Basin Setting		October 2020	10/30/2020 to 1/15/2021
4. Historical, Current, and Projected Water Supply		November 2020	11/2020 to 1/15/2021
5. Water Budget	April/May 2021	June 2021	6/1/2021 to 7/1/2021
6. Monitoring Network, Data Management System and Reporting	Jan 26-Feb 25 2021	March 2021	3/1/2021 to 4/1/2021
7. Sustainable Management Criteria	Ap 1-Ap 30 2021	May 15, 2021 ^a	5/15/2021 to 6/15/2021
8. Projects and Management Actions	April 25-May 25	June 5 ^a	6/5 to 7/5/2021
9. Plan Implementation			
10. References	May 25-June 25, 2021	July 5, 2021 ^a	7/15/2021 to 8/15/2021
11. Notice and Communications			
90 Day Notice of Intent to Adopt			7/1/2021 to 9/28/2021
Public Draft GSP with Public Meeting (all public comments due by 9/30/2021)			9/1/2021 to 9/30/2021
Submit Board package with final GSP			10/15/2021
Board adoption by each GSA and "Public hearing" ^d			11/16/2021 or Dec
Submit to DWR			Final date 1/31/2022

Blue text indicates document has been submitted.

a. Public meetings: 1) April/May 2021 (monitoring network, SMC, Projects and Management Actions, Plan Implementation); 2) July/August 2021-Entire GSP.

b. All GSAs adopt the same GSP. The GSP cannot be changed after the first GSA adoption. The Board adoption/public hearing will be after final public comments are due (10/15/2021), any comments on the GSP after this date can be made to DWR.

ACTION ITEMS January 2021

ITEM	OWNER	DUE
1. LSCE to send draft of Section 6 for review and comment by work group.	Tom, Debbie, Faithe	Completed
2. Prepare an announcement that Sections 3 and 4 are available for public comment. This will be run in the newspaper, send to 100 on the interested parties list, GSAs will post on their websites.	Ryan	Continuation from November
3. Contact Stantec re: public Survey Monkey statistics	LSCE	February 10
4. Investigate status of Byron Airport development status and email the group	Ryan	Continuation from

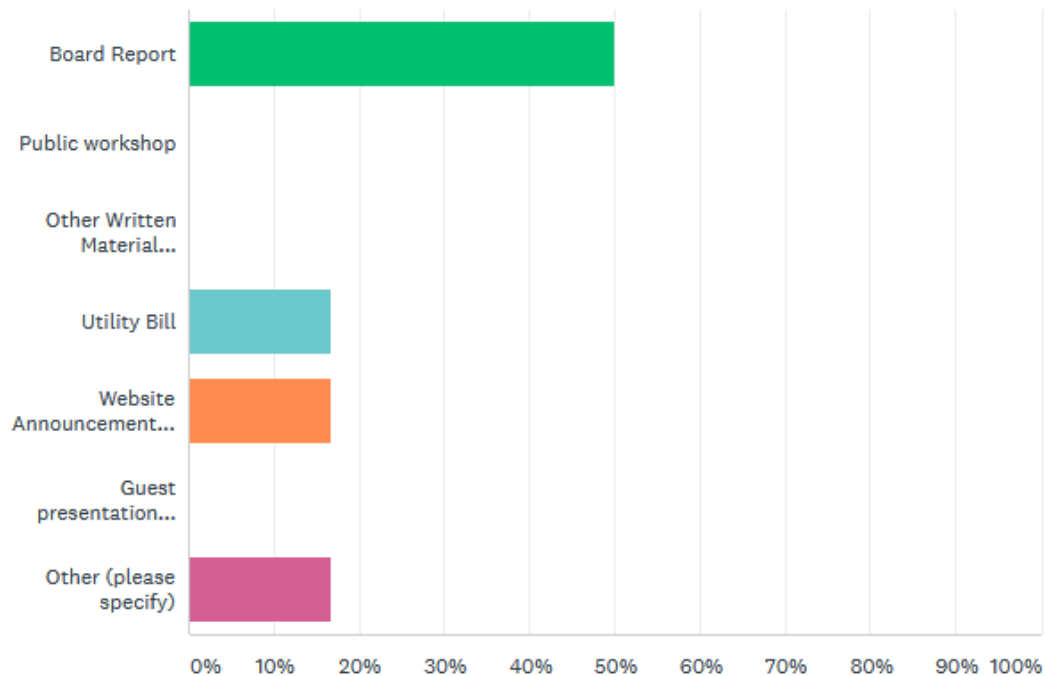
ITEM	OWNER	DUE
with the information.		November
5. Respond to request for cost sharing information (ref. January 6, 2021 email to Work Group re: Cost Share for ECC Grant Invoice).	Work Group members	Completed
6. Respond to monitoring questionnaire (ref. November 17, 2020 email to Work Group re: Monitoring Network).	Work Group members	Completed

ECC Outreach as of August 12, 2020

Answer Choices –	#	Notes
General GSP Outreach, Not GSA Specific	1	July 9, Public Workshop
Banta-Carbona ID	0	
Byron-Bethany ID	0	
City of Antioch	1	
City of Brentwood	10	
Contra Costa County	0	
Diablo Water District	4	
Discovery Bay Community Services District	2	
East Contra Costa Irrigation District	1	
Contra Costa Water District	0	
Other (please specify)	0	
TOTAL	18	

Outreach Method

Answered: 18 Skipped: 0

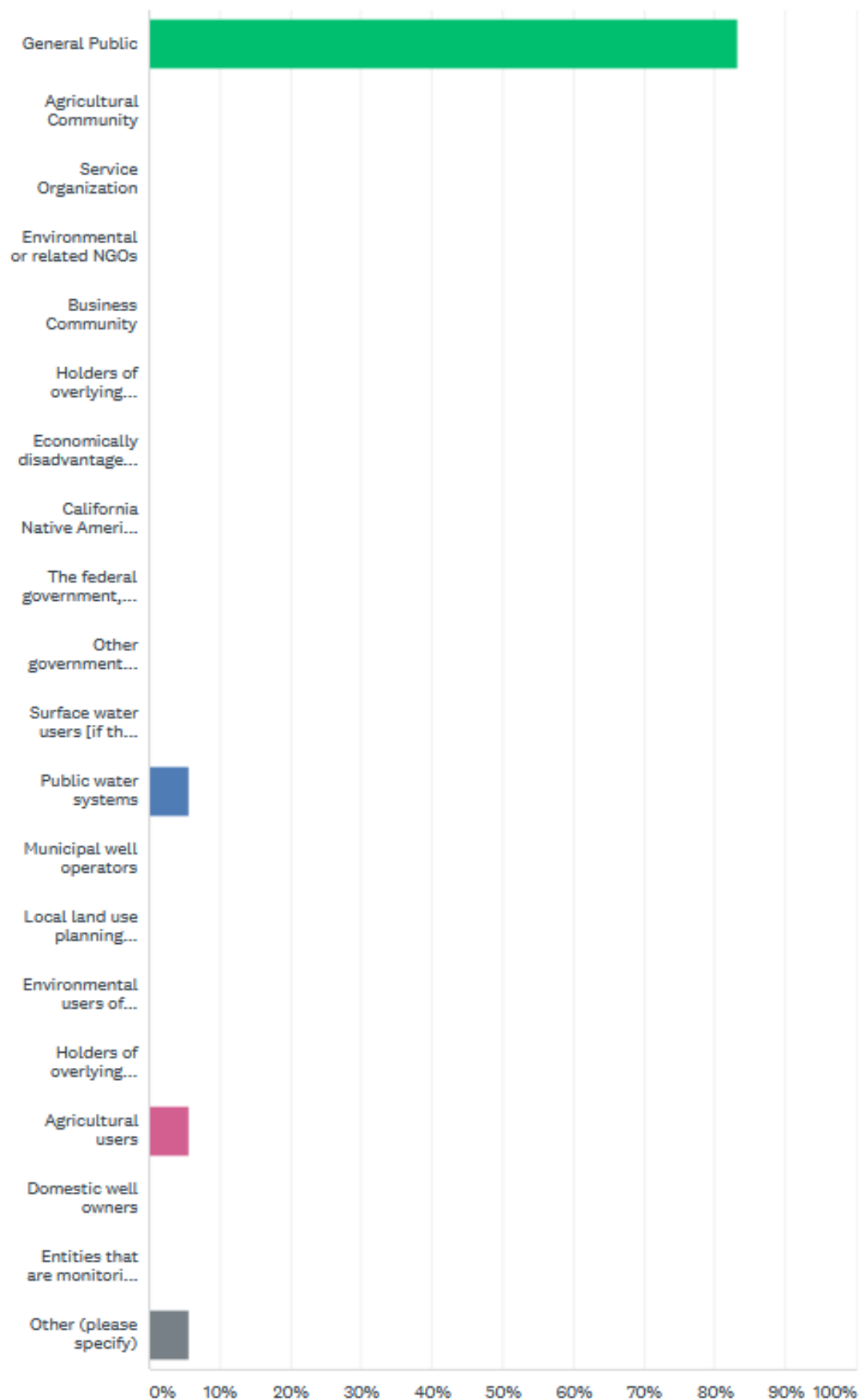


TOPICS COVERED

- GSP Chapters 1 & 2
- Recap of July's public workshop
- SGMA -GSP Update
- Citizen Comments to Draft Chapters 1 & 2
- BBM, Tracy Subbasin, ECCC Subbasin, GSP Development, San Joaquin Project Agreement
- Basin Boundary Modification (BBM), SGMA
- GSA MOU and Amendment
- BBM, East County MOU, SGMA, GSA, GSP
- SGMA, GSA, GSP, Prop 1 Grant
- SGMA, Proposed Basin Boundary Modification
- Info on how to receive more GSA/GSP/ SGMA info
- Amended and restated MOU
- SGMA, City's GSA Formation, GSP Development
- GSP Development Information
- Overview of GSAs and GSP
- Getting the public involved
- Prop 68 Letter of Support and GSP Update
- GSP development status and Amended MOU adoption

Type of Audience (Check all that Apply)

Answered: 18 Skipped: 0



Audience Number	
	8
	10
	10
	10
	25
	50
	50
	50
	50
	50
	50
	53
	300
	6200
	20,300
	4500
Total	31,716

East Contra Costa Subbasin GSP Development

Monitoring, Sustainable Management Criteria, Projects and Management Actions



Working Group Meeting

Tom Elson
LSCE

February 10, 2021



This slide presentation is for discussion purposes only. The content is preliminary and reflects work-in-progress on GSP development for the East Contra Costa Subbasin.

Presentation Topics

- **Discussion of key provisions in Section 6 Monitoring Networks (comments due by Feb 25)**
- **Status of Shallow Monitoring Well Installations**
- **Sustainable Management Criteria (Section 7)**
- **Projects and Management Actions (Section 8)**

Monitoring Networks – Key Provisions

- 1. There are more overall monitoring sites in areas with higher groundwater use**
- 2. Sustainable Management Criteria: Measurable Objectives (MOs) and Measurable Thresholds (MTs) only defined at representative network sites**
- 3. Monitoring frequency for groundwater levels is semi-annual**
 - a. GSAs use different frequencies in some wells for other purposes

Monitoring Networks – Key Provisions cont.

4. **Water quality monitoring is for “key constituents.”**
 - a. TDS, nitrate, chloride, arsenic, boron, mercury⁽¹⁾
5. **The monitoring frequency for water quality coincides with the public water system frequency in the Deep Zone and is annual for the Shallow Zone.**
6. **New shallow zone wells will have a conductivity sensor and data logger.**

(1) Marsh Creek watershed

Monitoring Network categories

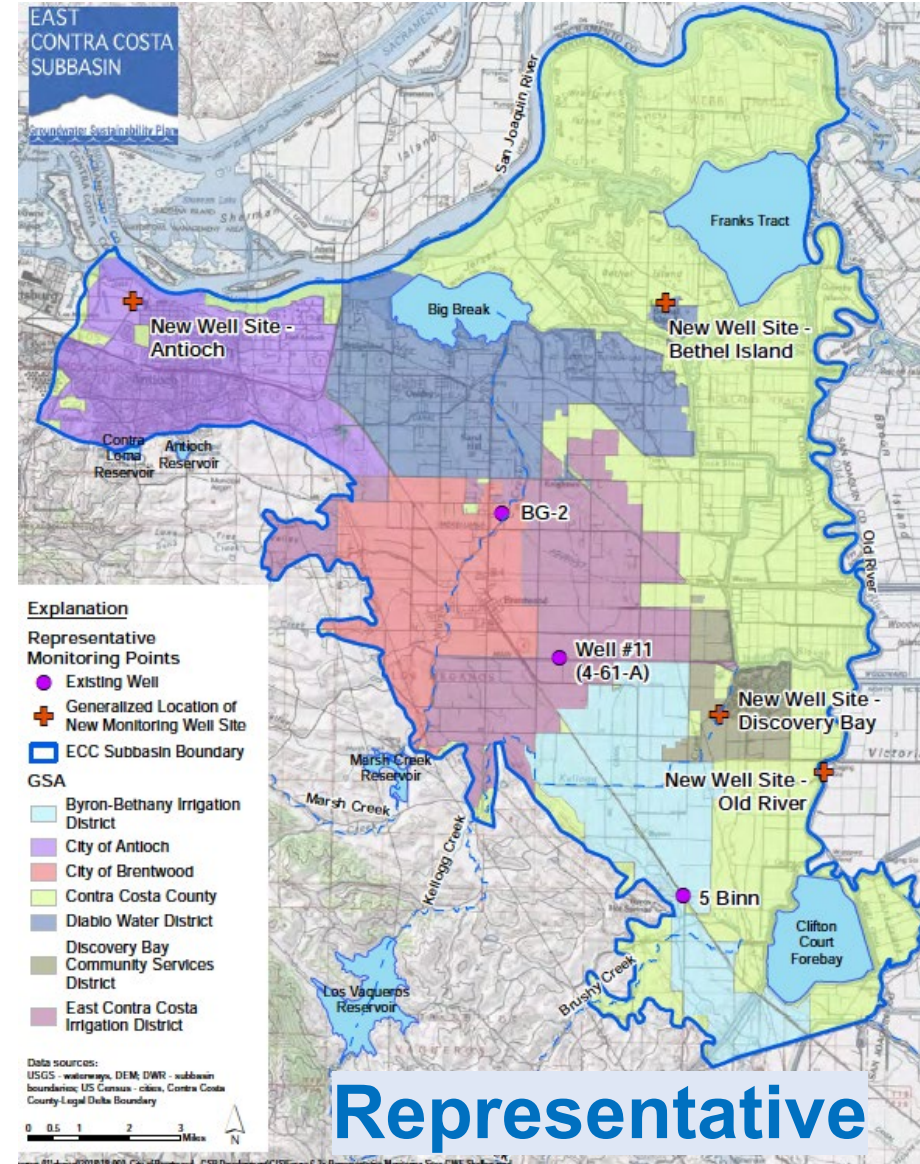
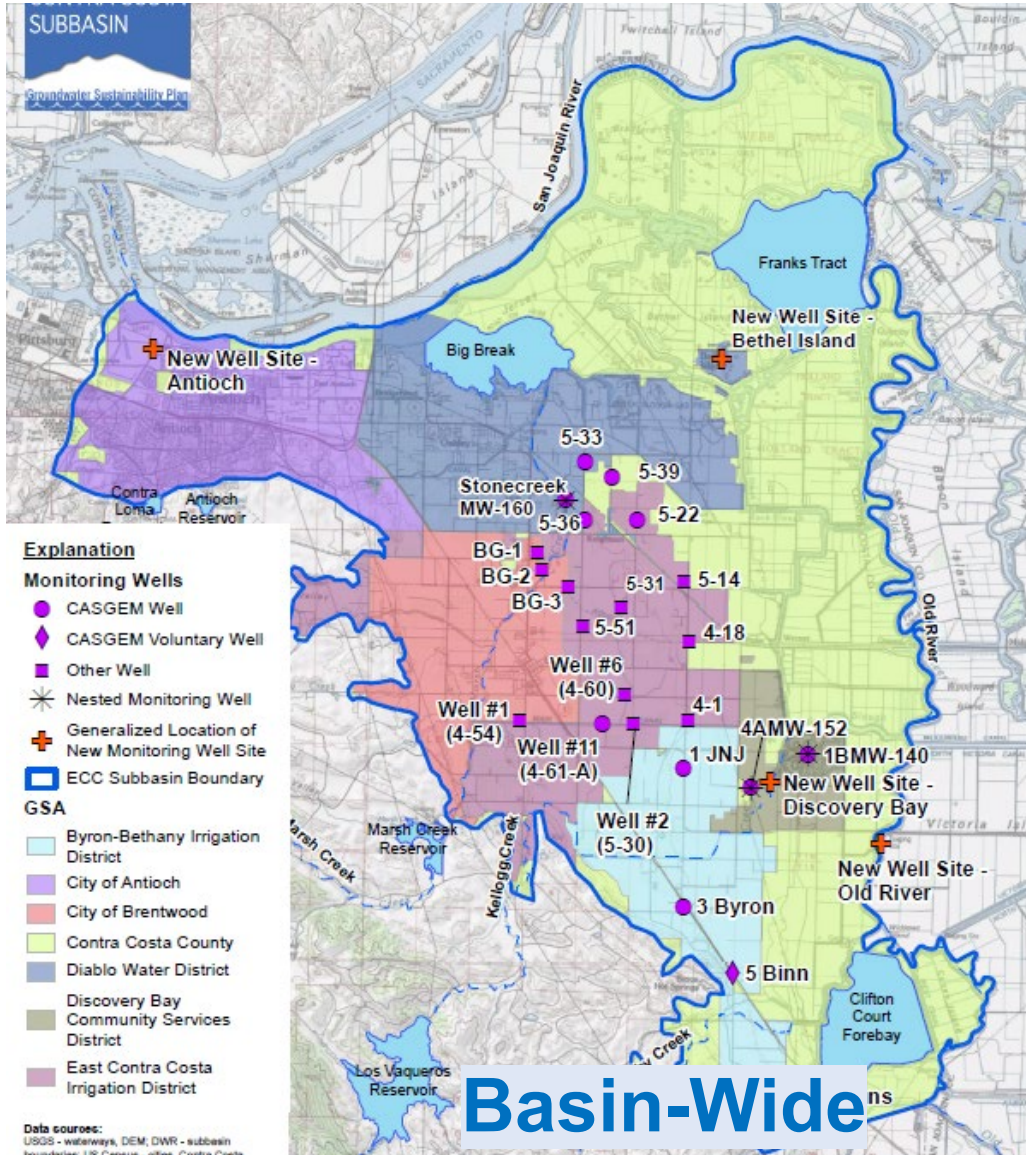
Basin-wide Monitoring Networks

- Groundwater Levels
- Groundwater Quality

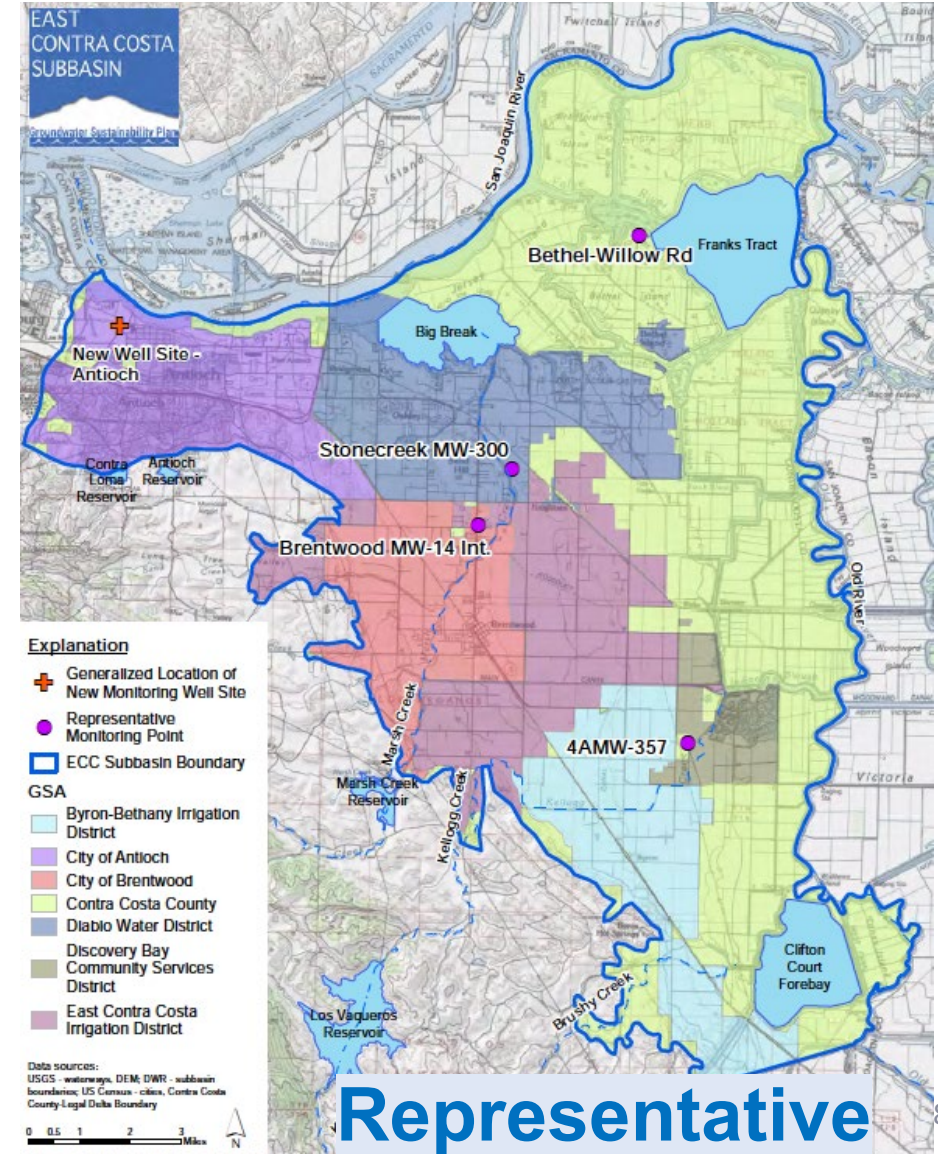
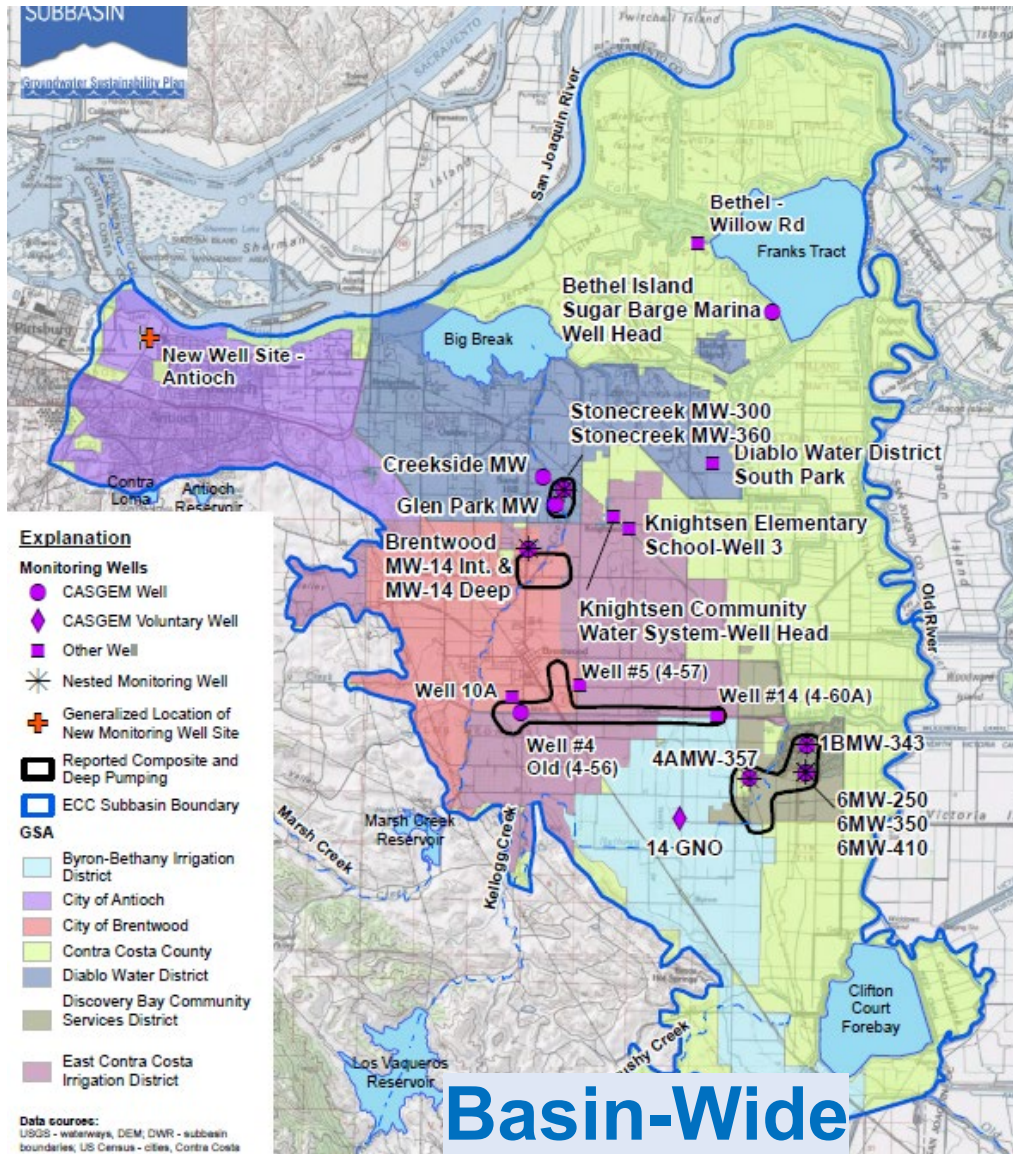
Representative Monitoring Networks

- Subset of Basin-wide monitoring network
- Used to monitor sustainability and have Minimum Threshold (MT) and Measurable Objective (MO) applied

Shallow Zone Monitoring Network - GWL



Deep Zone Monitoring Network - GWL



Monitoring Implementation

- 1. Responsibilities for existing and new wells**
 - a. QA/QC measures
- 2. Measurements to Data Management System**
 - a. Transition from CASGEM
- 3. Agreements with non-GSA well owners**
- 4. New well installations (which include annual WQ testing plus transducer/datalogger install and maintenance)**

Monitoring Questions under Plan Implementation

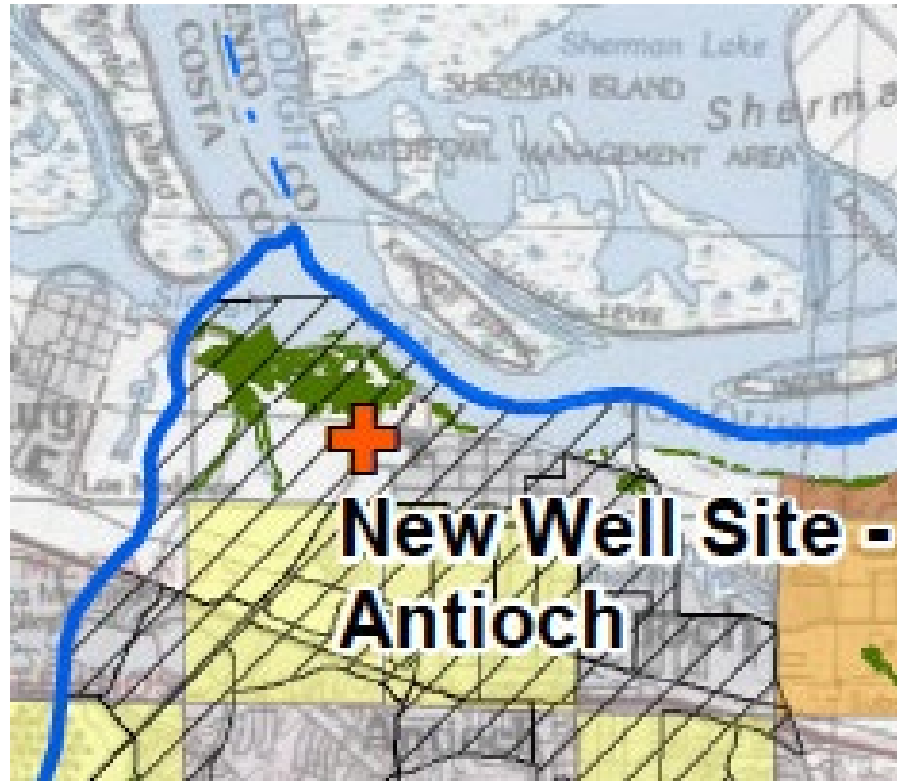
Per Nov 17, 2020 email:

- a. *Who will monitor groundwater levels:*
 - i. *GSAs monitor own wells and consultant monitor new wells.*
 - ii. *GSAs monitor all wells. Consultants monitor all wells.*
 - iii. *Other?*

- b. *Who pays for monitoring, analyses, and well maintenance?*
 - i. *GSAs pay for monitoring of own wells.*
 - ii. *GSA/GSP Partnership pays for New Well monitoring and GWQ analyses.*
 - iii. *GSA/GSP Partnership pays for all well monitoring.*

- c. *Who will process the groundwater level information?*
 - i. *GSA (similar to CASGEM).*
 - ii. *Consultant processing and upload to DWR.*

New Monitoring Well Installations

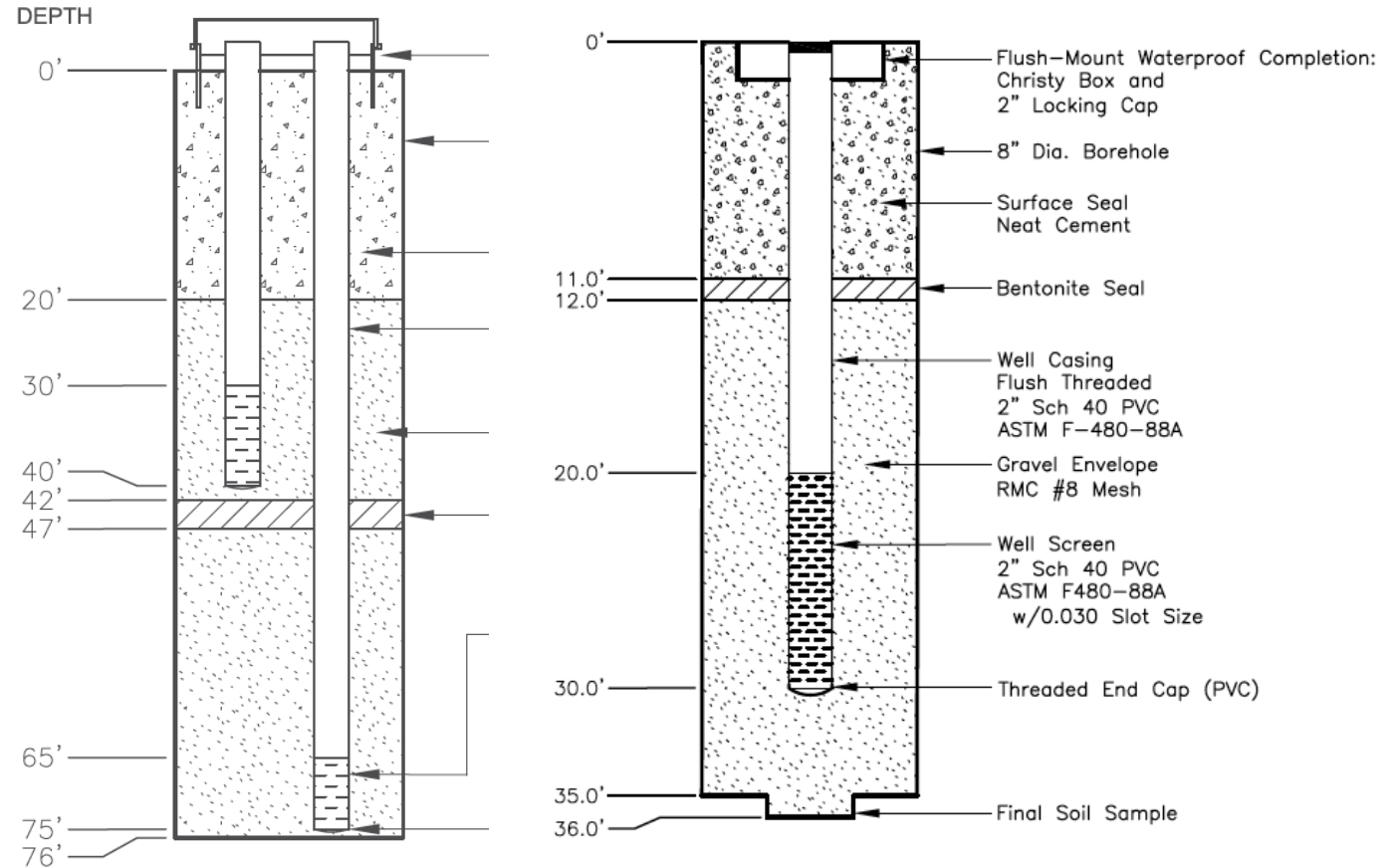


New Monitoring Well Installations

- 1. Funds have been granted and LSCE is coordinating with parties on siting**
- 2. Designs and contracting will follow final siting**
- 3. Budgeting for initial and ongoing monitoring:**
 - a. Initial sampling (requires dedicated equipment)
 - b. Install monitoring equipment
 - c. Interim site visits to verify recordings
 - d. Replace or update equipment

Final Design Considerations

1. Ground elevation
2. Groundwater and surface water elevations
3. Nested versus single completions



New Monitoring Wells: Siting

- 1. Need and general locations identified in funding application and shown on maps in Section 6.**
- 2. After need and general locations, siting criteria are mainly access for installation (drill rig) and for ongoing monitoring (pick-up and/or truck-mounted sampling equipment).**
 - a. Then, type of surface completion (above ground or flush), security, and protection

New Monitoring Wells: Siting cont.

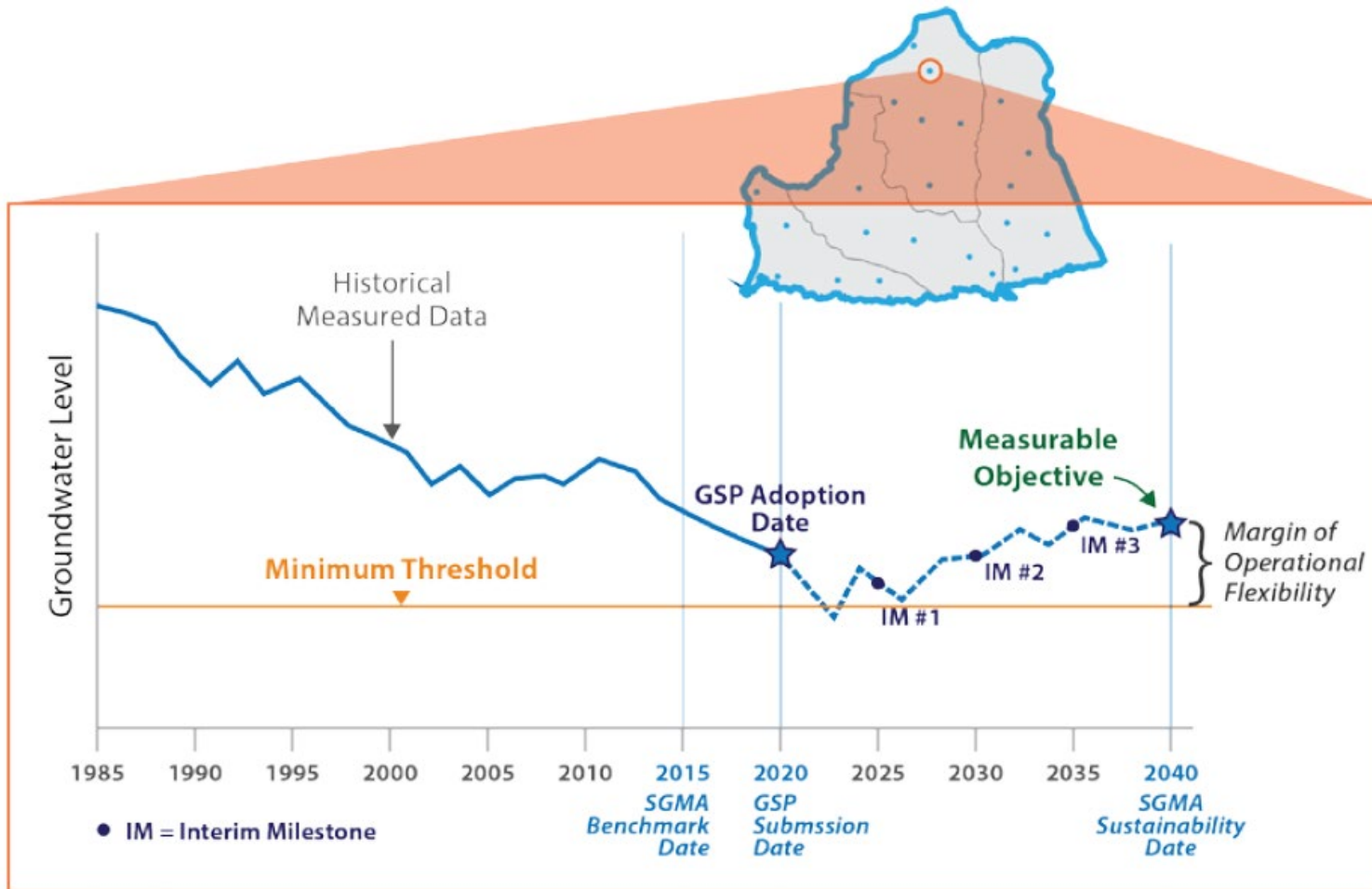


**Above ground housing
w/ lockable cap**









Flush

Sustainable Management Criteria



Sustainable Management Criteria

- **Locally defined by GSAs based on Sustainability Goals**
- **Must consider each Sustainability Indicator:**

Sustainability Indicators						
	Lowering GW Levels	Reduction of Storage	Seawater Intrusion	Degraded Quality	Land Subsidence	Surface Water Depletion

For each Sustainability Indicator Determine:

- **Undesirable Results**

Define what is **significant and unreasonable**, the negative impact (e.g., wells going dry)

- **Minimum Threshold (MT)**

Quantitative threshold for each sustainability indicator used to define when undesirable results may occur

- **Measurable Objective (MO)**

Quantitative target above the minimum threshold that allows for operation flexibility to prevent undesirable results

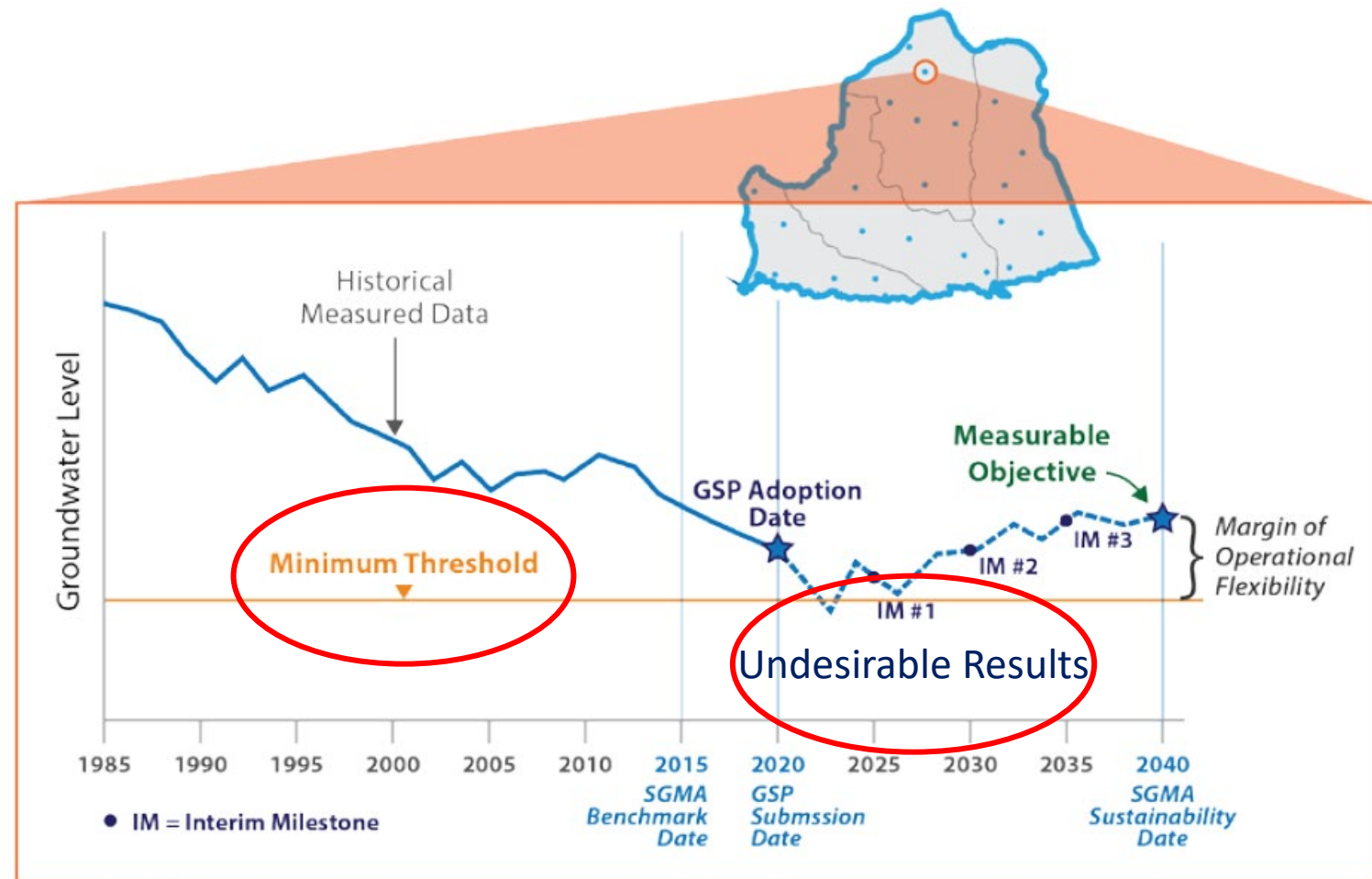
What is significant and unreasonable?

- Locally defined by GSAs
- Set for each of the 5 sustainability indicators or proxy (GWL and GWQ)
 - GWLs: significant and unreasonable depletion of supply over the planning and implementation horizon. Overdraft in a drought period is not sufficient to establish chronic lowering of GWL (may be Ok if offset by increase in GWL or storage during other periods).
 - GWQ: unmitigated degradation that affects beneficial uses and available supplies
 - Subsidence that substantially interferes with surface land uses or damages facilities
 - Depletions of interconnected surface water that has adverse impacts on beneficial uses of interconnected surface water

Minimum Thresholds

Minimum Thresholds

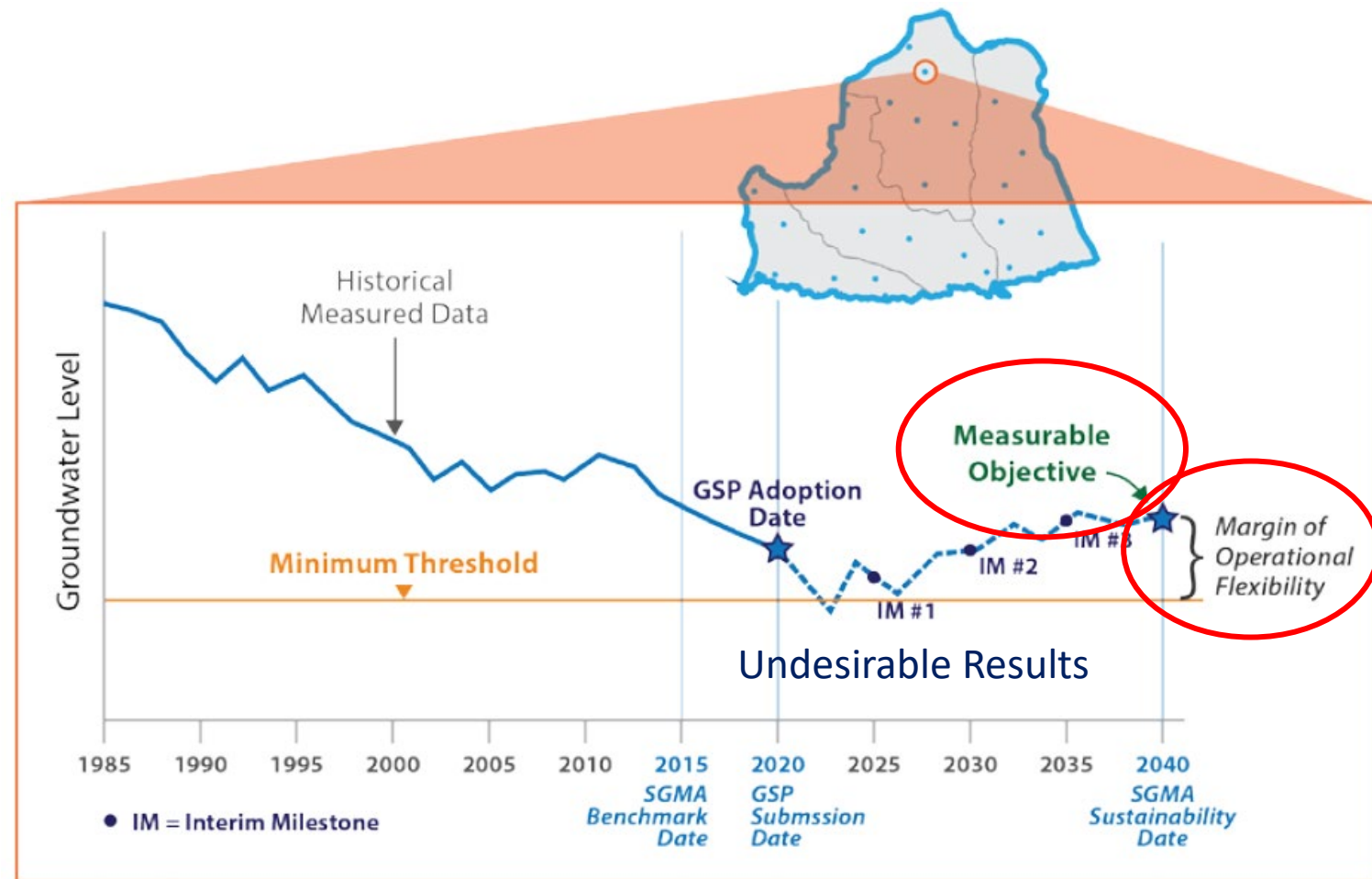
- Set at each Representative Monitoring Point (RMP)
- Set for each of the 5 sustainability indicators or proxy
- Quantitative value used to reflect undesirable result (what is significant and unreasonable)



Measurable Objectives

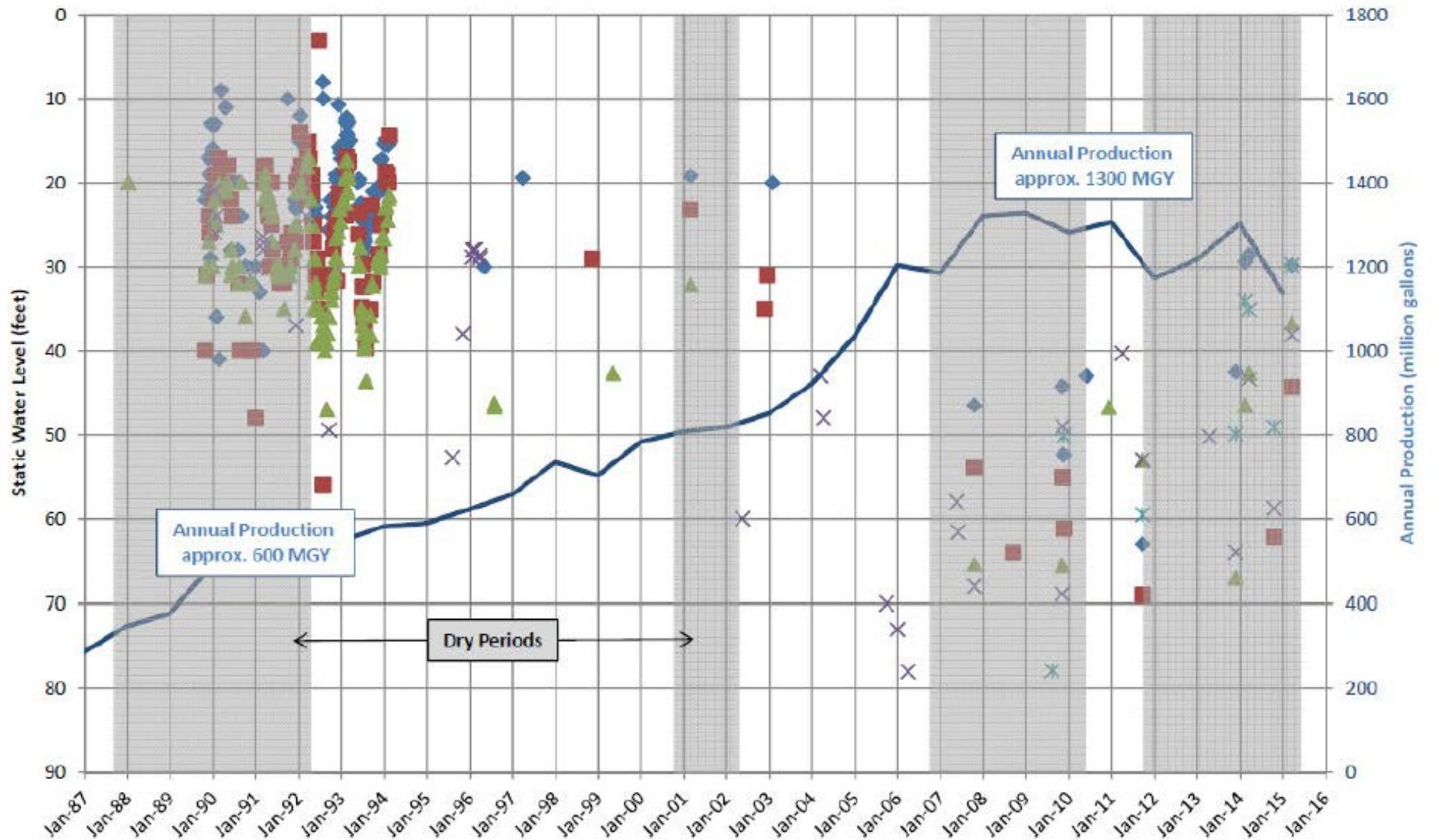
Measurable Objectives

- Set at each Representative Monitoring Point (RMP)
- Set for each of the 5 sustainability indicators or proxy (GWL and GWQ)
- Quantitative goal that allows operation flexibility above the MT



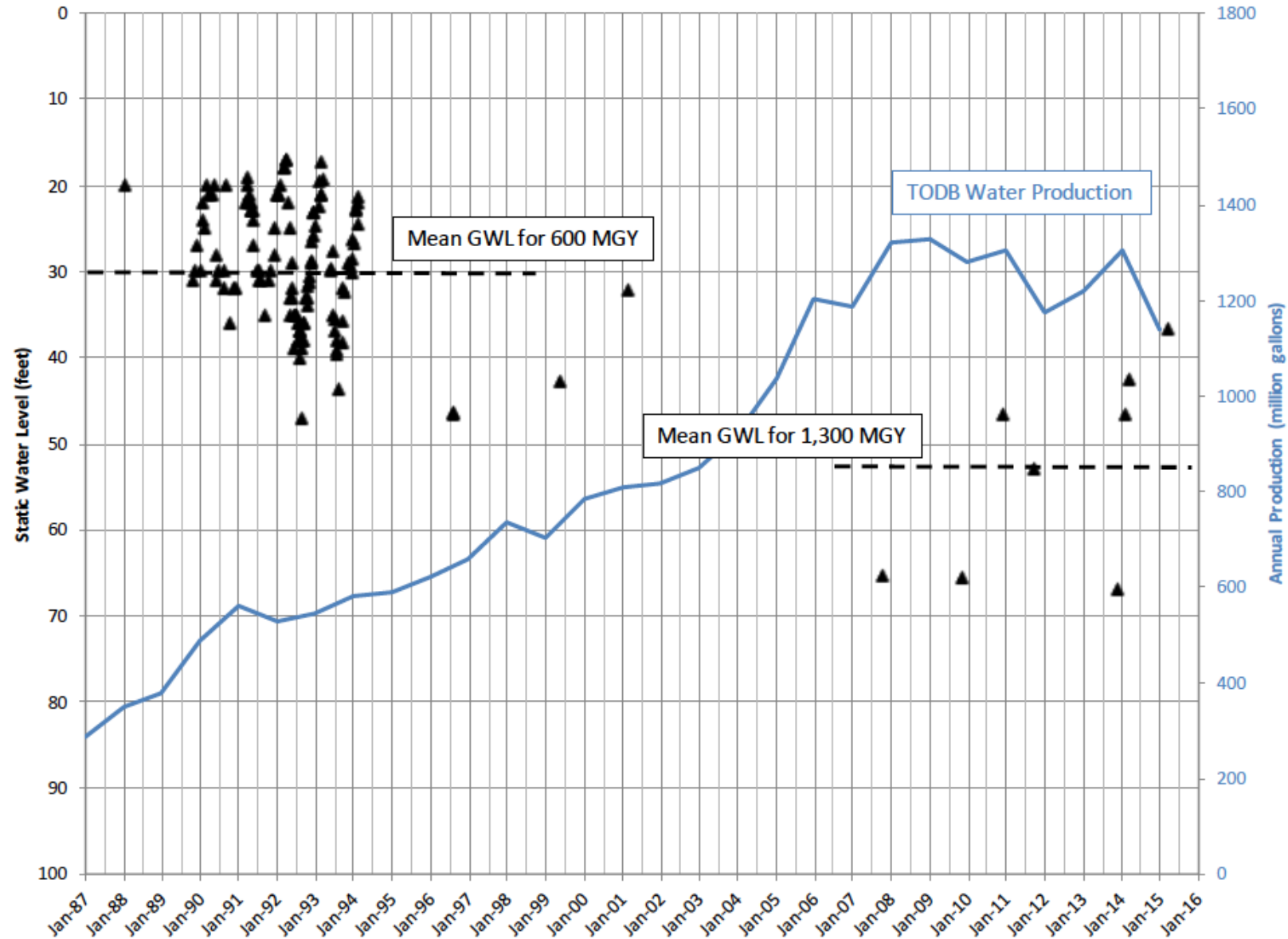
Local Considerations

TODB
Observed
GWLs with
time and as a
function of
total annual
pumpage



Local Example

TODB GWLs in Production Well 4



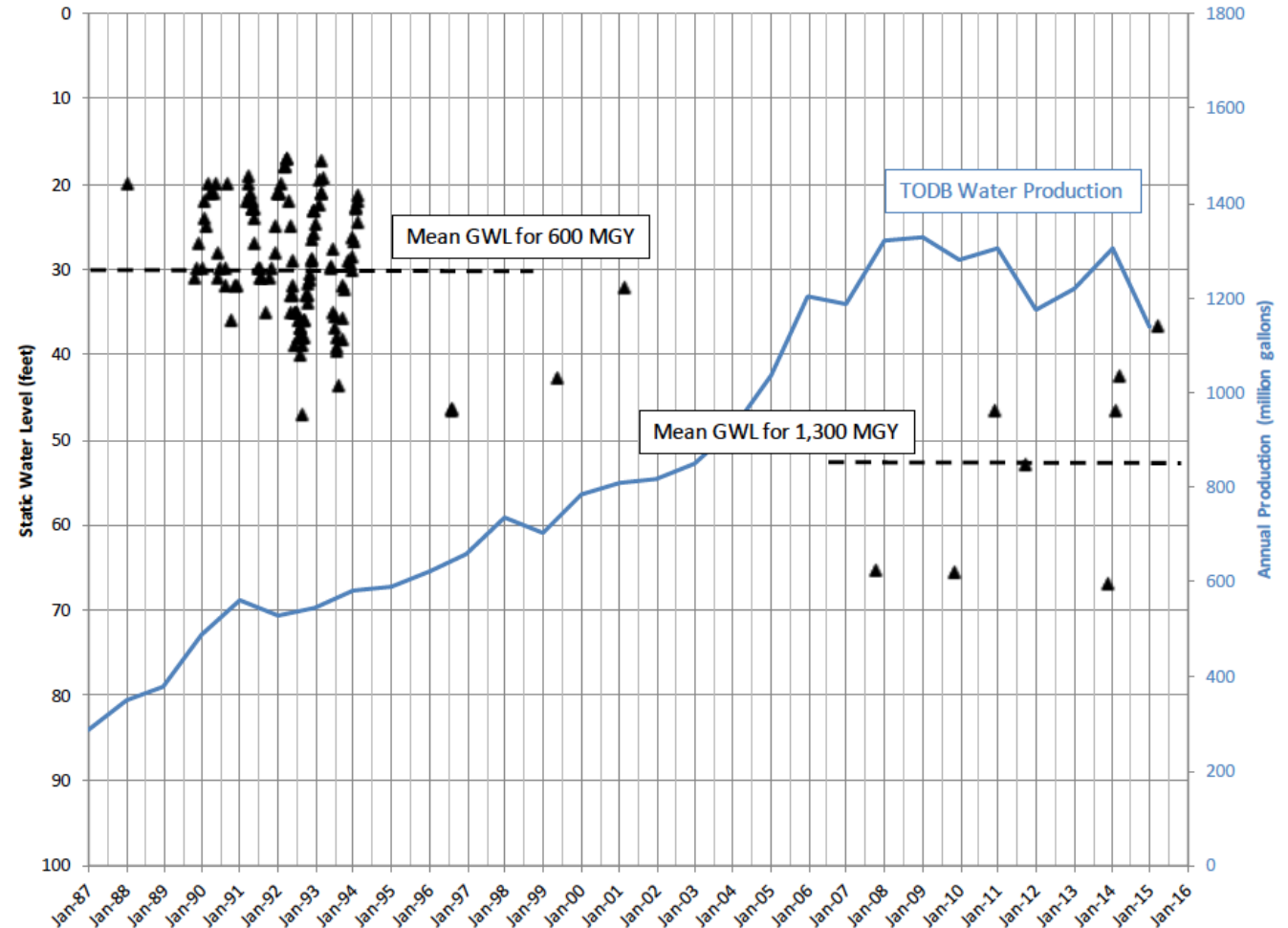
TODB Example

Minimum Threshold (GWL)

What is the deepest GWL that preserves system capacity⁽¹⁾ in all water-year types.

Considerations are:

- drought and climate change,
- projected demands,
- current and planned well field configuration (number and spacing), and
- whether other uses and users, property interests, etc. are protected.



(1) System capacity is aggregate well capacity

Implementation of projects or actions to achieve sustainability:

- Developed by GSAs individually or cooperatively
- In response to potential causes of undesirable results
- Actions might include:
 - Conservation
 - Pumping restrictions
 - Well location limitations
- Projects might include:
 - Direct recharge
 - Aquifer Storage and Recovery (ASR)
 - In-lieu recharge