

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting

### AGENDA

**Date/time:** Monday, September 9, 2019 | 3:00 – 5:30 p.m.

**Meeting Location:** Santa Rosa Utilities Field Office, 35 Stony Point Road, Santa Rosa

**Contact:** Andy Rodgers, Santa Rosa Plain Groundwater Sustainability Agency (GSA) Administrator

**Email:** [arodgers@westyost.com](mailto:arodgers@westyost.com) | Phone: 707.508.3661

Time	Agenda Item	Materials
3:00	<p>Welcome, Introductions and Agenda Review <i>Committee Chairman Bob Anderson and Andy Rodgers, GSA Administrator</i></p>	Agenda; July meeting summary; meeting calendar
3:05	<p>General Public Comment Public comment on matters not on the agenda and within committee jurisdictions.</p>	
3:10	<p>GSA Staff and Advisory Committee Updates <i>Administrator, Plan Manager, and other Staff</i> <i>Advisory Committee Members</i></p> <ul style="list-style-type: none"> <li>▪ August GSA Board meeting activity</li> <li>▪ Future meeting schedule/topics</li> </ul> <p><i>Objective: Provide relevant updates that inform Advisory Committee discussions.</i></p>	(Handout)
3:15	<p>Introduction to Sustainable Management Criteria (SMC) <i>Marcus Trotta, Sonoma Water</i> <i>Advisory Committee Members</i></p> <ul style="list-style-type: none"> <li>▪ Overview and requirements               <ul style="list-style-type: none"> <li>○ Key terms and definitions</li> </ul> </li> <li>▪ General summary/perspectives of basin conditions</li> <li>▪ Schedule and process</li> <li>▪ Identify key data/information needs to support SMC process</li> <li>▪ Next steps</li> </ul> <p><i>Objective: Learn about the Sustainable Management Criteria requirements and SGMA definitions, provide feedback on key terms, definitions and ways to support the SMC process.</i></p>	PPT presentation (Handouts)
4:00	<p>Overview of Water Budget Requirements and Existing Groundwater Flow Model <i>Marcus Trotta, Sonoma Water</i> <i>Advisory Committee Members</i></p> <ul style="list-style-type: none"> <li>▪ General Water Budget Components and SGMA Requirements</li> <li>▪ Overview of Santa Rosa Plain Hydrologic Model (SRPHM)               <ul style="list-style-type: none"> <li>○ Summary of existing model and ongoing and planned USGS/SWRCB updates</li> <li>○ Applicability of SRPHM for GSP tasks</li> <li>○ Initial recommended areas for refinements/modifications</li> </ul> </li> <li>▪ Next steps</li> </ul> <p><i>Objective: Learn about the water budget components, SGMA requirements and existing hydrologic models, provide feedback on recommended areas for refinements.</i></p>	PPT presentation (Handout)

5:00	<p><b>Groundwater User Registration Program update</b>  <i>Andy Rodgers, GSA Administrator</i>  Presentation</p> <ul style="list-style-type: none"> <li>▪ Overview and schedule</li> <li>▪ Website/webpage/webmap</li> <li>▪ Information exchange form</li> <li>▪ Draft mailer</li> <li>▪ Next steps</li> </ul> <p><i>Objective: Learn about and provide input groundwater user registration program and discuss implementation plan.</i></p>	PPT presentation (Handouts)
5:30	<p><b>Meeting Adjourns</b>  <i>Next Advisory Committee meeting: Monday, November 4, 2019, 3:00 – 5:30 p.m.</i>  <i>Next GSA Board meeting: Thursday, October 10, 2019, 1:00 – 3:30 p.m.</i>  <i>All-GSA Workshop: Groundwater Recharge: December 11, 2019, 4:00 – 6:00 p.m.</i></p>	

### Accessibility

If you need special assistance to participate in this meeting, please contact Andy Rodgers at 707.508.3611 or [by email](mailto:arodgers@westyost.com) (arodgers@westyost.com). Notification of at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility of the meeting.

### Agenda Materials

Agenda materials are available for review at West Yost Associates, 2235 Mercury Way #105, Santa Rosa, CA 95407, during normal business hours, and a copy of the agenda packet will be available for public review at the meeting. Any documents provided at the meeting by staff will also be available to the public. Any documents provided to the Advisory Committee during the meeting by the public will be available the next business day following the meeting. The agenda and agenda packet materials are also available at the Santa Rosa Plain [GSA website](http://santarosaplaingroundwater.org): (<http://santarosaplaingroundwater.org>).

### Public Comment

Members of the public may attend meetings of the Santa Rosa Plain GSA Advisory Committee and may comment before Advisory Committee consideration of individual agenda items, or during General Public Comment on any matter within the jurisdiction of the Advisory Committee. As needed, time limits may be placed on public comments to ensure the Advisory Committee is reasonably able to address all agenda items during the course of the meeting.

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

**Date/time:** Monday, July 8, 2019 / 3:00 – 5:30 p.m.

**Meeting Location:** Santa Rosa Utilities Field Office, 35 Stony Point Road, Santa Rosa

**Contact:** Andy Rodgers, GSA Administrator

**Email:** [arodgers@westyost.com](mailto:arodgers@westyost.com) | Phone: 707-508-3661

### MEETING RECAP

#### Summary of Action Items

<i>Action Item</i>	<i>Responsible Party</i>	<i>Deadline</i>
Send an email to the Advisory Committee members detailing the process for renewing two-year and three-year terms for all Advisory Committee members and Alternates.	Andy Rodgers	Complete
Review the Ordinance and provide feedback for improvements to Andy Rodgers before the next Board meeting.	Advisory Committee Members	August 7
Send additional feedback to Andy Rodgers about the well Registration program.	Advisory Committee Members	August 7
Send any additional comments or questions for Carrie about the rebate program to Andy Rodgers.	Advisory Committee Members	ASAP
Send feedback to Marcus Trotta on latest GSP subsections.	Advisory Committee Members	August 7
Send GSP Development PPT from this meeting to the Advisory Committee members.	Marcus Trotta	ASAP
Member agencies notify the Administrator, in writing, who will serve on the Advisory Committee for the next term beginning January 1, 2020 and ending December 31, 2021, as well as the alternate (even if it is the same members).	Advisory Committee Members representing member agencies.	November 1

**Next meeting:** Monday, September 9, 2019, 3:00 – 5:30 p.m., City of Santa Rosa Utilities Field Office (UFO), 35 Stony Point Road, Santa Rosa

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

### MEETING SUMMARY

#### Welcome, Introductions, and Agenda Review

Rich Wilson, Sacramento State University Consensus and Collaboration Program (facilitator), opened the meeting, suggested a round of introductions, and followed with an overview of the meeting's agenda. No comments were received on the agenda.

#### General Public Comment Period

No public comments were received.

#### GSA Staff and Advisory Committee Updates

Andy Rodgers, Administrator, presented the June GSA Board meeting activity – the Board accepted the Raftelis rate study report, adopted an Ordinance requiring registration of groundwater use facilities, adopted a Resolution for establishing the fee, and approved a Reserve policy for agency financial reserves. The County of Sonoma Board of Supervisors and Sonoma Water's Board of Directors approved an "Alternative Plan" supporting GSA activities for Fiscal Year 2019-2020 through 2021-2022 providing a combined contribution up to \$240,000 annually. The annual cost to fund the GSA is \$337,000 a year and there is an annual projected deficit of \$6,887. Rodgers identified various options for addressing the annual operating deficit.

At the April 11 SRP Board meeting, the Board offered unanimous support for Sebastopol joining the Santa Rosa Plain GSA and agreed to Sebastopol paying a prorated contribution of \$71,400 for three years. On June 25, Sebastopol City Council voted to join the GSA Board and voted Council Member Michael Carnacchi the GSA Board Member and City Mayor Neysa Hinton, the Alternate. Henry Mikus thanked Marcus Trotta for his time and support at the June Sebastopol Council meeting.

The two-year terms for Advisory Committee Members appointed by Member Agencies are up for renewal at the end of 2019. This concerns eleven seats including Sandi Potter, Mary Grace Pawson, Craig Scott, Jennifer Burke, Mark Grismer, Carolyn Dixon, Wayne Haydon, Matt O'Connor, Chris Bates, Henry Mikus, and Maureen Geary; these individuals need to re-apply. **By November 1, 2019**, the GSA is requesting member agencies notify the Administrator, in writing, who will serve on the Advisory Committee for the next term beginning January 1, 2020 and ending December 31, 2021, as well as the alternate (even if it is the same members). This will allow the GSA to maintain complete records.

Interest-based seats have a three-year term that ends December 2020. *There is nothing needing to be done for these seats in 2019.* However, interest-based members must apply to the GSA for the next term by October 1, 2020, even if they're already serving.

Marcus Trotta mentioned a plan for a community workshop in late 2019/early 2020 which would focus on work done to-date of the basin setting section of the GSP and moving forward concentrate on SGMA's six sustainable management criteria.

- Bob Anderson - How big a public workshop? What kind of outreach are you doing to solicit people to attend?

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

- Trotta - We plan to present our understanding of the water basin, describe its conditions, present the water budget, convey next steps and introduce the concept of sustainable management criteria (including setting thresholds) to the public. We look to Ann DuBay for outreach.
- Ann DuBay, Sonoma Water Outreach - Said there is funding available to send a postcard to everyone in the basin. They will also do traditional press releases and use social media, free media if possible. The meeting will most likely take place in the November/December timeframe.
- Member Furch suggested to hold the meeting in October as November/December are very busy periods.
  - Dubai - We are concerned about October as we need materials to be ready. Might look at moving the meeting to January to increase the opportunity for public involvement. She agreed November and December aren't as good for getting high attendance.

Trotta on basin prioritization - DWR recommended Wilson Grove Basin be a very low priority basin based on comments and information received. Santa Rosa Plain was reprioritized to medium rather than high priority. These are still draft recommendations, there is a 30-day comment period. The County submitted comments in support of the draft recommendations during the comment period and several resource agencies and organizations, including NOAA, California Department of Fish and Wildlife, the Nature Conservancy, California Trout and Trout Unlimited. DWR is in the process of considering the comments received and plan to release their final determinations early summer.

- Member Furch – I read a lot of concerns about the Coho streams. The timeline is challenging to amend boundaries right now. If we can be specific about the upland area there may be some ways to include those areas even if DWR can't include them in the boundaries. We might be able to take them into account anyway.
  - Trotta – In our current GSP we are taking them into account. We think the GSA would be able to find support for monitoring in the contributing watershed areas outside of the Bulletin 118 Basin. We will continue to coordinate with Wilson Grove no matter which way the prioritization goes. DWR will not allow basin boundary change requests again until after 2022.
- Member Furch – That is my understanding but given the sensitivity of the issue it seems we might be more specific about looking at the streams and the impacts. It seems like they will be included in some future boundary amendment.

Trotta mentioned grant funding approval from DWR to install twelve shallow monitoring wells in the Santa Rosa Plain Basin. He received a draft agreement and is in the process of reviewing and finalizing scope with DWR. Currently looking at drilling logistics and working on access and permitting issues. Hopefully, the wells will be installed by early fall to start collecting data that will be useful in the GSP.

### **Update and Future Direction of Rate and Fee Study**

Andy Rodgers provided the Ordinance updates. He put forward some ideas for improving/revising the Ordinance and mentioned the Board is hoping the Advisory Committee will provide them with advice.

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

### Comments/Questions

- Member Furch - Suggested to have an executive summary or fact sheet to explain what the Ordinance is.
- Member Bertsch – On the first section of the Appeals, it prompts one thing that can be appealed which is the amount of the groundwater fee. I wonder how that relates to this. The people won't be paying for three years. We aren't showing it on the tax roll. If the purpose of the registration process is to correct data, we might want to separate those things. Maybe we should have a very simple way to correct data.
  - Andy – The Appeals is more for someone who thinks they shouldn't be charged for anything. The registration program is set up to get new data to correct data and doesn't have anything to do with the Appeals.
- Member Bertsch – Is there a cheat sheet that explains why they aren't paying anything right now but will be in three years? Is there anything that shows exactly what the County is paying?
  - Rodgers – It speaks to what Member Furch mentioned before. We need to have some good at-a-glance materials.
- Member Potter – Regarding production of wells in Windsor – Section 2a Municipal Large Water service providers – make sure it includes irrigation water, not only drinking water.
- Member Hayden – Regarding the Raftelis report – include mention in the Ordinance. We should specifically say we are using Raftelis numbers.
  - Rodgers – good idea, will check with Legal Counsel.

Andy Rodgers then gave an update on the groundwater user registration program. He said the direction from the Advisory Committee and the Board is to keep it simple. Currently looking at ways to exchange information and make sure our data sets get better over time. We need to develop materials to be sent to SRP groundwater users for Board review and he solicited the Advisory Committee members' help. He noted the importance of working with a lot of people on the materials to make sure it is clear, then asked if there was interest from any Advisory Committee Members to be involved.

### Comments/Questions

- Member Furch - Suggested Ann Dubay's Communications sub-committee (Rue is part of the committee), and noted it would be nice to have something in Spanish too (such as a two-page flyer).
- Member O'Connor – Said he would be interested to provide feedback but would prefer not spending meeting time to do so.
- Rich Wilson – The committee must be Brown Act compliant so less than majority of the group could participate.

Andy Rodgers said there would be a phased implementation. Phase 1 - FY19/20 would include initial groundwater user notification, implement website updates and distribute supporting materials and review updated datasets from municipal and large groundwater users. Phase 2 - FY20/21 would review/update datasets from small water service providers and agriculture, and Phase 3 - FY21/22 would review/update datasets from rural residential and urban well users.

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

### Comments/Questions

- Member Furch – It seems data from rural residential will be the most difficult to collect. Why start with the large groundwater users?
  - Rodgers – We are starting with the large users because there are fewer of them than water service providers, agricultural users and rural residential users.
- Member Soiland – It seems strange to tell people they will not be paying for three years. It is a long time from now, it is a bit of a disconnect.
  - Rodgers – We won't be assessing a fee but will be collecting data. We already have our understanding of the basin. People will have the opportunity to add information. We will focus on making the groundwater user classes and update our datasets with the new information.
- Member Anderson – Slide 30, third bullet. How is large defined? Public interpretation is different from ours. Take the “and” out of the bullet.
  - Rodgers - Good comment.

Carrie Pollard, Sonoma Water – Presented the Prop 84, Northern Sonoma County Water Conservation Program. The North Coast Resource Partnership Prop 84 grant makes grant money available to private well users including mutual water systems, shared well, community wells, and other non-profit water systems in the GSA through August 2020. Four programs are included; turf replacement rebate, high efficiency toilet rebate, high efficiency water rebate, and residential water use consultation. 75% will be covered by the grant, Sonoma Water will cover a match contribution of 25% as an in-kind match contribution to the SRP GSA. Sonoma Water will develop the applications, process the rebate payments, provide quarterly reporting to the GSA and track participation and cost by program.

### Comments/Questions

- Member Bertsch – So the total on the landscape rebate is 2625 sq feet amongst all the projects?
  - Pollard – Yes, per site it is 500 sq ft maximum.
- Member Bertsch – Is this currently active?
  - Pollard – It is not currently active. All programs are already available through other means through Sonoma Water but will now be made available to well owners.
- Member Furch – Is this the same as the program that was available to replace up to two toilets including installation?
  - Pollard – No, that was the drought funding through Prop 84. This funding is to allow expansion.
- Member Scott – This could be a good tool to vet who has a well. Sonoma Water is making funds available to this new category? Does this need Board approval?
  - Pollard – No Board approval is required. It is true this could help with registration data.
- Member Burke – Regarding urban residential well users, will only the landscape rebate apply?
  - Pollard – We can set it up however you want it to be.
- Member Potter – In Windsor we don't allow grant funds for people irrigating with recycled water.

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

- Member Furch – Would it include shared wells?
  - Pollard – Yes.

Pollard welcomed comments as she would like to get outreach going for the 2019 Sonoma County Fair. The Sonoma-Marin Saving Water Partnership has an un-manned booth during the Fair. The booth will contain resource cards for each partner listing rebates, and resources currently available. A card is also being developed to advertise resources for well users.

- Member Soiland – Is this only available to the SRP GSA?
  - Pollard – Yes.

### Groundwater Sustainability Plan (GSP) Development

Marcus Trotta gave an overview of the subsection of the GSP focusing on current and historical groundwater conditions, including six groundwater conditions' requirements: groundwater elevation; change in storage; seawater intrusion; groundwater quality; land subsidence; and interconnected surface water. He also gave a preview of the groundwater flow model and the water budget section of the GSP. He requested verbal feedback at the meeting, and any written feedback, by Aug. 7.

#### Comments/Questions

- Member Anderson – What does the water budget include?
  - Trotta – It needs to account for both surface water and groundwater. We need to include both the watershed-wide water budget and, also report the basin specific watershed.
- Member Mikus – There is a stark change from 1990 to 2007 in groundwater levels in the vicinity of Santa Rosa Creek and the Laguna. Any idea why that might be?
  - Marcus – Yes, there was an increase of area with lower water levels. Sonoma Water was using three wells in the basin, it could be what is showing up.
- Member Bertsch – The same issue exists in Sebastopol, it would be good to describe in writing about the declines in the west county and if the trend is continuing.
- Member Hayden – There seems to be more categories on the maps than explanations. It is also difficult to line the colors up because of the transparency that has been applied to the map but not the explanation. Another point, there is a difference in water levels in confined and unconfined aquifers. I think there is a misunderstanding about this, a little explanation wouldn't hurt.
  - Trotta – Good point, thank you.
- Member Hayden – Regarding figures 3-10a and b – Get point across how deep the water is – mainly for the shallow groundwater system.
  - Trotta – We are developing that kind of map for interconnected surface water.
- Member Bertsch – Regarding map 3-10 – We are splitting some maps by shallow and deep. Is that using the 200 ft line from the old basin setting?
  - Trotta – Yes, it is following how we define aquifers in section 3.1. The shallow and deep aquifers are based on the geologic model we have, generally about 200 ft where the transition occurs.
- Member Bertsch – There are a couple decreases/declines but aren't called out as counter to the trend. It would be interesting to have details.

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

- Member O'Connor – Regarding 3-10 a and b. I observed the water elevations are more similar than deep in general.
  - Trotta – Part is due to data gaps. We will add some additional information on vertical gradient and how it varies in the basin.
- Member Furch – What defines a well of interest?
  - Trotta – Wells that have long-term data to look at data over time.
- Member Potter – When the County General Plan and the GSP Plan are not consistent with language it might be helpful for the County planners to go back to the County General Plan, see what the trends were, and comment on the status of those.
- Member Furch – In a couple of places you list things that will be done. Maybe you should add a bullet for land use and intensity of land use. Those kinds of uses could impact the Santa Rosa Plain.
- Member O'Connor – One advantage you have with the presentation is that you have PowerPoint slides.
  - Trotta – We can get you the slides.
- Member Bertsch – Can we add a legend to the maps for production wells?
- Member Furch – Arsenic is naturally occurring. If it says Arsenic, it must be clear and acknowledge Arsenic is dangerous.
- Member Bertsch – I agree, even though naturally occurring, extraction can increase the concentration of Arsenic.
  - Trotta – SGMA requires the GSAs to set sustainable criteria for degraded water quality caused by groundwater pumping or recharge. It will become more important when we get into sustainable management criteria.
- Member Furch – Andy Rodgers can help with ensuring the General Plan is consistent with language on surface water/groundwater requirements.

Lastly, Trotta mentioned they are currently working on the water budget and a sub-consultant is evaluating the USGS model and how best it can be used to develop the water budget.

### **Meeting Attendees**

#### ***Advisory Committee Members (present)***

Agriculture, Bob Anderson  
 City of Cotati, Craig Scott  
 City of Santa Rosa, Jennifer Burke  
 City of Sebastopol, Henry Mikus  
 Environmental, Sebastian Bertsch  
 Sonoma RCD, Wayne Haydon  
 Environmental, Rue Furch  
 Federated Indians of Graton Rancheria, Maureen Geary  
 Gold Ridge RCD, Matt O'Connor  
 Sonoma Water, Carolyn Dixon

# Santa Rosa Plain Groundwater Sustainability Agency

## Advisory Committee Meeting Summary

Town of Windsor, Sandi Potter  
Rural Residential, Marlene Soiland

### ***Advisory Committee Members (absent)***

Agriculture, David Long  
Business, Joe Gaffney  
City of Rohnert Park, Mary Grace Pawson  
County of Sonoma, Mark Grismer  
Independent Water Systems, Chris Bates  
Rural/residential, Doug Beretta

### ***Staff***

GSA Administrator, Andy Rodgers  
Sonoma Water, Marcus Trotta  
GSA Administrative Assistant (minute taker), Simone Peters

### ***Facilitator***

Rich Wilson, Sacramento State University – Consensus and Collaboration Program

### ***Public***

Approximately 10 members of public

# Santa Rosa Plain Groundwater Sustainability Agency Board and Advisory Committee Meeting Schedule

SRPGSA Board	Advisory Committee
<b>2019</b>	
<b>March 14</b> Rate/fee study Draft budget Reserve policy Audit	<b>January 9</b> Rate/Fee Study Update Revised Plan Area Section Hydrogeologic Conceptual Model Overview Initial Draft Figures and Maps for Current and Historical Groundwater Conditions and Hydrogeologic Conceptual Model Subsections
<b>April 11</b> Rate/fee study Adopt FY 19-20 budget	<b>March 11</b> Rate/Fee Study Update Hydrogeologic Conceptual Model– Draft subsection
<b>May 22</b> <b>All-GSA Workshop: Climate Change &amp; Groundwater Sustainability</b> <ul style="list-style-type: none"> <li>• GSP requirements regarding climate change</li> <li>• Local implications of climate change on groundwater and surface water</li> <li>• How this information will be incorporated into GSPs</li> </ul>	
<b>June 13</b> Approve Groundwater Sustainability Fee	<b>May 13</b> Hydrogeologic Conceptual Model– Revised subsection Current and Historical Groundwater Conditions– Draft Materials Rate/Fee Study and Groundwater User Registration Program Update
<b>August 8</b> Groundwater User Registration Implementation Plan	<b>July 8</b> Current and Historical Groundwater Conditions– Draft Subsection Water Budget Requirements and Groundwater Flow Model Overview Rate/Fee Study and Groundwater User Registration Program Update
<b>October 10</b> Consider Approval of Ordinance Updates Review Draft 19/20 Budget Revisions	<b>September 9</b> Overview of Water Budget Requirements and Existing Groundwater Flow Model Introduction to Sustainable Management Criteria Groundwater User Registration Program Update

# Santa Rosa Plain Groundwater Sustainability Agency Board and Advisory Committee Meeting Schedule

SRPGSA Board	Advisory Committee
<b>2019</b>	
<p><b>December 11, 4-6pm, Santa Rosa</b>  <b>All-GSA Workshop: Groundwater Recharge</b></p> <ul style="list-style-type: none"> <li>• What is recharge? What do we know about it? How does it relate to SGMA?</li> <li>• California’s Flood-MAR Initiative</li> <li>Local On-Farm Recharge efforts and studies</li> </ul>	
<p><b>December 12</b>                      Groundwater User                      Registration Program                      Implementation</p>	<p><b>November 4</b>                      Basin Setting Update                      Water Budget and Model Discussion                      Management Areas Discussion                      Sustainable Management Criteria Considerations                      Cannabis Water Use</p>
<p><b>Early 2020: Public Workshop on Sonoma Valley GSP and Basin Conditions</b></p> <ul style="list-style-type: none"> <li>• What defines the basin?</li> <li>• Communities</li> <li>• Water sources</li> <li>• Groundwater conditions</li> <li>• SGMAs Sustainable Management Criteria: What they are, why they matter, how they will be developed and how you can help</li> </ul>	

# Sustainable Management Criteria

## Description of Terms and Definitions

The following description of terms and definitions related to Sustainable Management Criteria (SMCs) has been prepared to assist staff, advisory committee members, board members and community members develop a common understanding of this critical component of the Groundwater Sustainability Plan (GSP) being developed by the Groundwater Sustainability Agency (GSA). Text in *“italics and quotations”* represent definitions contained within the California Water Code, as defined by either the Sustainable Groundwater Management Act (SGMA) or the Final GSP Emergency Regulations.

**Sustainability Indicator** refers to the following underlined six effects *“caused by groundwater conditions occurring throughout the basin that, when significant and unreasonable, cause **Undesirable Results**”*:

1. *“Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply if continued over the planning and implementation horizon. Overdraft during a period of drought is not sufficient to establish a chronic lowering of groundwater levels if extractions and groundwater recharge are managed as necessary to ensure that reductions in groundwater levels or storage during a period of drought are offset by increases in groundwater levels or storage during other periods*
2. *Significant and unreasonable reduction of groundwater storage*
3. *Significant and unreasonable seawater intrusion*
4. *Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies*
5. *Significant and unreasonable land subsidence that substantially interferes with surface land uses*
6. *Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water”*

**Sustainability Indicators** become significant and unreasonable, and therefore **Undesirable Results**, when a GSA-defined combination of **Minimum Thresholds** is exceeded.

**Minimum Thresholds** *“refers to a numeric value for each sustainability indicator used to define undesirable results”* and represent groundwater conditions at representative monitoring points that would prevent undesirable results from occurring. These thresholds are the primary metric used to determine whether or not the GSA is achieving sustainability.

**Undesirable Results** are a quantitative description of the combination of minimum threshold exceedances that cause significant and unreasonable effects in the basin. Undesirable results may be defined by minimum threshold exceedances at a single monitoring site, multiple

monitoring sites, a portion of a basin, a management area, or an entire basin. Undesirable results must be eliminated within 20 years of GSP implementation.

**Measurable Objectives** “refer to specific, quantifiable goals for the maintenance or improvement of specified groundwater conditions that have been included in an adopted Plan to achieve the sustainability goal for the basin”. These objectives represent quantitative goals that reflect the GSA’s desired groundwater conditions in the Basin and guide the GSA to achieve its sustainability goal within 20 years. Measurable Objectives should allow for a reasonable margin of operational flexibility between the minimum threshold and measurable objective that will accommodate droughts, climate change, conjunctive use operations, or other groundwater management activities. Although measurable objectives are not enforceable during implementation of the GSP, the GSP needs to demonstrate that there is a planned path toward achieving measurable objectives.

An **Interim Milestone** is a “target value representing measurable groundwater conditions, in increments of five years, set by an Agency as part of a Plan.” Interim milestones need to be set at each representative monitoring site using the same metrics as the measurable objectives and minimum thresholds and are used to track progress toward meeting the sustainability goal.

**Representative Monitoring Sites** “refers to a monitoring site within a broader network of sites that typifies one or more conditions within the basin or an area of the basin.” Representative monitoring sites are a subset of a basin’s complete monitoring network, where minimum thresholds, measurable objectives, and interim milestones are set. A single representative monitoring sites can be used for one sustainability indicator or multiple sustainability indicators. Additionally, SGMA allows for groundwater-levels to be used as minimum thresholds, measurable objectives and interim milestones as a proxy for multiple sustainability indicators where a correlation can be established.

**Management Areas** “refers to an area within a basin for which the Plan may identify different minimum thresholds, measurable objectives, monitoring, or projects and management actions based on differences in water use sector, water source type, geology, aquifer characteristics, or other factors” Management areas represent separately defined portions of a basin utilized to facilitate groundwater management and monitoring and may have differently-defined minimum thresholds and measurable objectives than the basin at large and may be monitored to a different level and scale as appropriate. Undesirable results, however must be defined for the entire basin and can’t vary by management area.

The **Sustainability Goal** “means the existence and implementation of one or more groundwater sustainability plans that achieve sustainable groundwater management by identifying and causing the implementation of measures targeted to ensure that the applicable basin is operated within its sustainable yield” The goal states the GSA’s objectives and desired conditions of the groundwater basin, how the basin will get to that desired condition, and why the measures planned will lead to success. The sustainability goal is not quantitative, but is

supported by the locally-defined minimum thresholds and undesirable results. Demonstration of the absence of undesirable results supports a determination that basin is operating within its **sustainable yield** and, thus, that the sustainability goal has been achieved. The sustainability goal should incorporate the following:

- Goal Description
- Discussion of measures
- How goal will be achieved in 20 years

The sustainability goal cannot be finalized until after minimum thresholds and undesirable results have been defined, projects and management actions have been identified, and the projected impact of those projects and management actions on groundwater conditions have been evaluated.

***Sustainable Yield*** "means the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result".

# Sustainable Management Criteria

## Key Data and Information Needs to Support SMC Development

The following list of items represent key data and informational needs to assist staff in prioritizing resources for supporting advisory committee members, board members and community members in developing Sustainable Management Criteria (SMCs). The data and information needs are grouped by each applicable sustainability indicator for the Subbasin.

### Needed for All

- Defined historical climactic cycles (completed)
- Monitoring network descriptions and evaluation of potential Representative Monitoring Points (*under development*)
- Potential Management Areas for Advisory Committee consideration

### Lowering of Groundwater Levels

- Groundwater-level hydrographs/contour maps (completed)
- Groundwater-level trend maps (*under development*)
- Maps of well depths/screened intervals (eg, shallowest depth by square mile)

### Reduction of Groundwater Storage

- Water Budgets from models, including refined groundwater use estimates (*under development*)

### Seawater Intrusion

None - Not an applicable Sustainability Indicator for the Subbasin

### Degraded Water Quality

- Water quality distribution and trend maps (completed)
- List of relevant and existing water quality standards and thresholds

### Land Subsidence

- Historical subsidence graphs and maps (completed)

### Depletions of Interconnected Surface Water

- Streamflow and stream stage datasets and graphs (completed)
- Interconnected surface water maps (*under development*)
- Maps of groundwater-dependent ecosystems (*under development*)
- Maps of well densities/depths within one mile of interconnected surface water with locations of known surface water rights/diversions
- Maps of simulated pumping from shallow model layers with interconnected surface water

# Sustainable Management Criteria Engagement Opportunities and Tools

September 2019

## Overview

Sustainable Management Criteria (SMCs) are the heart of the Groundwater Sustainability Plan. Unfortunately, SMC terminology is non-intuitive, complex, and technical. Most people will struggle to define the meaning of ‘minimum threshold’, ‘measurable objective’ or ‘sustainability indicator’ in reference to the aquifer or groundwater that feeds their well, water system or neighborhood creek. Yet, SGMA requires that people and communities who benefit from groundwater be actively engaged in developing SMCs.

The challenge for the GSA Board, Advisory Committee and staff will be presenting concepts and information in a way that people can understand, that is relevant to their lives/livelihood and that will allow them to provide meaningful input to the GSA.

Listed below are key opportunities and tools the GSA can use to educate and engage people. **Following feedback from the Advisory Committee, staff will develop these concepts into an engagement plan that will include a timeline and deliverables, and that falls within the GSA’s FY 2019-2020 outreach budget.**

## Opportunities

- Workshop on basin setting: Introduce SMC concepts (Winter 2020)
- Separate, facilitated workshop on SMCs (For Petaluma Valley and Sonoma Valley -- Spring 2020)
- Monthly Updates (throughout 2020)
- Existing stakeholder meetings (short, stand-up presentations for Board, Advisory Committee members and staff to provide information on SMCs in a clear, understandable way)
- Variety of media channels

## Tools

- Facilitated discussions to solicit input and ideas at workshops (for example, using World Café-style set-up or small group tabletop discussions)
- Talking points
- Fact sheets that explain SMCs in simple language, using examples and graphics
- PowerPoint presentation that is simple and visually compelling
- Surveys
- Member agency and stakeholders social media channels
- Letters to the editor; opinion pieces
- Postcard or flyers delivered via US mail
- Flyers posted at popular gathering spots