

Santa Rosa Plain Groundwater Sustainability Agency Advisory Committee Meeting Meeting Summary

Date/time: Monday, November 18, 2019; 3:30 pm-6:00 pm

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 | Phone: 707.508.3661

Next meeting: January 13, 2020, 3:00-5:30 pm, City of Santa Rosa Utilities Field Office (UFO), 35 Stony Point Road, Santa Rosa.

MEETING SUMMARY

Welcome, Introductions and Agenda Review

Sam Magill introduced himself as the new facilitator for the Santa Rosa Plain Advisory Committee (Advisory Committee), reviewed the agenda, and discussed general housekeeping items.

Rue Furch, co-chair of the Advisory Committee, noted Sebastian Bertsch is leaving the Advisory Committee, thanked him for his participation, and noted Andy Rodgers, GSA Administrator, is reviewing applications for his replacement.

General Public Comment Period

No public comments were received during this period.

GSA Staff and Advisory Committee Updates

Administrator, Plan Manager, and other Staff Advisory Committee Members

Mr. Rodgers commented the October 10 GSA Board meeting was cancelled without action. Additional agenda items will be added to the Board's December 12 to make up for the cancelled meeting.

Mr. Rodgers continued with a report on the Groundwater User Registration Program (Program):

- Input is being collected from staff and the Advisory Committee, the Board will provide its input on December 12.
- By the January Advisory Committee meeting, the Program will be refined for final approval by the GSA Board;
- The Program website is set to launch in March 2020, and includes an interactive map for user registration.

- The Advisory Committee will be provided with updated Program materials in advance of the January meeting. The electronic interface for public user is still under development by GSA staff.
- Staff is working with legal counsel to develop a privacy statement at the GSA Board's direction.
- Any additional edits to the Program mailer should be sent to Mr. Rodgers (arodgers@westyost.com) in advance of the January meeting.

Questions/Comments from Advisory Committee

- Comment Haydon: One thing you may want to consider for the privacy statement. USGS states that this "Information may be used in a generalized way, without showing specific information, without being specifically labeled, etc." I'll find this example and provide it to you. Comment Furch: We should include "data will be aggregated for use and further research" so people know specific wells will not be pointed out.
 - Response Rodgers: Great, we will send out drafts of this statement for your review.
- Question Scott: I'd like to request a list of addresses for the City of Cotati mailer to know ahead of time who will receive these letters. I want to know who is likely to have a private well.
 - Response Rodgers: (to Marcus Trotta), Any issues?
 - Response Trotta: None.
- Comment Furch: In the second paragraph, "July 2019 the GSA adopted". I suggest you say something like "approval of funding structure for developing the plan will NOT be charged to well owners." They don't care who pays for it, but they care that it isn't them. It will make them comfortable. The next paragraph should say "based on types of use and (where data comes from), and the final sentence about calculated data of estimated use should say something about "until we hear from you" inviting well owners to provide more information.
 - Response Rodgers: You want to encourage them to respond?
 - Furch: Yes, the second part of my suggestion is "this is where we got the data. It's based on use as opposed to users. Future fees will be calculated based on estimated data unless we have further information from well owners." We want to encourage them to respond.
 - Response Rodgers: There will be a draft 5, so feel free to send more suggestions.
- Comment Soiland: I don't understand the purpose of this mailer. We don't ask anywhere in here for people to register their well. We need to be clear about our request and include directions on how to do it.
 - Response Rodgers: Thank you for pointing that out. They are already registered, so that's done but the mailer doesn't point that out. Our request is that they review our data (of them) and provide additional information. This is the reason there will be a Draft 5.
- Comment Close: Going back to Ms. Furch's point, we should emphasize that well owners won't be charged. Municipal well owners are paying currently, so let's be careful about suggesting current rate payers will not need to pay in the future.

- Response Rodgers: Let's hope all these questions send people to the website to get clarity. The mailer is small, so we need to direct people to the website. With no other comments, I will take this back to my desk. We will continue to work on our database. Based on my schedule, the new registration program webpage will be developed by approximately February.

GSA Grants Update

Marcus Trotta, Sonoma Water, provided a brief update on grant funding opportunities and current work. California Department of Water Resources (DWR) is constructing shallow monitoring wells in all three Sonoma County basins; a total of 22 are planned with 12 located within in the Santa Rosa Plain. DWR Technical Support Services are offered to GSAs across the state: we applied for additional support, and currently have the largest number of monitoring wells under the grant. The shallow well locations are used to penetrate the shallow aquifer systems and better evaluate surface water-groundwater interactions. We sited them near existing stream gauges, the data should be very useful. Mitch Buttress, Sonoma Water, is coordinating activities with DWR.

Ten wells were completed in the Santa Rosa Plain as of November 15. Two remain to be installed in Mark West Creek area. Delays are due to complicated access permissions. DWR will likely come back next year to complete the last two wells. Wells all range in depth from 20'-50', depending on where we need to observe the interaction, and are generally, less than 50-100' away from stream channels. To ensure access, wells were installed in a public right-of-way.

The Press Democrat did a great job describing the project, but pulled an old quote from Jim Bundschu back in 2016 stating agriculture was leery of monitoring. This quote is out of date as agriculture is generally supportive of monitoring now; Ann DuBay is working with Jim to write a comment letter to the Press Democrat.

Questions/Comments from Advisory Committee

- Question Furch: How do depths compare to private wells in the vicinity?
 - Response Trotta: Most of these wells are shallower than water supply wells used by agriculture or rural residential users. It's important to track shallow portions of aquifer where you can see impact. But separately we are thinking of installing deeper wells. What we could potentially do, if any of these shallow wells looks like there is an impact from pumping, is go back and install deeper wells.
- Comment Furch: I'm really pleased by this project, but I know there is some concern from citizens about impacts of these wells on private wells. So, let's educate folks about this.
- Question Scott: It's impressive how quickly the grant was secured, and wells were installed. Congratulations! My question – now that the wells are installed, who will be physically monitoring them with instruments? And will GSA cover the operational costs?
 - Response Trotta: Great question. Beginning November 19, DWR will further develop the wells with an additional drilling rig. Once complete, Sonoma Water will establish surface water elevations by surveying well casings. The GSA needs to cover this cost. We will install pressure transducers and temperature devices and

begin collecting data in December. They will start collecting data in December. Going forward, these wells will become part of the GSA monitoring program. DWR will fund the additional equipment, but the GSA is responsible for long-term O&M.

- Question Furch: Will the public know? Where does the data go?
 - Response Trotta: It goes into the Groundwater Sustainability Plan and included in annual reports after the GSP is submitted. We are also working on a public data portal to include this and much other data on groundwater elevations in the basin.
- Question Furch: What about real-time information on groundwater depths? Is that still an idea?
 - Response Marcus: There will be some opportunities, particularly where wells are near existing stream gauges. It can be added to gauge telemetry systems and reported more quickly, but will not be “live” data streams.
- Question Long: I’m glad to hear we are not doing real-time display. I’m wondering how the shallow agricultural wells play into sustainable management criteria.
 - Response Trotta: For sustainable management criteria, we need to set a criteria and thresholds for streamflow depletion. We can use groundwater levels as a proxy for stream flow depletion. Shallow wells will be helpful to establish levels, as well as interconnected surface flow in the basin. We have some data, but until you know the groundwater level right near the stream, that data must be refined. It will also be used to calibrate the groundwater model.

Marcus Trotta provided an update on the Pop 68 grant funding. The grant proposal was submitted to DWR on November 15; funding recommendations will be released in early Spring, 2020. He asked that the Advisory Committee members refer to the map in the meeting packets as it includes a summary of tasks in the grant that were submitted. Tasks include

1. Conduct rural residential outreach campaign
2. Develop and implement sustainable management criteria working groups.
3. Make improvements to groundwater use estimates in rural areas. Use remote sensing.
4. Coordinate with Permit Sonoma to make upgrades on how they collect, compile and share data on well users, wells, permitting, existing monitoring, and groundwater user registration.
5. Install deeper monitoring wells. Deeper wells will show the roll of fault lines in groundwater basins and provide additional data on the Russian River basin.
6. Seepage runs, streamflow measurements that can help us understand the gaining and losing of surface and groundwater interactions.

Questions/Comments Advisory Committee

- Question Furch: What will we do in the meantime? Can work be performed in the interim period?
 - Response Trotta: We plan to move forward with existing resources.
- Question O’Connor: Is there a back-up plan if the grant doesn’t come through?
 - Response Trotta: We may need to scale down staff efforts if that happens. But we will be looking for funding for these tasks. There are other opportunities, the Technical Support Services Program may also fund deeper wells.

Discussion of Groundwater Use for Cannabis Operations

David Kuszmar, North Coast Water Quality Control Board (Regional Water Board), delivered a presentation on cannabis permitting and water use in Sonoma County. The Regional Water Board's cannabis data is novel and sheds light on cropping and irrigation practices.

Based on 2017 information, there are about 3000 enrollees across the Regional Water Board's jurisdiction; the Regional Water Board estimates this data is approximately 5% of actual cultivation in the region. 95% are assumed to be operating under the black market. Data on water use in the presentation is thought to be broadly representative of most cannabis operations.

Questions/Comments Advisory Committee

- Comment Furch: Data is collected on both full sun outdoor conditions and mixed light conditions (under some regime of light stress is used to help accelerate growth of cannabis). You will see a lot of hoop houses for this purpose. Under and out from hoop house, alternating is a common practice.
- Question Haydon: What is the estimated plant density of farms?
 - Response Kuszmar: 10 ft²/plant. So, 1300 plants is the size of the first farm. The second farm is about 2000 plants, 1.5 times the previous farm, so 6-7 ft²/plant.

Mr. Kuszmar continued by noting Mendocino and Sonoma Counties are presented together due to a small sample size of permittees. Well water is the primary irrigation source in this region; surface water is used more often in Humboldt and Trinity Counties.

Most farms in this region lack a year-round water source or storage capacity to withdraw in the winter and have enough to make it through the growing season (April-October). In general, growers are not set up to comply with forbearance for surface water use. The Statewide Division of Water Rights issues water rights and registers growers who use surface water sources.

Mr. Kuszmar explained most growers in Sonoma County grow in recognized groundwater basins, while northern "Emerald Triangle" growers tend to locate in upstream areas. While groundwater impacts are unlikely in these areas, stream dewatering for salmonids and other species is a greater concern. In Sonoma, this is much less of an issue due to reliance on groundwater and coverage by SGMA.

Given much smaller number of grows vs. the Emerald Triangle, cannabis has a minimal impact on ground and surface water in the Sonoma region, especially compared to dominant industries like vineyards. All told, Sonoma County cannabis growers enrolled in the Regional Water Board permitting program cover less than 100 total acres.

Questions/Comments Advisory Committee

- Question Close: The forbearance is for surface water use?
 - Response Kuszmar: For surface water use.

- Question Furch: Does this follow the same rules as agricultural ponds then?
 - Response Kuszmar: It is similar.
- Question Furch: The forbearance will be challenging because growers need to use it when it's hot, but this keeps you from using it during that time.
 - Kuszmar: If folks want to grow at the rate they have been, then they will need to either increase storage capacity or sink a well because you don't need a right to sink a well. Permitting ponds is difficult, suitable conditions can be tricky, wells are easy. Rainwater capture requires permitting too.
- Question Bertsch: Are there any other agricultural producers in this county that have adopted forbearance agreements?
 - Response Kuszmar: Not to my knowledge.
- Question Mikus: How do you account for the number of illegal grows?
 - Response Kuszmar: We did some preliminary air photo assessments trying to guess how many people will ask for permits. It was fairly rudimentary. We have a program right now using artificial intelligence to identify grows more accurately. In the future, this will be statewide and include a map with GIS layers of all parcels we think are growing.
- Comment Mikus: I keep hearing that Sonoma County is more difficult to get a growing permit than elsewhere. I'm not surprised that there are more north coast growers outside the county. \$9M illegal vs \$1M legal in cannabis revenue is what I had heard.
 - Response Kuszmar: I think that ratio probably holds. You could safely take any number you're using to estimate the water use in any county and multiply it by 10. But, in Sonoma County there are so many more lucrative and easy crops.
- Comment O'Connor: I thought it was \$3M and \$9M. Also, we are working on water-use modeling in Mark West and Mill Creek, using human intelligence to identify cannabis grows in air photos. It is a small piece of the pie, a single digit percentage, 2-3%.
- Comment Close: There are quite some folks looking to grow indoors in Sonoma County. They are another piece of the puzzle.
 - Response Kuszmar: That's true, but any indoor growing operations will be hooked up to city water systems.

Mr. Trotta (filling in for Robert Pennington of Permit Sonoma) presented water use information for Cannabis specific to Sonoma County. He outlined county default water use permits, trends in permitted grows, and descriptions from the county regarding zero water use permits in sensitive areas. He also presented indoor and outdoor grow assumptions for water use. Permit Sonoma's estimates are more conservative than others, showing higher numbers than Regional Water Board estimates. Mr. Trotta noted Permit Sonoma is in the third year of permitting cannabis in Sonoma County. 80 participants enrolled in the first year; this rate has tapered off in subsequent years for a total of 180 permitted growers. The primary concern with cannabis and water is in upland areas where you have sensitive streams with sensitive species that could be impacted by diversions. Anyone applying for a permit is required to demonstrate that they will have a zero-net water use.

Questions/Comments Advisory Committee

- Question Bertsch: Is it just the three Coho watersheds in Sonoma County where net-zero is required?
 - Response Trotta: Yes, and southern Sonoma Valley.

Mr. Kuszmar also discussed hemp production in Sonoma County. The 2018 farm bill legalized hemp as an agricultural commodity federally. So, anyone growing hemp has access to farm bill programs, NRCS, RCDs, banks, crop insurance, etc. That creates an attractive environment for agricultural producers who want to diversify their crops. The Sonoma Agricultural Commissioner will host the first public meeting discussing hemp permitting in Sonoma County on November 20. There does appear to be interest by agricultural producers. The typical hemp farm resembles a farm for corn or another row crop. So, hemp will likely show up in areas currently used for other crops. It remains to be seen if we will have extensive hemp cultivation, and if so, for how long. Persistent issues such as stigma, odor, etc. will continue to be an issue here; industrial cultivation is more likely in other states. Hemp is not estimated to have an out of the ordinary impact on groundwater.

Questions/Comments Advisory Committee

- Comment Furch: I know there is a lot of interest in hemp in agriculture, not because they will transition to it, but because it could supplement income.

Sustainable Management Criteria (SMC) Updates and Request for Input

Mr. Trotta provided an overview of the Sustainable Management Criteria and noted Sonoma Water is currently working on the water budget for the GSP. One focus of this work is updating the Santa Rosa Plain Hydrologic Model to meet SGMA and GSP requirements.

Initial recommendations and observations for updating SRPHM include:

- Update the model to develop a better understanding of rural pumping; when the US Geological Survey (USGS) developed the initial model, it did not have the spatial resolution required by SGMA for GSPs.
- Methodologies developed during the rate and fee study will be used to estimate rural residential use on a per-parcel basis.
- Land use data has been updated to 2014 levels.
- A draft of the model may be presented at the January 2020 Advisory Committee meeting; the model and simulated water budget will be used to develop scenarios for sustainable management criteria.

Questions/Comments Advisory Committee

- Question Haydon: We are going to be looking at the inadvertent recharge using USGS's Agriculture package?
 - Response Trotta: The Agriculture package is a new way to simulate agricultural usage in the model. The current package was a program developed outside the model. This one will be integrated into the model and will better show seasonal variations and such.

- Question Haydon: Will this get at recharge?
 - Trotta: No, the recharge package will do that.
- Question Haydon: How do we get at agricultural return flows?
 - Response Trotta: Those tend to be minor in this basin. Most agriculture is grapes, which use drip irrigation. Septic might be a bigger interest in the return-flow study. And there have been studies done to estimate the amount of water typically put into a septic system. We can present more on that component of the water budget at a future meeting.
- Question Bertsch: Septic return-flow is important to estimate. Quantifying agricultural return flows is also tricky because we consider it a credit in this system, which is a good thing, when over-irrigating is a bad thing. How do we address that? Because, we have irrigation targets to meet that will help conserve water.
 - Response Trotta: Any available data sets we can use to calibrate the model are useful. And you are right that when we get data voluntarily from growers, they may be more conservation minded and using less water already.
- Question O'Connor: What is the crop demand calculator?
 - Response Marcus: That's old. It's from before the Agricultural Package, and it was a step we used to do, but moving forward we will use the Agricultural Package instead.
 - O'Connor: The Division of Water Rights also has a crop demand calculator that I recommend you check out.
- Comment Rodgers: I attended the meeting in Petaluma last week where this was discussed.
 - Response Furch: I'd like to hear Petaluma and Sonoma Valleys' thoughts. It would be useful to our process.
- Question Close: Should our two products match?
 - Response Rodgers: Ideally it would be close, but if they are not, they are not.
 Furch: Have participating agencies looked at data to see where any gaps are?

Mr. Trotta continued by discussing Sustainable Management Criteria key data and information needs. Information needs continue to be refined through input from the advisory committees in all three Sonoma groundwater basins. Although not all identified needs can be developed in advance of GSP deadlines, the GSAs are prioritizing key needs based in part on this list. Advisory Committee members were encouraged to send additional information needs to Mr. Trotta as appropriate.

Questions/Comments Advisory Committee

- Question Furch: Have any of the resource agencies said what criteria they think is important?
 - Response Trotta: We plan to solicit this input from resource agencies.
 - Response Magill: The agency working group (one of three proposed Sustainable Management Criteria focus groups) can fill in those gaps.
- Question Close: Can we see what other basins are proposing?

- Response Trotta: Absolutely. Summary of Advisory Committee input from September meeting: intended to capture initial thoughts on the sustainable management criteria, it is useful for framing our sustainability goals for the basin.
- Response Magill: When would you like the Advisory Committee to provide any additional data needs?
- Response Trotta: Over the next two weeks.
- Comment Rodgers: The other basins are reaching out for input at this early stage to make sure it isn't just staff putting together what we believe is the beginning of the GSP. When you get the first draft you will see information that is familiar.
- Question O'Connor: What are you going to do with this next?
 - Response Trotta: We've already started putting this information together as part of the GSP. We need to take a closer look at it to see what we need to prioritize. Determining the order of information needs and where to put the indicators in is also underway.
 - Response O'Connor: You have a laundry list here. Some of the ideas are impractical. Your job will be to sort through what is and isn't practical.
 - Response Long: I want to echo that. Not all suggestions are salient.
- Question Magill: If there are items you're not able to pursue, will you explain why?
 - Marcus: Yes, we will explain.
- Comment Haydon: I think you would approach it from the angle of "how much ___ is acceptable?" (subsidence for example.)
- Comment Furch: I've used key drivers before. The key driver will tell you or precipitate something. Those are the critical indicators. The rest are interesting indicators.
- Comment Scott: I would prioritize criteria suggestions by how closely they relate to our goal at-hand. Things that are interesting or curious, I think those would go to the bottom of the priority list.
- Question Rue: What's the deadline for feedback?
 - Response Magill: December 2.

[All-GSA Workshop: Groundwater Recharge: December 11, 2019, 4:30 –7:00 p.m.](#)

Mr. Trotta discussed the All-GSA Recharge Workshop. There will be presentations on the science of recharge and what we know in Sonoma County. The statewide program to promote recharge will be highlighted and the on-farm recharge study will be presented. After presentations, the plenary will break into tabletop discussions to talk about recharge techniques, locations, etc. Ann DuBay is interested in reaching out to Advisory Committee members to staff tables that have 6-8 attendees each to help facilitate discussions.

[Questions/Comments Advisory Committee](#)

- Comment Furch: Invite your friends and neighbors. This workshop is open to the public. Last time it was closed to the public and that was frustrating for some.
- Question Close: Do we want to advertise on social media?
 - Response Trotta: Ann DuBay will be sending out something soon.

Meeting Adjourned 5:49 p.m.

Attendees:

Advisory Committee Members (present)

Agriculture, David Long
City of Cotati, Craig Scott
City of Santa Rosa, Colin Close
City of Sebastopol, Henry Mikus
County of Sonoma, Mark Grismer
Environmental, Rue Furch
Environmental, Sebastian Bertsch
Federated Indians of Graton Rancheria, Maureen Geary
Gold Ridge RCD, Matt O'Connor at 3:57pm
Rural Residential, Marlene Soiland
Sonoma RCD, Wayne Haydon
Town of Windsor, Sandi Potter

Advisory Committee Members (absent)

Agricultural, Bob Anderson
Sonoma County Water Agency, Carolyn Dixon
Independent Water Systems, Chris Bates
Rural Residential, Doug Beretta
Business, Joe Gaffney
City of Rohnert Park, Mary Grace Pawson

Staff/Presenters

Andy Rodger, SRP GSA Administrator
Marcus Trotta, Sonoma Water
David Kuszmar, North Coast Regional Water Quality Control Board
Adriana Staggiano, Gold Ridge RCD (notes taker)

Facilitator

Sam Magill, Sacramento State University – Consensus and Collaboration Program