



Minutes

East Contra Costa GSP Working Group and Communications Committee Meeting

When: Wednesday January 13, 2021, 10:00 a.m. to 11:30 a.m.

Where: Zoom Call

Attendees: Bill Brewster, Dan Muelrath, Eric Brennan, Jill Mosley, Mike Davies, Paul Seger, Tracy Shearer, Vicki Kretsinger, Tom Elson, Faithe Lovelace, Aaron Trott, Nacho Mendoza

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	January 22
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 with the information.	Ryan	Continuation from 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	January 22
6. Respond to monitoring questionnaire (ref. November 17, 2020 email to Work Group re: Monitoring Network).	Work Group members	Completed

Meeting Summary

1. Jill and her team have GSP Section 4 posted on the ECC website.
2. Still no comments from the public on Sections 1 - 3
 - a. Jill is going to check to see how many views the sections have on the website.
 - i. Stantec would have to provide the viewer statistics for the survey.
 - b. Dan and Eric informed the group that on 1/15 an article regarding the GSP will be published letting the public know the group is looking for comments.
3. CCWD had comments for production amounts and will provided the group with updated numbers.
4. Eric reported that Brentwood had not yet received payment for Progress Report 8 but TODB and ECCID have received payments.
 - a. Jill informed the group that CCWD has not received payment since Progress Report 5.
5. As a preview to Section 6, Tom gave a presentation on Monitoring Networks for water quality and water levels and provided information on representative sites to monitor for sustainability.
6. DWD (Dan and Paul) posed the question of ensuring that GSAs comply with sustainability. The hypothetical raised was a local project implemented by a GSA (e.g., expanded non-potable pumping by DWD) that induces undesirable results (say, declining water levels). In response, as signatories to the GSP and in accordance with the responsibilities of each GSA to sustainably manage groundwater, the

undesirable effects arising from a project would be evident through monitoring of sustainability indicators. Mitigation would be required under SGMA regulations. However, to the extent that more explicit means to regulate GSAs within the subbasins (i.e., to prevent a GSA from inducing undesirable results), Dan asked whether the MOU among GSAs would be invoked. This topic is fundamental to SGMA regulations and will be part of GSP implementation (Section 9).

7. Bill with DWR provided updates on the following topics:
 - a. Bulletin 118, California's Groundwater 2020 continues to be delayed. The Fact Sheet for this publication can be found at: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/California-GW-FactSheet.pdf>
 - b. In light of a dry winter, the Work Group might wish to be aware of a reporting system on household water shortages. This resource serves individual well owners not served by a public and provides a means to report a shortage. This resource is intended to inform state and local agencies on drought impacts on household water supplies and statistics are provided on a county basis. The site can be found at: <https://mydrywatersupply.water.ca.gov/report>.
 - c. DWR is in the process of updating outreach and landowner access agreements involving groundwater monitoring in order to maintain networks and fill data gaps. There are not a significant number of such wells in the ECC Subbasin, but Vicki indicated that it would be desirable to be aware of the scope and timing of the project within the subbasin.
 - d. DWR's Airborne Electromagnetic (AEM) surveys are being planned in 2021. The project is funded by Prop 68 program to survey California's groundwater basins. Information from the surveys will provide aquifer data to GSAs on subsurface hydrogeologic characteristics intended to reduce uncertainty and aid in successful development and implementation of GSPs and groundwater recharge projects. A Fact Sheet can be found at: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Data-and-Tools/Files/Prop68/P1-2020-AEM-Fact-Sheet.pdf?la=en&hash=A4189F4F13195F5620D0795CE3655E12B4DBDDF0>.
8. The next meeting is Wed. February 10th 10 to 11:30 am.

Attachments

Agenda for January 13, 2021

Slide Presentation for Monitoring Networks, GSP Section 6



Agenda: ECC GSP
East Contra Costa GSP Working Group and
Communications Committee Meeting
When: Wednesday January 13, 2021, 10:00 a.m. to 11:30 a.m.

Where: <https://zoom.us/j/93368708747?pwd=WHV4enExOVh4eDIHditpREh6K2E3Zz09>

Purpose

1. Outreach Status- Sections 3 and 4 comments
2. Present background GSP Section 6 Monitoring Network

Agenda

#	Item	Presenter
1.	<p>GSP Outreach & Communication:</p> <ul style="list-style-type: none"> • Sections 3 and 4 posted to website (Nov. 20) for public comments by January 15, 2021 (post to website, run in newspaper, GSAs post on websites, send 100 emails)? • DWR extended contract with Stantec through 2021 • Byron Airport development status • Website-updates 	<p>Ryan</p> <p>Tom Ryan Jill</p>
2.	<p>GSP Updates</p> <ul style="list-style-type: none"> • Draft Sections 1 and 2-- No comments received but still available for public comment • Draft Section 3 (Basin Setting)-Public comments due January 15, 2021. • Draft Section 4 Historical, Current, and Projected Supply—posted on website and comments due January 15, 2021. • Draft Section 5 Water Budget and Groundwater Model; out for GSA review in late January • Draft Section 6-Monitoring Network and DMS; out for GSA review by January 22 	<p>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 and waiting for payment (as of 9/2/2020). • PR9: email sent 1/6/2020 requesting cost share by Friday Jan 22nd for 4th Q 2021. 	<p>Eric</p> <p>LSCE</p>
4.	<p>Other Project Updates</p> <ul style="list-style-type: none"> • DWR updates 	<p>Bill</p>

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

ACTION ITEMS November 2020

ITEM	OWNER	DUE
1. Review Section 4 and return comments to LSCE	Tracy, Jill, Rick/Nick, Eric	Done
2. Prepare an announcement that Section 4 is 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	Done
3. Investigate status of Byron Airport development status and email the group with the information.	Ryan	Done
4. What does ECC need to do to continue FSS into next year. Reapply or request a continuation?	Debbie/Lisa	Renewed



East Contra Costa Subbasin GSP Development

Project Status, Online Visualization, Groundwater Model, Monitoring Networks

Working Group Meeting

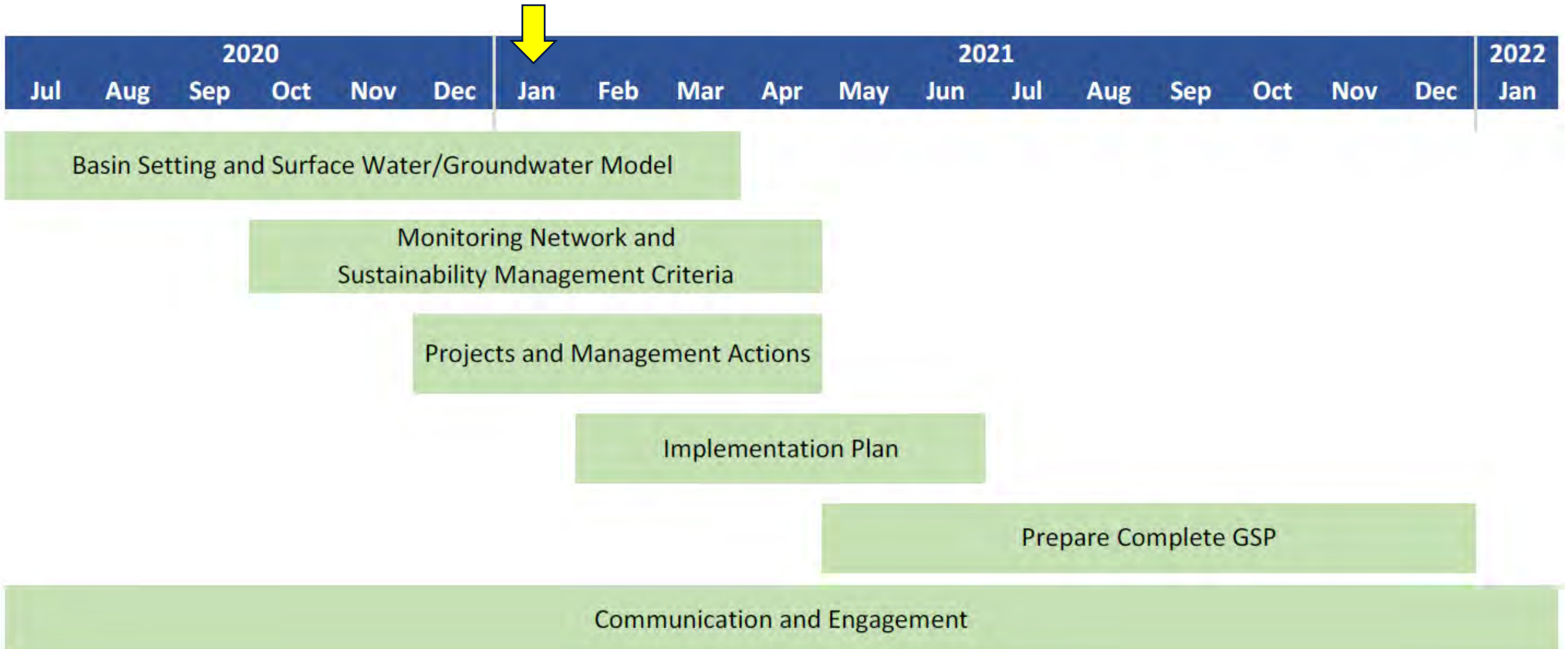
Tom Elson
LSCE

January 13, 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.

Project Status: GSP Schedule

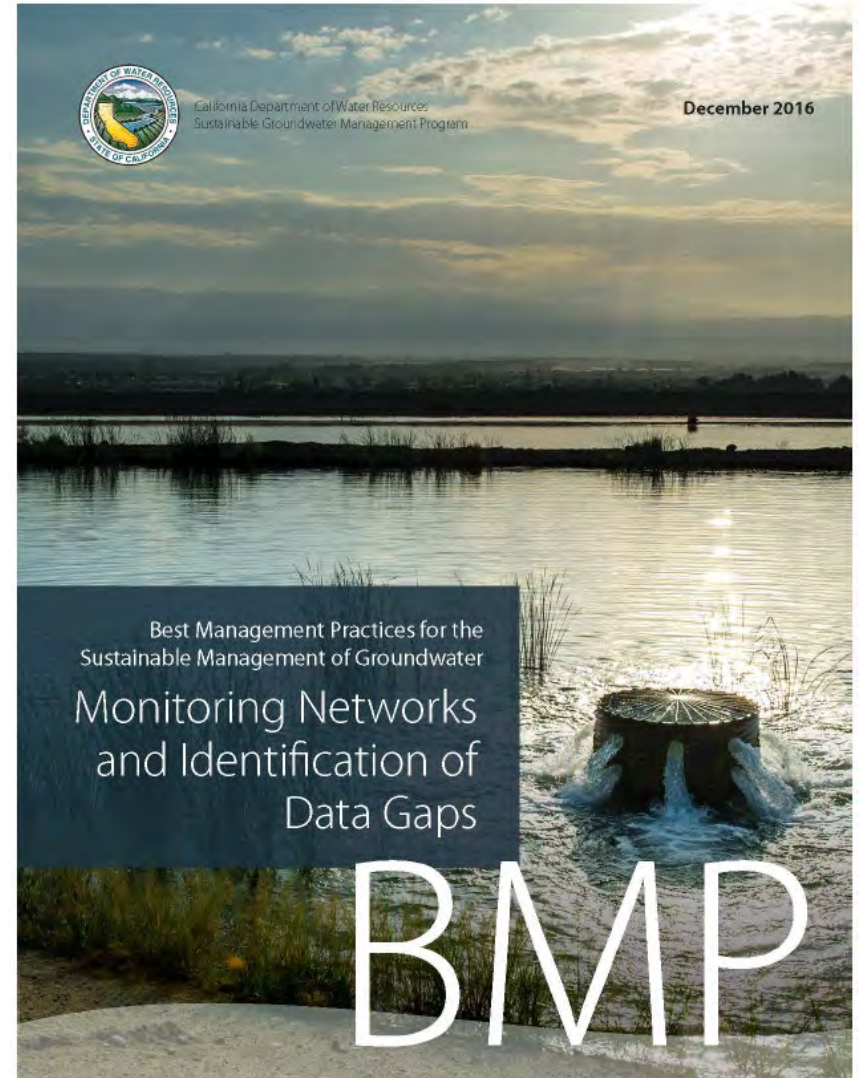


Project Status: GSP Section Status






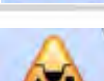
GSP Section	To GSAs for review	Post to ECC Website	Public Comment Period
1. Introduction to East Contra Costa GSP		April 2020	April to July 2020
2. Plan Area			
3. Basin Setting		October 2020	10/30/2020 to 1/15/2021
4. Historical, Current, and Projected Water Supply		November 2020	11/2020 to 1/15/2021
5. Water Budget	Jan 2021	March 2021	3/2021 to 4/2021
6. Monitoring Network, Data Management System and Reporting	Jan 2021	March 2021	3/2021 to 4/2021
7. Sustainable Management Criteria	Feb 2021	April 2021	4/2021 to 5/2021
8. Projects and Management Actions			
9. Plan Implementation	April 2021	May 2021	5/15/2021 to 6/30/2021
10. References			

Monitoring Networks

- **Monitoring Network for Sustainability Indicators**
- **Monitoring Network Criteria**
- **Two Network Categories**
- **Data Gap (New Monitoring Wells)**



Monitoring Networks: Sustainability Indicators

Sustainability Indicator		Representative Monitoring Network	Proxy Network
	Chronic Lowering of Groundwater Levels	Groundwater Levels	
	Reduction of Groundwater Storage		Groundwater Levels
	Seawater intrusion	None	
	Degraded Groundwater Quality	Groundwater Quality	
	Land Subsidence	PBO stations	Groundwater Levels
	Surface Water Depletion due to Groundwater Pumping	Stream Flow	Groundwater Levels

Monitoring Networks: Criteria

Monitoring Network Criteria:

- Good historical record
- Spatial distribution-horizontal and vertical
- Denser in higher pumped area
- Dedicated monitoring wells for GWL network (preferred to production wells)
- Well construction
- Professional judgement if more than one well is present

Monitoring Networks-Two categories

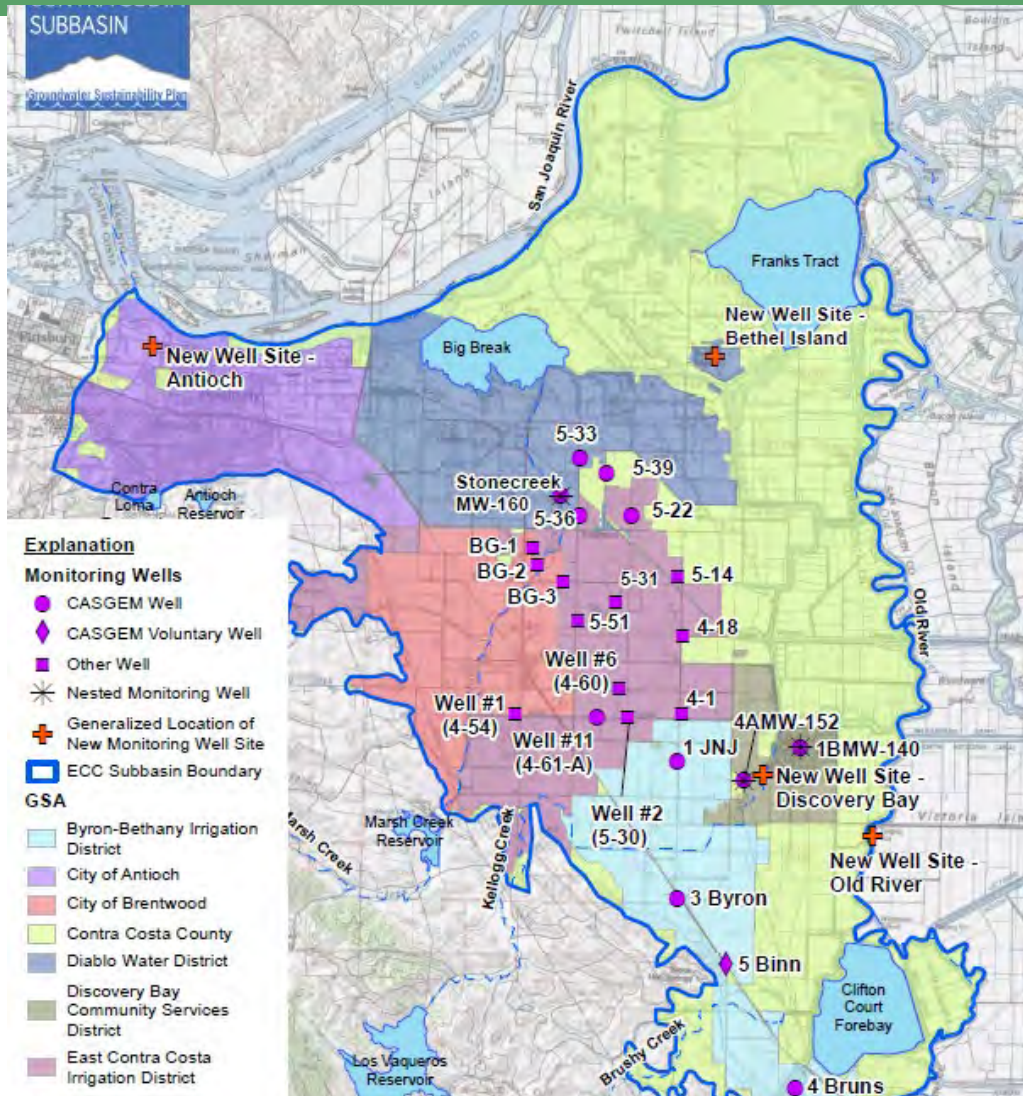
Basin-wide Monitoring Networks--Preliminary

- Groundwater Level
- Groundwater Quality
- Each GSA received an email (Nov 17, 2020) with preliminary basin-wide networks
 - ✓ Most have responded and comments are being reviewed

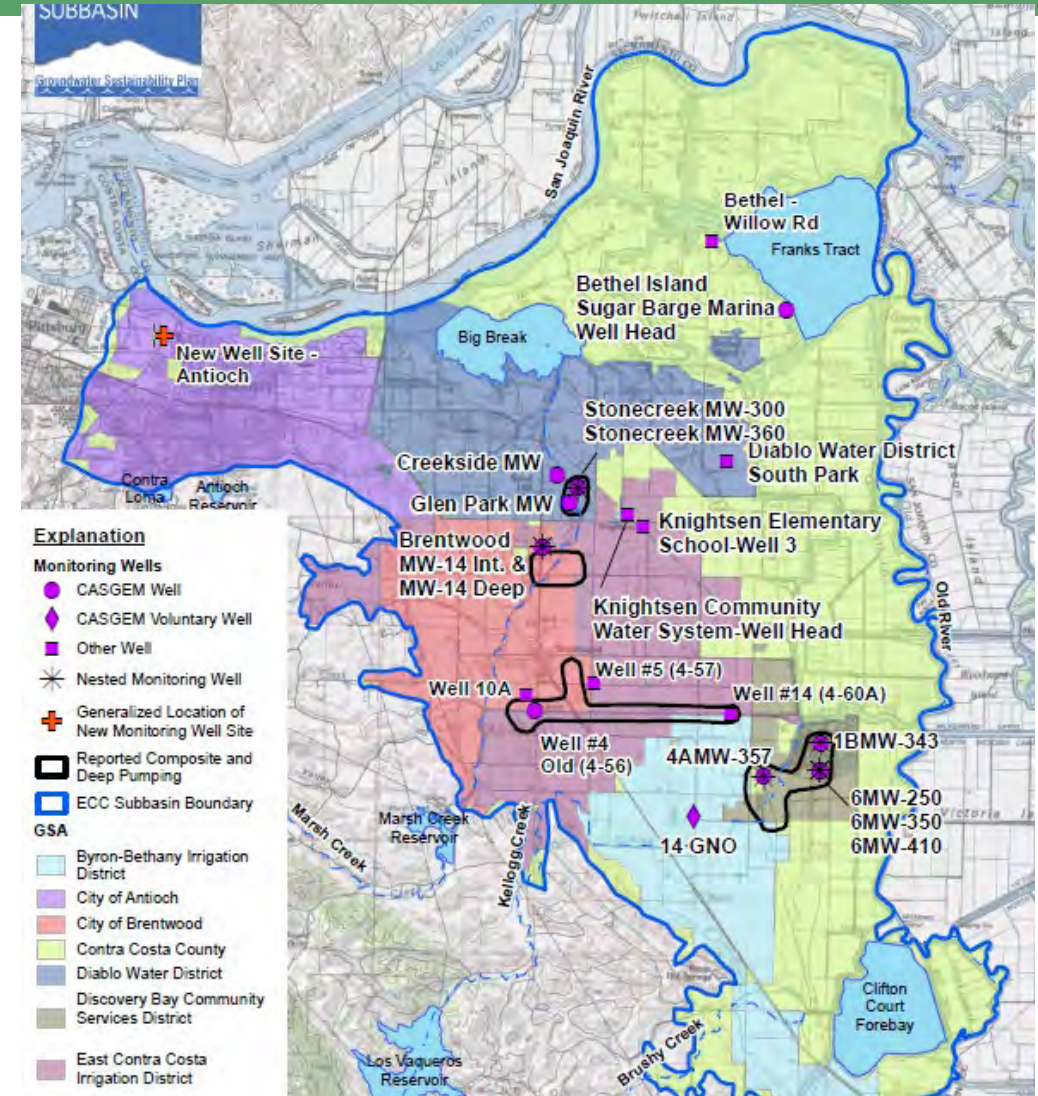
Representative Monitoring Networks

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

Monitoring Networks : Basin-wide GWL

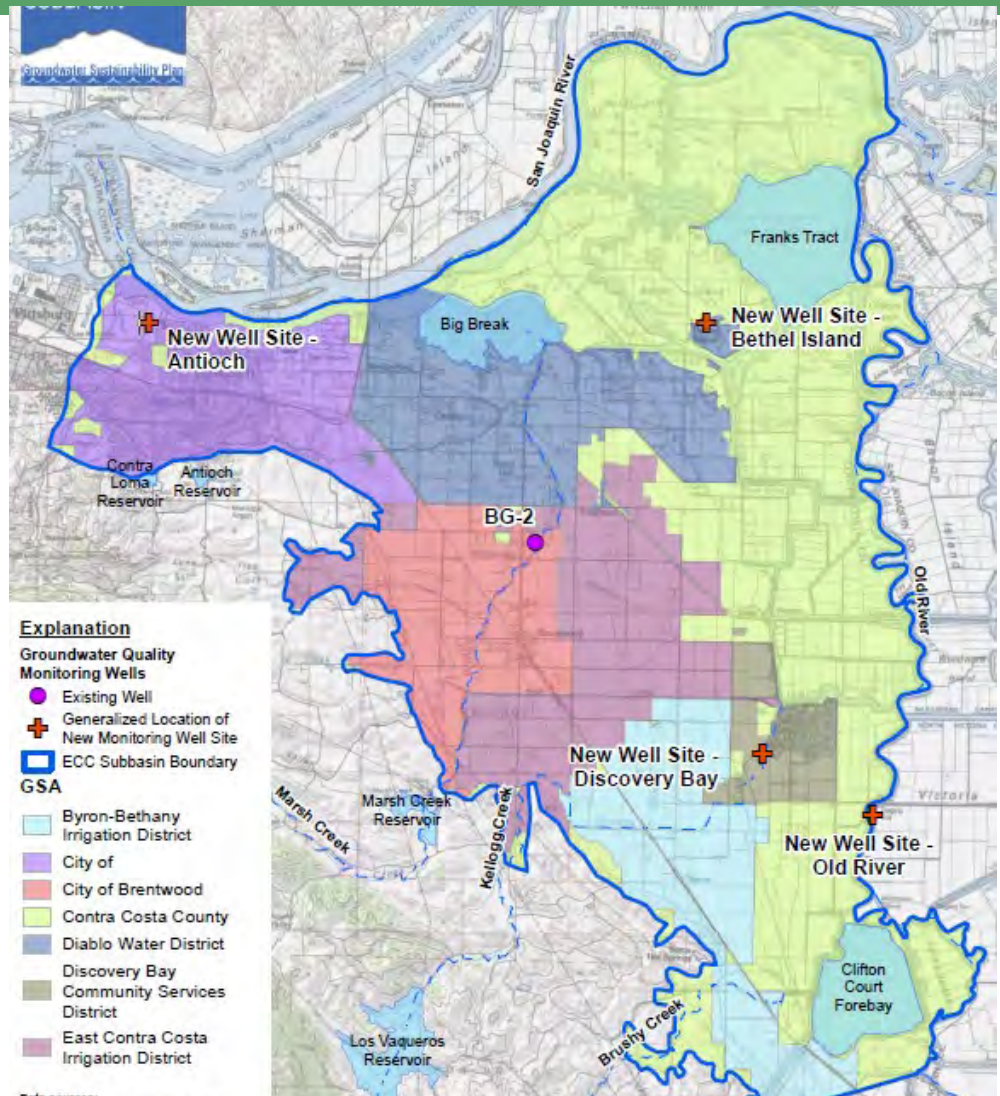


GWL Network: Shallow Zone

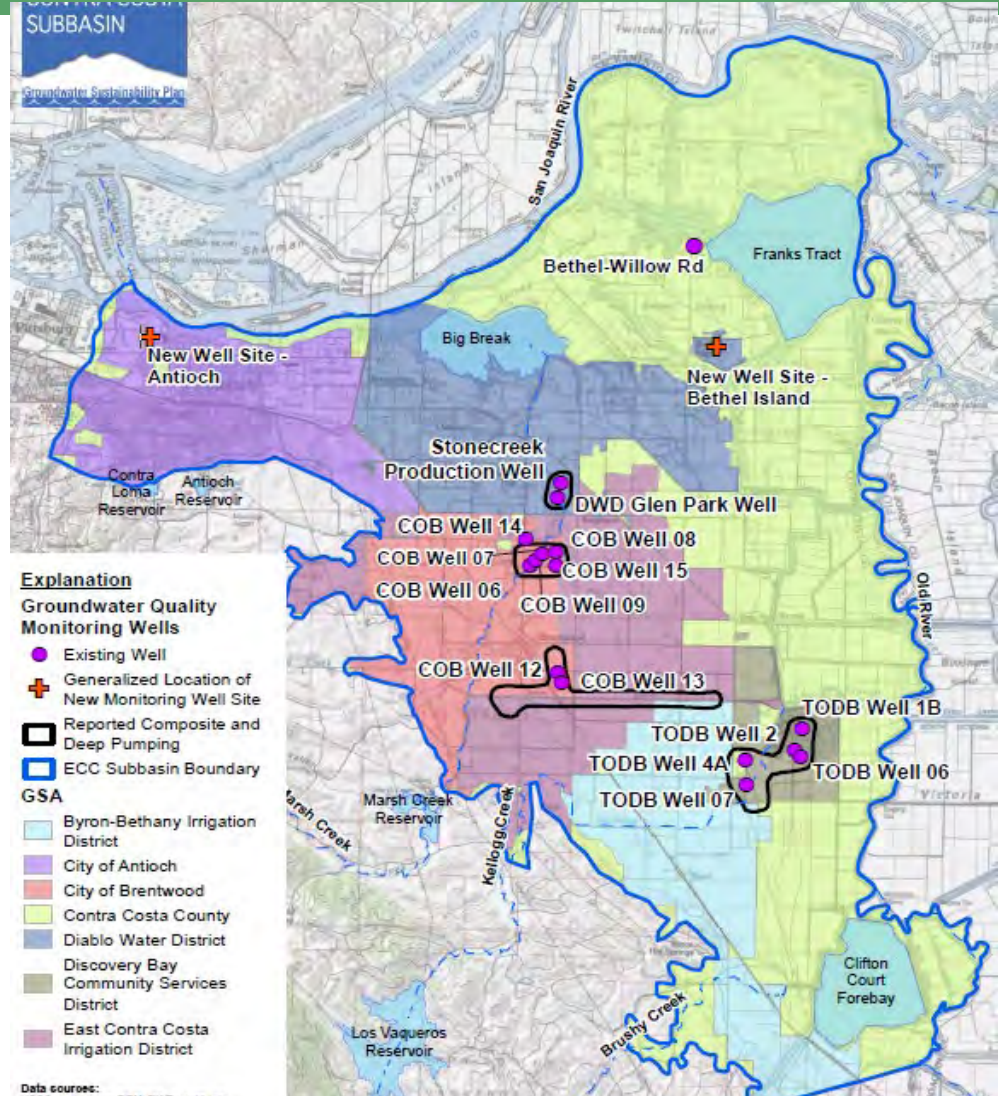


GWL Network: Deep Zone

Monitoring Networks : Basin-wide GWQ



GWQ Network: Shallow Zone



GWQ Network: Deep Zone

Monitoring Networks-Representative Monitoring Network

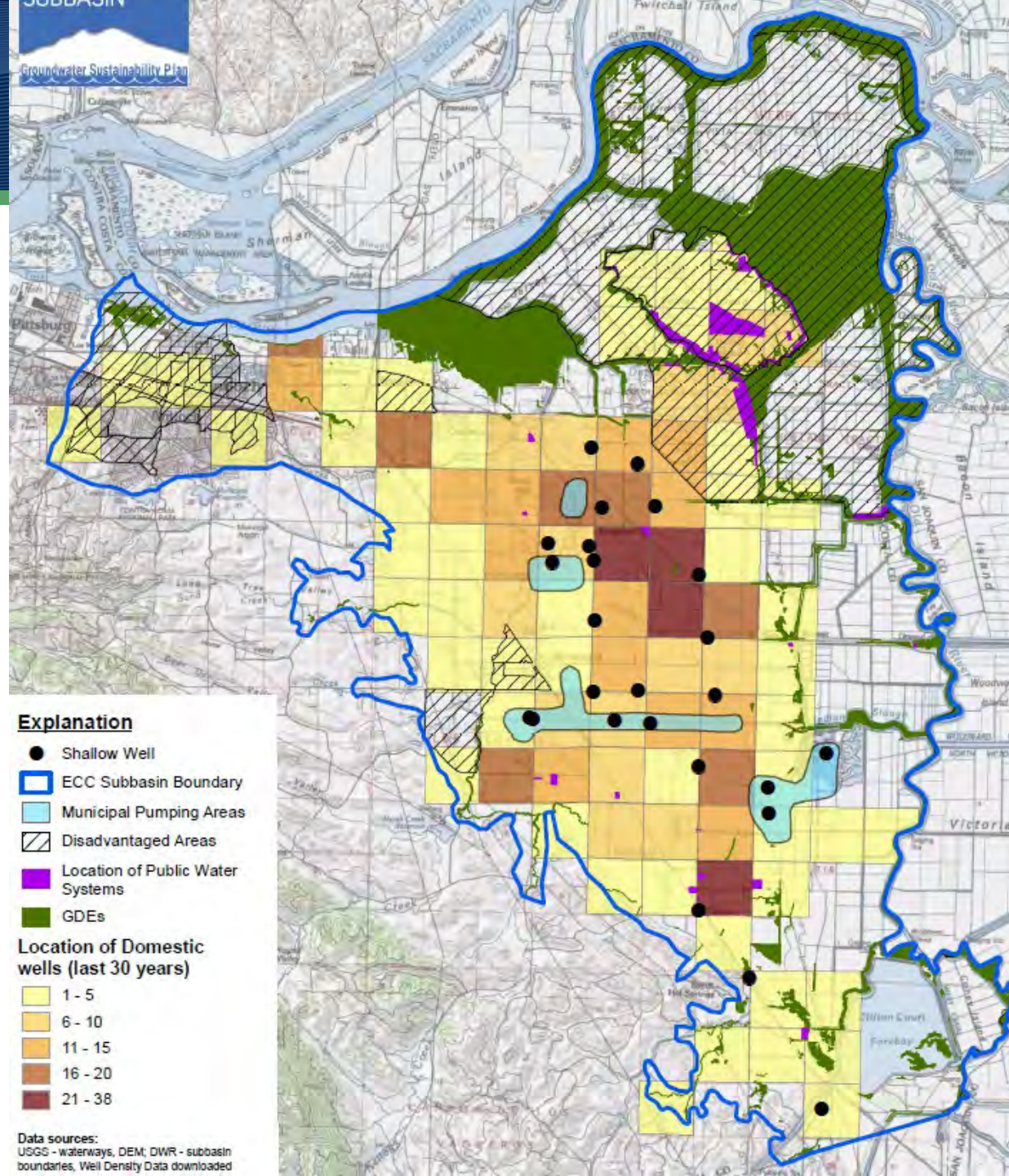
- Representative Monitoring Points(RMP) are a subset of Basin-wide monitoring network wells (GWL, GWQ, Subsidence)
- Must show that the RMP reflects general conditions in the area and are similar to historical measurement in the nearby monitoring wells
- Used to monitor sustainability and have Minimum Thresholds and Measurable Objectives applied
- Select RMPs after determine what is significant and unreasonable conditions in the subbasin

GWL Data Gap Analysis

Data Gap Analysis:

Has the monitoring network considered the location of:

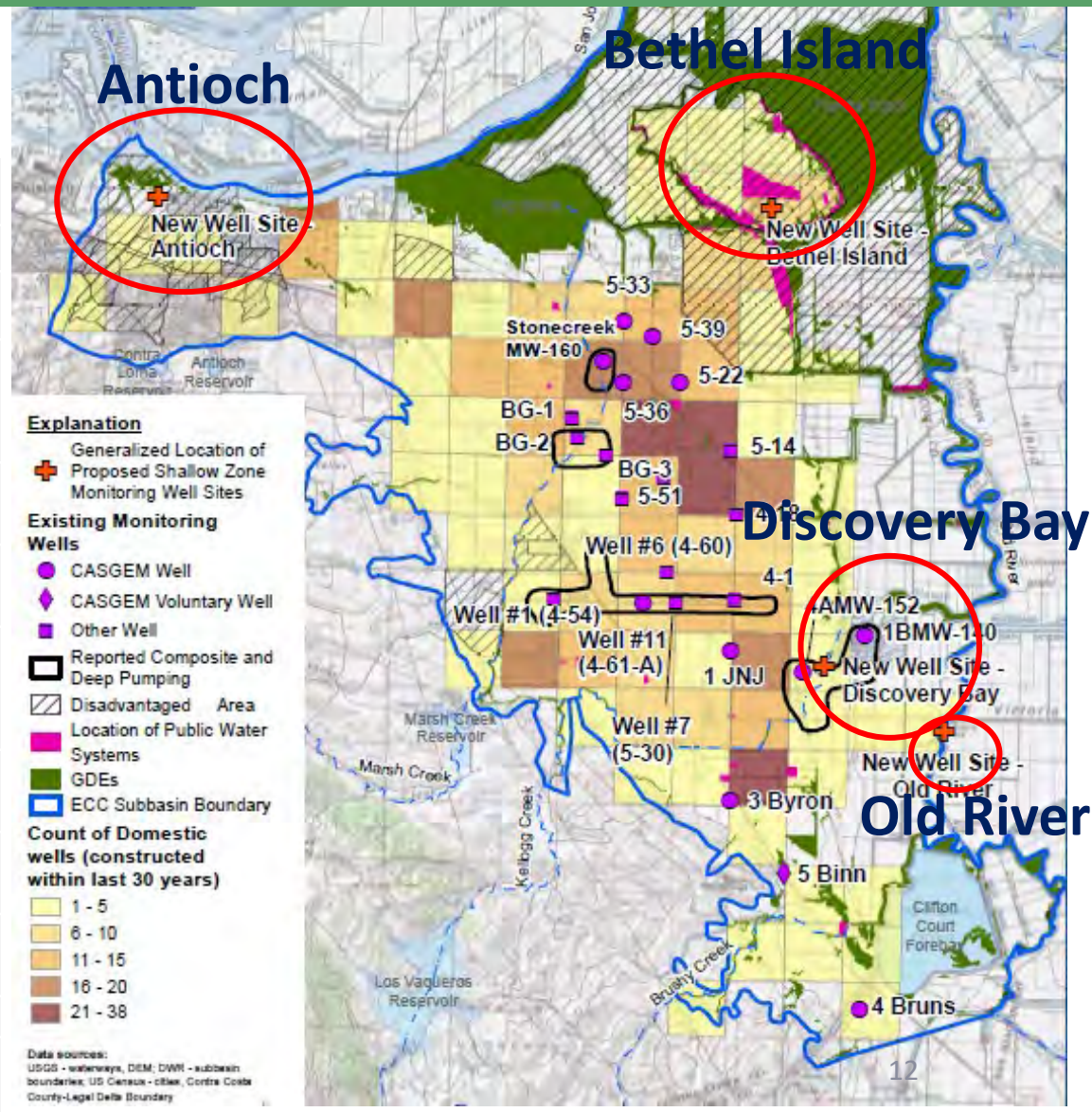
- Disadvantaged Areas (hatched)
- Local Public Water Systems (purple)
- Groundwater Dependent Ecosystems (green)
- De Minimis users- domestic well owners (yellow to brown)



Data Gap Analysis-Shallow GWL

Four new monitoring wells sites-paid for by DWR Prop 68 Grant funds as part of this GSP

Data Gap	Antioch ¹	Bethel Island ²	TODB ³	CCC/CCWD/B BID
Zone	Shallow/Deep	Shallow	Shallow	Shallow
Climate Change: monitor sea level rise, increase in chloride/TDS	x	x		
Expand shallow network	x	x	x	x
Expand deep network	x			
Groundwater Quality	x (esp. Cl and TDS)	x (esp. Cl and TDS)	x	x
Near GDEs and monitors for shallow groundwater/surface water interaction.	x	x	x	x
Located near small public water systems and domestic wells	x	x		
Located near Disadvantaged Areas	x	x		
Adjacent to Municipal Well Pumping			x	
Subbasin Boundary Conditions	x	x		x
Construction: perforations (ft bgs)	10-15, 20-30, 85-95	5-10, 20-30	10-15, 20-30	5-15, 25-35





Monitoring,
Sustainable
Management
Criteria, and GSP
Implementation

Maintaining a Sustainable East Contra Costa Subbasin

Sustainable Management Criteria

Sustainability Goals set by GSAs

For each Sustainability Indicator, determine:

- **Undesirable Results**

Define what is **significant and unreasonable**, the negative impact (e.g., wells going dry) associated with each of 5 sustainability indicators or proxy (e.g., GWL and GWQ representative monitoring networks).

- **Minimum Threshold (MT)**

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

- **Measurable Objective (MO)**

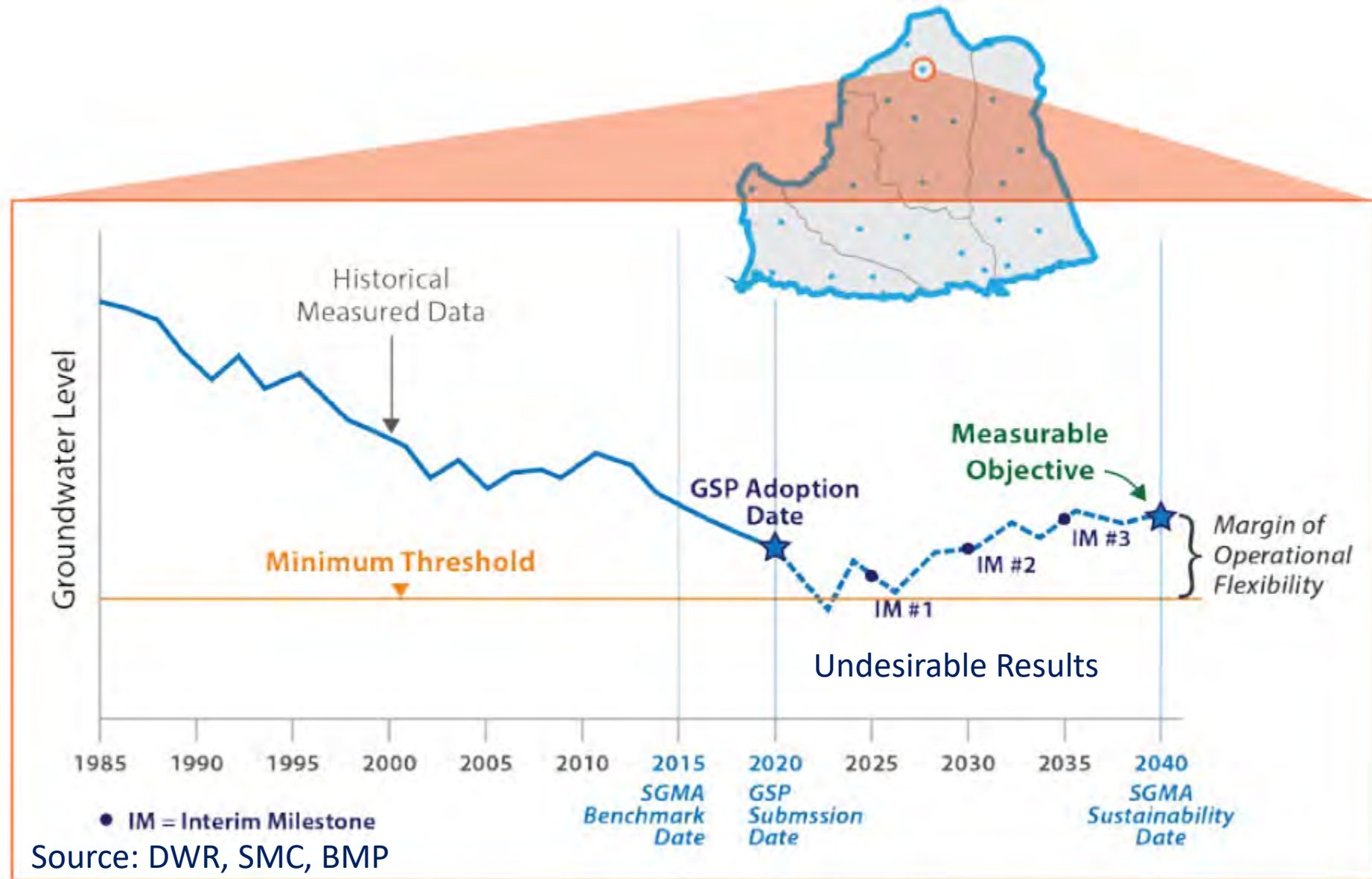
Quantitative target above the minimum threshold that allows for operation flexibility to prevent undesirable results

Undesirable Results-what is significant and unreasonable

- Avoiding undesirable results is sustainable management
- Locally defined
- 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 the surface water

Sustainable Management Criteria

- **Minimum Threshold**
- **Measurable Objective**
- **Margin of Operational Flexibility**



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.