

Regional Water Management Group

LOCATION: Online (ZOOM)

MINUTES

Monday, June 28, 2021 1:30 pm

1. The meeting was called to order at 1:30 pm, by Tom Wheeler, chairman.

Those present included:

Tom Wheeler – Madera County

Al Solis – SEMCU

Jeannie Habben – Madera County

Stephanie Anagnoson – Madera County

Kristi Robinson – Water Wise/Triangle T

Jacob Roberson – RWMG Coordinator

Keith Helmuth – City of Madera

Angela Islas – SHE

Jack Rice – MAWA

Mark Hutson – Madera/Chowchilla RCD

Brandon Tomlinson – Chowchilla WD

Carl Janzen – Madera ID

Gretchen Heisdorf – Root Creek WD / P&P

Sam Cunningham – Madera County

Chris Montoya – DWR

Jenny Nunez-Rodriguez – Madera County

Laura Satterlee – SHE

Joe Fiss – Greystone Equities/SEMCU

Matt Maringer – Greystone Equities

Igal Treibatch – SEMCU

Clyde Wheeler – Indian Lakes

Celeste Wheeler – Indian Lakes

Kirsten Hefner – Madera County

Don Roberts – Gravelly Ford WD

Amy Siliznoff – Madera/Chowchilla RCD

Pete Leffler – Luhdorff and Scalmanini

Eddie Mendez – Madera County

2. Review & Approval - Agenda & Minutes

- A motion to approve the June agenda was made by Carl J; Gretchen H second; all voted; Motion passed unanimously.
- A motion to approve the May minutes was made by Carl J; Gretchen H second; all voted; Motion passed unanimously.

3. Public Comment

- **SAVE THE DATE!** The next Irrigated Lands Regulatory Program (ILRP) stakeholder meeting will be held on July 14th from 10 am – 12 pm. This meeting is intended to focus on the development of nitrate Groundwater Protection Values to be incorporated into Groundwater Quality Management Plans. More information will be provided prior to the meeting.
- DWR is advancing the development of principles and strategies related to groundwater management and drinking water well impacts as part of the April 21st Executive Drought Proclamation. DWR is hosting Listening Sessions to gather input from stakeholders for this effort. All perspectives and everyone are welcome. Listening Sessions will be identical and will be offered on June 29th 12 pm - 1:30 pm ([click here to register](#)), June 29th 5 pm - 6:15 pm ([click here to register](#)), and June 30th 12 pm - 1:30 pm ([click here to register](#)).
- Round 3 funding solicitation for Prop 1 will open on July 6th at 8 am. Proposals will need to be submitted on [FAAST's website](#).

NEW BUSINESS

4. Discussion & Action - Financial Report/Warrant Approvals

- Carl J commented that SEMCU paid the rest of their membership dues for the year, and we also received \$16,000+ for Prop 1 grant funds for a total of \$17,368 coming in for the

month. \$2,000 was spent for Jacob, \$500 for grant administration, and \$16,400 to Self-Help for a total of \$18,900+ spent for the month. This leaves us with a balance of \$35,191.

- A motion to approve the financial report was made by Carl J; Kristi R second; all voted; Motion passed unanimously.

5. Discussion – Proposition 1 Disadvantaged Community Involvement Funding

- San Joaquin Valley Counties
 - Self Help Enterprises – Projects 12 and 13
 - Angela I commented that there has not been a lot of activity with water quality sampling. The water quality division at SHE has been supporting the water sustainability division on the drought responses which is one of the biggest priorities right now. Nothing else to report besides this.

6. Discussion – Proposition 1 IRWM Implementation Funding

- Mountain Counties and San Joaquin Valley Counties
 - Eddie M commented that for Indian Lakes, they are currently in discussion with the vendor for the moment to get the installed meter costs. They have gone through 2 rounds of Requests for Information (RFI) with the vendor and contractor. The 1st round went through about 20 items to try to figure out the layout for the community and what type of staging will be needed, and other details. They have received the 2nd round of answers from the contractor, and they are waiting to receive the 2nd round of answers from the vendor. Eddie will be following up later this week with the vendor to see if there is any other information needed to provide an accurate quote. This is the final step before moving on to the contract needed for the construction to begin.
 - Clyde W was under the impressions that Madera County Department of Public Works would be the ones installing the meters. Eddie commented that the agreement was written in a way where either Public Works or a contractor could install the meters for this project. Public Works held a meeting with the utility department staff, and the utilities department decided they did not have enough staff to get the project completed within the project period, so they decided to go with an outside vendor. The vendor is a direct contact for everything involved with this project, including the meters themselves and the installation of the meters.
 - Tom W commented that they have the staff, but if an emergency came up, they would need to leave this project and not come back to it until the emergency is taken care of. The utilities department would need to hire additional staff which is something that will not be done. The most efficient way to get this project done is to contract it out.
 - Clyde asked to just let them know when the meter installation will begin so they can get a picture of the first meter being installed to include in their newsletter. Eddie mentioned that this would satisfy the deliverable of the project which includes notifying the public that this project is being done.
 - Celeste W asked how long the project will take to complete once it starts. Eddie answered that they have not received a timeline from the contractor yet, but Eddie is approximating 2-months minimum to get the meters installed. Tom W also mentioned that the agreement with the contractor will give a begin date and end date.
 - Keith H commented that for the City of Madera, they are looking to complete their RFP and having a consultant hired out by the end of this month.

- Jacob R commented that Maggie Dutton with Contra Costa WD reached out and has asked for the final dollar amounts for these projects so she can use these numbers to reference for Round 2 planning. Tom W asked how Maggie is involved with these projects, and Jacob answered that Contra Costa WD is the organization dealing with DWR directly about these projects, kind of the in-between person for us with DWR. Tom mentioned that this is fine and for Jacob to reach out to Eddie M, Keith H, and Jason R to get the dollar amounts for Maggie.
- Eddie M mentioned that Parkwood is on the same track as Indian Lakes and will essentially be included on the same contract with the vendor. The difference is that the meters installed for Parkwood will be different from those installed for Indian Lakes, and concrete meter boxes needed to be installed for some Parkwood locations versus the plastic ones for Indian Lakes. One project will be completed before moving on to the next one, so if Indian Lakes is started first, then Indian Lakes will be finished before moving on to Parkwood. Not sure which community will be started first.
- Eddie M commented that for Parksdale, they had a site visit with a pump company to look at staging and access to make sure there is space to do the work comfortably. There are a few details to work out, but things are moving forward. The contract should be ready to start here in the next month or two, and the project should take only 2 – 3 weeks from start to finish to get the well rehabbed.
- Jacob R mentioned that for the Chowchilla project, Jason R is not on the call today to provide an update on their project.

7. Discussion – Domestic Wells – Prop 68 Funding

- Pete L with Luhdorff and Scalmanini provided an update on this project and used PowerPoint slides to provide visual aids during his presentation. The slides are attached at the end of these minutes. They have been working on the domestic well inventory projects for a couple of months now. Today he is providing an update to add to the update he provided in March to the group about this project.
 - The GSPs for the Madera and Chowchilla Subbasins included domestic well mitigation to avoid negative impacts to users. This project includes two parts, domestic well inventory and installation of monitoring wells near domestic well clusters. This project does not include any areas in the foothills.
 - Pump problems, well problems, and aquifer problems are the 3 problems used to classify the dataset characteristics for wells included in this project. Most pumps are designed to last up to 10 to 15 years before needing replacement, and this problem is not related to declining groundwater levels. Wells are typically made up of PVC or steel materials that degrade over time. A typical well life span might be around 30 to 50 years (could be shorter or could be longer), and this problem is also not generally related to declining groundwater levels. Declining groundwater levels have a direct relation with the aquifer problem used for this project. This is where the groundwater levels have gone below the depth of the bottom of the well, which will result in no water being available to the well. The intent of the domestic well mitigation program is to assist the domestic well owners with the aquifer problem after the submission dates of the GSPs which was January 2020.
 - They have received further insights from DWR on this issue. DWR has reviewed 4 GSPs, where 2 were approved and 2 were asked to address some deficiencies. Some of the deficiencies were related to issues with groundwater level sustainable management criteria, including potential mitigation for domestic wells. Some of the language in those letters stated that even though SGMA does

not require that all impacts to be mitigated, the GSAs should consider mitigation strategies describing how drinking water impacts may occur during the GSP implementation period and how they will be addressed. What occurs between now and the year 2040 will look at how to address that. DWR is saying that some type of mitigation is needed.

- Going back to the type of work they are doing for this project, they are focusing on certain data sources that are available. Those sources include the DWR well completion report database, the County well permit database, the County parcel data, and census information. The well status (active or inactive) is hard to find since neither of the databases used for this project list that information. The location accuracy is variable but generally pretty good from the DWR well completion report database. The County well permit database is good for matching the APNs. For construction information, they get that from the DWR well completion report database.
- Pete referred to a map in his presentation slides showing the concentration of domestic wells in the 2 subbasins using information from the DWR database. The orange and red squares indicate higher numbers of wells. There is a higher concentration in the area East of Highway 99 for the Madera Subbasin and along Highway 99 heading into the Chowchilla area. The next map was developed using information from the County well database. Each parcel that has a well is in purple with a thin black outline. The third map indicates community water system locations in relation to parcels with domestic wells. These 3 maps are just different ways to look at the information available from the different databases used for this project.
- Pete showed a chart they get if they compare the DWR database with the County permit database. The chart goes from the years 1991 to 2020. The green indicates information from the County permit database and blue indicates information from the DWR database. The information from year-to-year kind of mirror each other; however, you can see that in most years they have a few more of the county permits vs the well completion reports. One of the reasons that this can occur is perhaps not all wells that are drilled get a well completion report submitted to DWR. Well completion reports are submitted after the wells are drilled and County permits are pulled before the wells are drilled, so, in theory, someone could pull the permit but not drill the well.
- Pete also covered costs incurred with wells that may have issues. Pete used a chart to demonstrate the different problems with wells, where the problem is coming from (pump, well, or aquifer), possible solutions, GSP relation, and the approximate cost for the different problems.
 - Pete wanted to point out a footnote on this chart. It is not really a realistic option to deepen existing domestic wells for different reasons, leaving the only option to replace the well.
 - Tom W asked why it's not realistic to deepen an existing domestic well, and Pete answered that a domestic well is typically made from 5" – 6" PVC. To deepen the well, you'll have to go into that casing will all the drill equipment to drill below the bottom of the well. After drilling, you'll have to put another casing within the existing casing which would include more gravel filter pack which would reduce the original 5" – 6" casing diameter for the well. Other issues exist as well including damaging the original casing and draining out the original filter pack when drilling below the bottom of the well.
- Pete also mentioned that in the work they are doing, the typical definition of a dry well is when the water level goes below the bottom of the well or inefficient well

saturation. Some wells require a certain amount of water in the well to pump (i.e., the well needs to be at least 10' below the water level to get a couple of GPMs). This is the way they are confronting this project. There are a lot of assumptions that go into an analysis like this, and it can give you different numbers. Some other studies might use the term dry well and apply it when the water level goes below the pump which doesn't really mean it is a dry well and it may just be a situation where the pump needs to be lowered to start pumping water again.

- Igal T mentioned that something missing from this project that they may want to consider is when a well is unusable due to contamination. Right now in the Madera Ranchos area, you cannot drill below 500' due to risks of contamination. Igal recommended including this in the study. Pete mentioned arsenic being one of the contamination risks that Igal is referring to. They have looked at that in the GSP and talked to a local well driller about this issue in the Madera Ranchos area. Wells can be drilled down to about 550' maximum and still get good water quality.
- They are currently working on the sensitivity analysis of assumptions and finalizing the domestic well inventory before they begin to evaluate the optimum nested monitoring well locations. They will also prepare a domestic well inventory report to document that information before drilling and installing new nested monitoring wells (2 in the Madera Subbasin and 3 in the Chowchilla Subbasin) to collect water level and water quality samples. They will put in transducers to do automated water level monitoring. They will also document this through preparing well installation reports.
 - Tom W asked what is meant by nested. Pete answered that nesting means you are installing 2" PVC well casings within the same bore hole. You then use seal between the well screens and the different well casings to seal them off from each other. They will be putting in 2 or 3 of these in each bore hole depending on what they find when they drill the well. Pete also mentioned that this allows them to test water at different depths. They have put in several of these already as part of previous grants over the past couple of years.
- Carl J asked how many domestic wells Pete thinks we have in the 2 subbasins. Pete answered that this brings another assumption in to play. The answer would need to consider wells drilled since what date. This project works with wells that have been drilled since 1970. Since 1970, there is somewhere around 5,000 or so domestic wells that are in the DWR database. Carl mentioned that in some cases, the agriculture well was later converted to a domestic well when the water table went down, and they drilled a new, deeper agriculture well. Tom heard about this too; they did this to a well in the 1980s near the fairgrounds.
- Igal T commented that in Southeast Madera around Madera Ranchos, there are about 4,500 homes/individual landowners of which 1,000 are rate payers for 10A, which leaves about 3,500 wells from what Igal can tell. Igal would be surprised if there are only 5,000 domestic wells in total between the 2 subbasins. Tom thought the number was low as well.
 - Pete commented that these are the numbers they have from the databases they are working with. There are probably wells which a well completion report was not done for. On the other hand, it's probably the case that a good chunk of these wells may not be active. They are working with the information and data that they have.
 - Tom added that he drilled a well back in the mid-1980s and it took them a long time to find the report that Tom submitted. They lost a lot of stuff in the old days too.

- Stephanie A clarified that the number of 5,000 that Pete gave is from the well completion reports available. Stephanie also added that part of the project is to accurately quantify the number of domestic wells since that seems to be lacking with the current information available in the different databases. Pete commented that the discrepancies between the databases is part of the sensitivity analysis that they will be doing. They'll know more once they get more in-depth with this project.

8. Discussion – Creek Fire / Forest Management / Watershed

- Tom W mentioned that the judge did not issue an injunction against the Forest Service to stop all their work. They still need to go through the lawsuit process, but they are working on it. This is to stop different projects from happening, which include logging and soil stabilization. If anyone has not seen the damage from the Creek Fire yet, drive up to Mount High and back, and that would be enough to educate you on what happens when you don't manage your forest. Tom would be willing to take people on a tour to see the damage done to areas that were managed/logged most recently versus the damage done to areas that have not been managed/logged for a while now so you can see the difference in the forest.
 - Stephanie A would like to go on a tour, and wonders if the Madera RWMG would like to go on a tour in the Fall/Wintertime when the weather is cooler. Tom liked this idea and asked Jacob R to send out an email to the group to see who would be interested in going. Tom mentioned maybe renting a bus to take the group members on a tour like what the Forest Service used to do.
- Stephanie A commented that the County Environmental Health is going to present on July 13th or the 20th to the Board on what they have been doing with the Creek Fire.
- Jeannie H shared that Jeff Aiello created a [30-minute video](#) where he went out and did an expose on the Creek Fire. Jeannie will send the link to Jacob R to share with the group. The video is on YouTube, and he shows what the area looked like before the fire happened, while it was happening, and what it looks like now after the fire damage.

9. Discussion – Madera RWMG Meetings on Zoom

- Tom W said that he does not mind keeping the meetings on Zoom going forward and thinks that some meetings should be done in person (like the voting for the reorganization each year). Maybe have a meeting in person 3 times per year. Having these meetings on Zoom saves Tom and others a lot of time on travel, and we have also had better participation on Zoom meetings than we have had with in-person meetings. Carl J agrees with Tom, and we are getting the business done with having meetings on Zoom. Group members agreed.
- Madera RWMG meetings will continue to be on Zoom going forward, with at least one meeting per year in person when we reorganize. Madera would be a good location for the in-person meeting since it is in a more central location. We will determine which monthly meeting will be in person.

10. Discussion – Drought Working Group

- Jeannie H announced that they have started a drought working group and the first meeting was held last week. The drought working group was around back in 2014 and worked with local organizations that can assist people if wells go dry, if there are water issues, or if any types of those things happen. The group is looking to have a clearinghouse of information. They have started a drought page on [MaderaCountyWater.com](#) where they will have resources for people to go to, information that people can get and download, and they are going to try to keep that rolling and send information out to people to reach them with the information available. We are in a drought and it is not a new one, it's the same drought that has worsened.

- Tom W commented that 1977 was just as bad as a year for rainfall compared to this year. Tom had 16+ inches of rain in 1977 and this year only 15.02” of rainfall up in the North Fork area. Tom also added that ponds don’t have much water in it, so the water is heating up and killing off the fish that are in them. Cattle ranchers are starting to worry about what they’re going to do for feed. Right now, at the end of June, we are seeing the same conditions that we see and the end of September regarding water and moisture levels. Fire conditions are very dangerous right now.
 - Igal T asked if he could get in touch with this working group to get a better understanding about how to reach out to the Madera Ranchos community and see if there are any projects that we can bring to help because based off what has happened in the past, there are going to be issues coming out this Summer. Igal and his team have the back page of the Ranchos Independent where they can direct people on where to go for help with issues from the drought. Jeannie can send out information and have articles ready to go for this. Jeannie also mentioned that they can use any information that the group sends out. Just copy and paste the information to send out to Madera Ranchos people.
 - Igal also asked if there are any funding opportunities available to help those experiencing issues with their domestic wells due to the drought. Jeannie mentioned that they are having a discussion on this on July 20th. They are having a workshop with SHE and they have a lot of information on domestic wells, getting potable water delivery, getting water tanks for potable water storage, assisting with getting new wells drilled, and other information as well. They are working on getting the flyer out for this workshop. The workshop will be both in-person and on Zoom.
 - Chris M also added that the DWR will be holding listening sessions tomorrow and Wednesday where they want to hear what people have to say and suggestions on how to deal with the drought and wells going dry. Chris recommended that Igal attend one of the listening sessions to voice his opinion about the drought. DWR also has a website where people with domestic wells going dry can put in some information so DWR can reach out and try to assist as much as possible.
 - [Please click here](#) to visit the Household Water Supply Shortage Reporting System.
 - Jacob R will send the listening session information and Chris M’s contact information to Igal.
- Tom W thinks every inch of Madera County should be a part of this working group. They had a fire in the North Fork area last week caused by someone burning a debris pile.

OLD BUSINESS

11. Sustainable Groundwater Management Act – SGMA – Report

- Stephanie A commented that for the County GSA, the Board adopted an allocation earlier in June and they recently had an inter-basin coordination meeting with the Merced, Chowchilla, Madera, and Delta-Mendota Subbasins to discuss subsidence.

12. Chowchilla Nitrate Control Program - Report

- Kristi R mentioned that they continue to do outreach for testing of nitrates in the Chowchilla Subbasin and they will begin doing Townhall meetings in each of the small communities that are impacted the most by nitrate starting in July. They hope to get additional homeowners wanting their wells tested from these Townhall meetings and get them safe drinking water if they have high nitrate counts. Please email Kristi (ChowchillaDrinkingWater@gmail.com) if you know of anyone interested in having their well tested for nitrates in the Chowchilla Subbasin (Northwest part of Madera County).

13. Implementation Grant Project Updates – Report

- Round 1 – Arundo/Sediment Removal Project
 - Jeannie H mentioned that the final check has been received. Gretchen H said that this project is officially done and can be taken off the agenda.

14. New/ Suggested Members for the Madera RWMG

- No new members suggested.

15. Future Agenda Items

- Nothing mentioned.

16. Next Meeting

- Next meeting is scheduled for Monday, July 26th, 2021, at 1:30 pm on ZOOM for now, unless we can meet in person. If we can meet in person, meeting will be held at the Chowchilla location.

17. The meeting was adjourned at 2:37 pm.



Domestic Well Inventory Update



Project Background/Objectives

- DWR Prop 68 Grant Funding
- GSPs included Domestic Well Mitigation Programs to avoid adverse impacts to this group of beneficial users
- Need for improved understanding of locations, density, construction of active domestic wells (Part 1: Domestic Well Inventory)
- Identify/address additional monitoring needs with dedicated MWs (Part 2: Install new MWs in areas with clusters of domestic wells)

Project Background/Purpose

- Wells can experience three general types of problems: Pump, Well, Aquifer
- Pump Problem: Most wells pumps are designed to last up to 10-15 years before needing replacement (not related to declining water levels)
- Well Problem: Wells typically made of PVC or steel materials that degrade over time; typical well life may be 30-50 years (not related to declining water levels)
- Aquifer Problem: Declining water levels that may go below the bottom of a well, thereby causing no water to be available to well
- Intent of Domestic Well Mitigation Program is to assist well owners with “Aquifer” problem that occurs after submittal of GSP in January 2020.

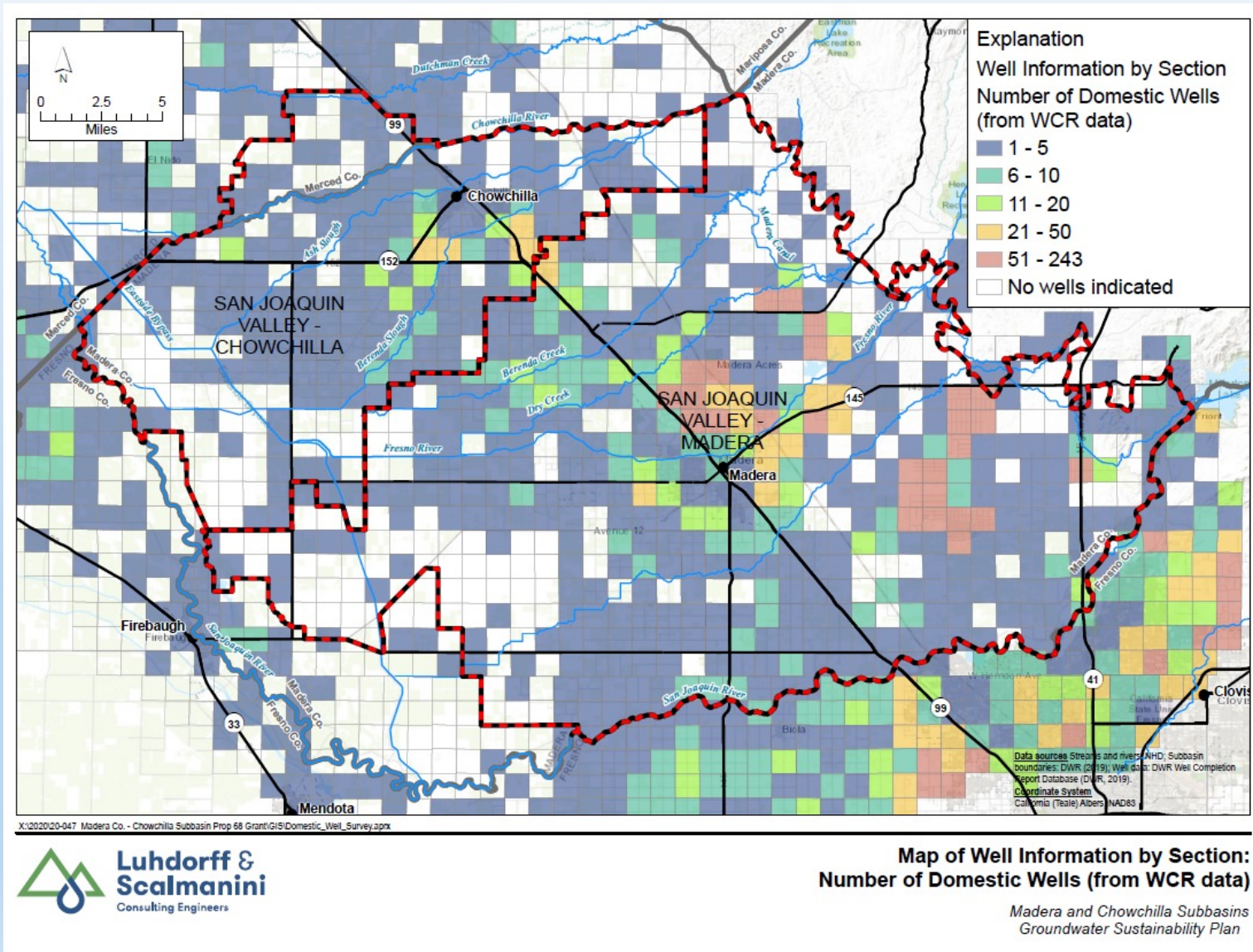
Recent (June 2021) DWR Review of GSPs

- Cuyama Valley and Paso Robles Subbasin GSPs were not approved in part because of deficiencies related to handling of Groundwater Level SMC and mitigation specific to domestic wells
- DWR evaluations state, “While SGMA does not require all impacts to groundwater uses and users be mitigated, the GSA should consider including mitigation strategies describing how drinking water impacts that may occur due to continued overdraft during the period between the start of GSP implementation and achievement of the sustainability goal will be addressed.”

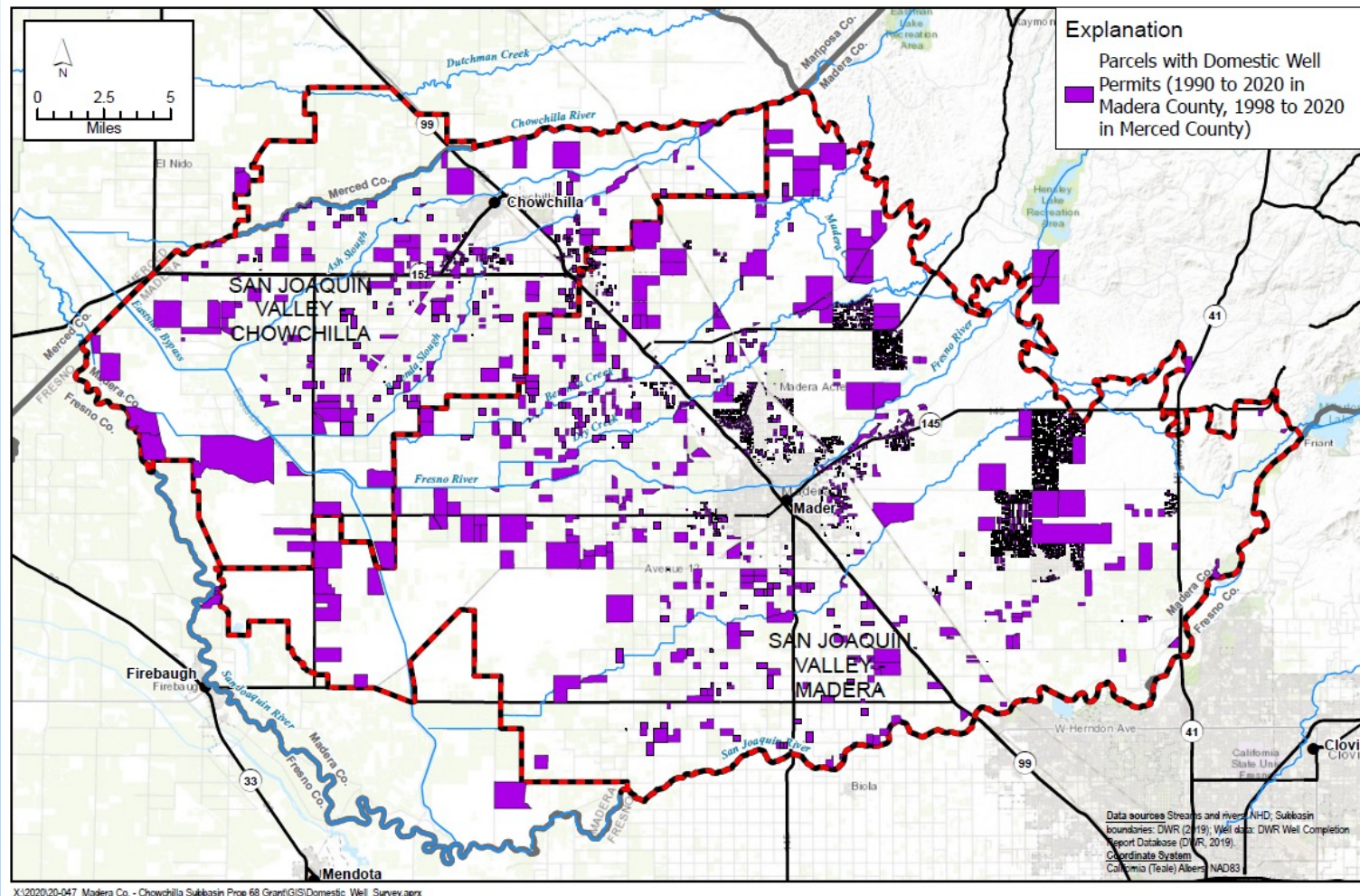
Inventory Dataset Characteristics

Data Source	Historical Well Presence	Well Status (active)	Location Accuracy	Construction (depth, screens)
DWR Well Completion Report Database	Since early 1900s	No	Variable (some only to PLSS section)	Usually included
County Well Permit Database	Since 1990s (Mad=1990, Mer=1998)	No	By APN (not all match parcel GIS data)	No (only seal depth)
County Parcel Data	Inferred from Use/Dwelling Code	No	By APN	No
Census Information	Inferred from # Homes	No	By Census Block	No

Domestic Wells (DWR WCR) Since 1970



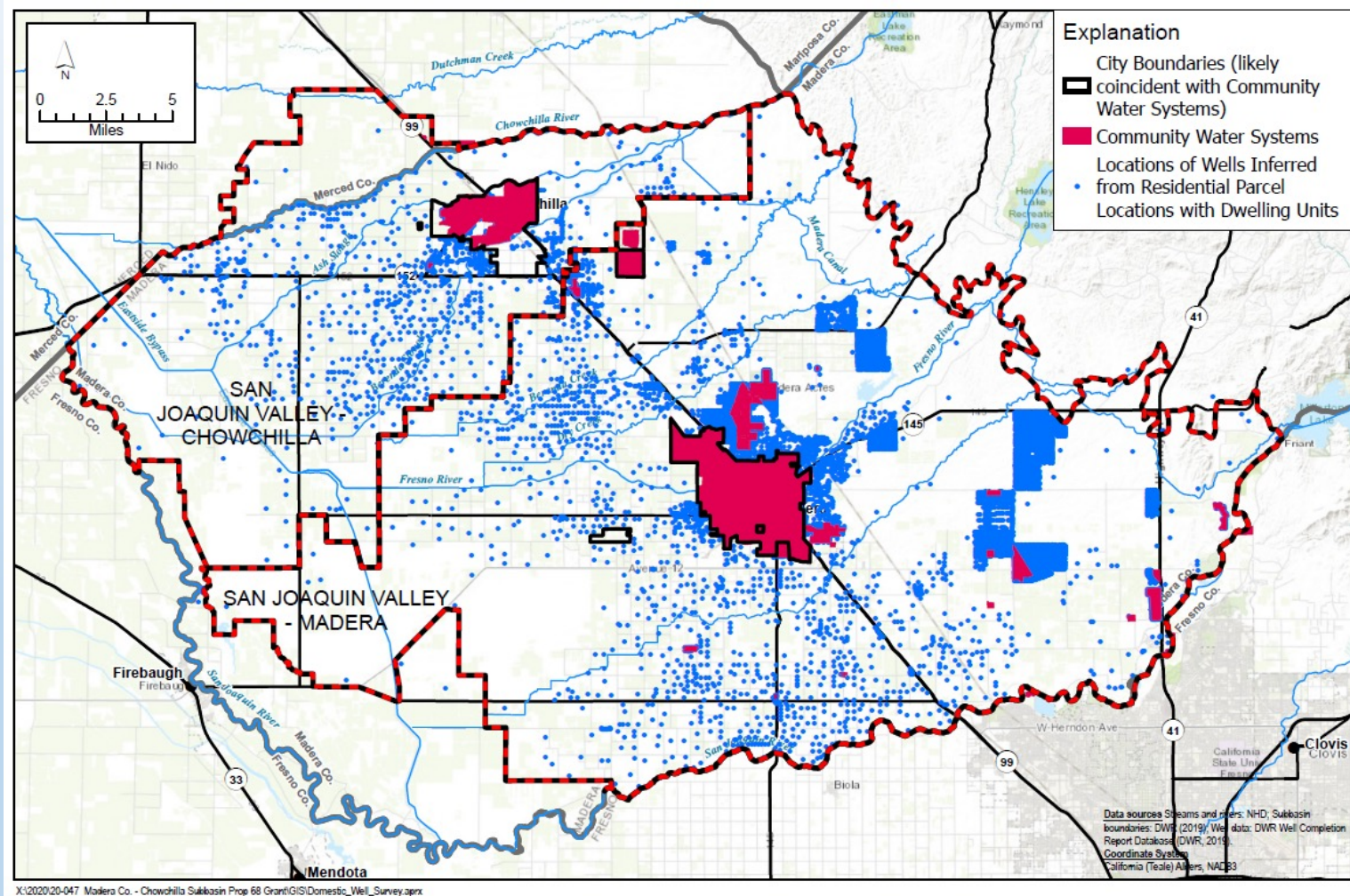
County Well Permits Since 1990s



Map of Domestic Well Permits Matching Assessor Parcel Numbers

Madera and Chowchilla Subbasins
Groundwater Sustainability Plan

Inferred Domestic Wells from Parcel Data

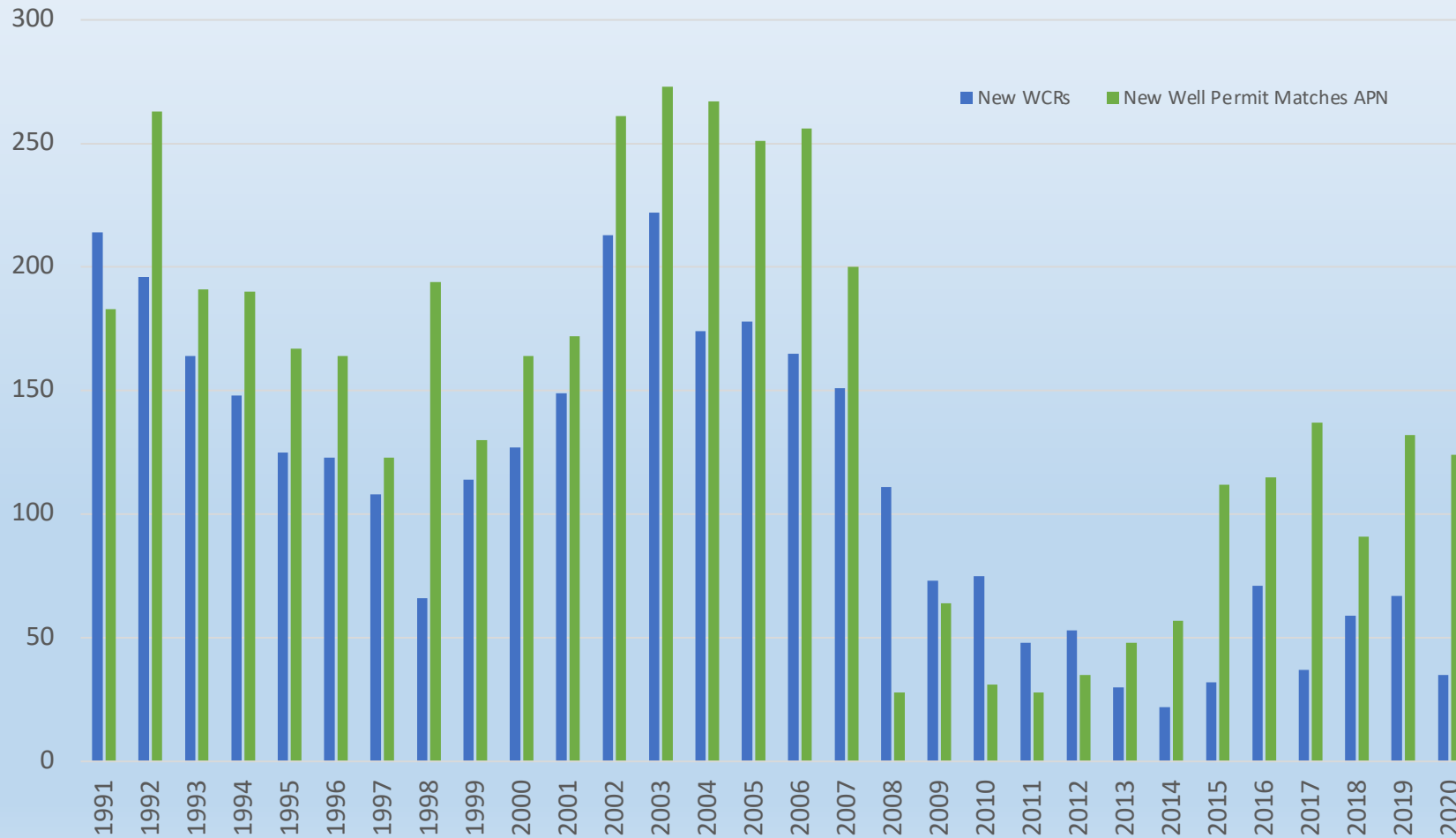


Map of residential dwelling parcels with Community PWS and City Boundaries

Madera and Chowchilla Subbasins
Groundwater Sustainability Plan

Domestic Well WCRs vs. County Permits

WCRs and County Permits by Year in Madera County Portion of Madera and Chowchilla Subbasins - New Domestic Wells



Refined Analysis of Dry Domestic Wells

Typical Definition of Dry Well: Regional groundwater level below bottom of well or insufficient well saturation (e.g., 10 feet above bottom of well).

Note: A water level below a pump does not necessarily constitute a dry well – pump may just need to be lowered.

Refined Analysis of Dry Domestic Wells

Issue	Type of Problem	Solution	Related to GSP	Typical Cost
Water level in well below pump setting depth	Pump	Lower Pump	Yes/No	\$1,000 to \$2,000
Pump not working (old age or pump-related issue)	Pump	Replace Pump and Equipment	No	\$5,000 to \$7,000
Well casing/screen failure (due to old age)	Well	Replace Well	No	\$25,000 to \$35,000
Water level below bottom of well	Aquifer	Replace Well	Yes	\$25,000 to \$35,000

Notes: Costs for lowering pump based on lowering pump by 100 to 150 feet; Pump replacement cost includes column pipe, wiring, control box, etc.; Replacement well cost is for drilling/installing new 600-foot deep well and does not include new pump/equipment; Well deepening for domestic wells is not a realistic option

Next Steps

- Sensitivity analysis of assumptions
- Finalize domestic well inventory
- Evaluate optimum nested monitoring well locations
- Prepare Domestic Well Inventory Report
- Drill/install new nested monitoring wells
- Install transducers and collect GW quality samples
- Prepare Well Installation Reports

Questions