



A Tradition of Stewardship
A Commitment to Service



AGENDA

REGULAR COMMITTEE MEETING

Thursday, April 26, 2012, 2:00 p.m.

Agricultural Commissioner's Office/UCCE Conference Room
1710 Soscol Avenue, Napa CA

Committee Members

Michelle Benvenuto
Franklin Tucker Catlin
John Alan Galbraith
Donald Gleason
David Graves
Michael Haley
Peter McCrea
Charles Slutzkin
Steve Soper
Marilee Talley
William Trautman
James Frederick Verhey
Susanne von Rosenberg
Duane Wall
Dale Withers

1. CALL TO ORDER & ROLLCALL
2. WELCOME & OPENING REMARKS
(Staff, Consultant, Committee)
3. ORGANIZATIONAL ITEMS (15 min)
(Staff, Consultant, Committee)
 - a. APPROVAL OF ACTION MINUTES & MEETING SUMMARY
 - b. REVIEW MEETING AGENDA AND PROCESS
 - c. REVIEW & ADOPT MISSION STATEMENT

4. PUBLIC COMMENT

In this time period, anyone may comment to the Committee regarding any subject over which the Committee has jurisdiction, or request consideration to place an item on a future Agenda. No comments will be allowed involving any subject matter that is scheduled for discussion as part of this Agenda. Individuals will be limited to a three-minute presentation. No action will be taken by the Committee as a result of any item presented at this time. (Chair)

5. PRESENTATIONS AND DISCUSSION ITEMS :

COMMITTEE REVIEW, DISCUSSION & DIRECTION

- a. HYDROLOGIC CHARACTERIZATION/GW MONITORING/RECHARGE (65 min)
(Phil Miller, Deputy Director/Public Works; Vicki Kretsinger Grabert (LSCE)
 - Recap of LSCE 2011 Groundwater Study Recommendations
 - Review Next Steps of Groundwater Study (LSCE Scope of Work)
 - Q&A - Discuss GRAC questions
- b. HISTORY & UPDATE ON THE MILLIKEN-SARCO-TULOCAY (MST) BASIN (25 min)
(Steve Lederer, Interim Director/Public Works)

➤ COMMITTEE BREAK

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5. PRESENTATIONS AND DISCUSSION ITEMS : (cont'd)

COMMITTEE REVIEW, DISCUSSION & DIRECTION

- c. REVIEW OF THE DRAFT NAPA COUNTY GROUNDWATER MONITORING PLAN ANNOTATED OUTLINE (55 min)
(Rick Thomasser, Manager/Flood District, Patrick Lowe, Deputy Director/CDPD)
- Presentation of the Components of the Proposed Groundwater Monitoring Plan for Napa County (Purpose/Objectives/Key Components/Confidentiality)
 - Q&A - Discuss GRAC questions

6. OTHER BUSINESS

- a. UPDATE ON DRAFT PLAN FOR PUBLIC OUTREACH/EDUCATION (5 min)
(Michael Haley, Don Gleason, Jim Verhey/Ad-Hoc Committee;
Deborah Elliott, Water Resources Specialist/Flood District)
- b. UPDATE ON ACTIONS BY ST. HELENA CITY COUNCIL RE: WELLS (5 min)
(Steve Lederer, Acting Director/Public Works; Alan Galbraith, GRAC)
- c. DISCUSSION OF REPORTING OUT VIA MEETING SUMMARY (5 min)
(Peter McCrea, GRAC Chair; Hillary Gitelman, Director/CDPD)

7. ANNOUNCEMENTS

8. FUTURE AGENDA ITEMS

- Draft Napa County Groundwater Monitoring Plan
- Includes Confidentiality Policy
- Draft Communication and Education Plan
- Preparation for Joint Meeting with WICC – July 26

9. ADJOURNMENT to the NEXT MEETING (Chair)

Thursday, June 28, 2012 – 2:00pm
Agricultural Commissioner's Office/UCCE Conference Room
1710 Soscol Avenue, Napa CA

Note: Where times are indicated for agenda items they are approximate and intended as estimates only, and may be shorter or longer, as needed. If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability. Please contact Greg Morgan at 707-259-8621, 804 First St., Napa CA 94559 to request alternative formats.





A Tradition of Stewardship
A Commitment to Service



ACTION MINUTES
NAPA COUNTY GROUNDWATER RESOURCES ADVISORY COMMITTEE MEETING
February 23, 2012

1. CALL TO ORDER & ROLL CALL

The Napa County Groundwater Resources Advisory Committee (GRAC) met in regular session on Thursday, February 23, 2012 with the following members present:

Marilee Talley; Michael Haley; Jim Verhey; Dale Withers; Chair Peter McCrea; Duane Wall; Steve Soper; Don Gleason; and Alan Galbraith. Dave Graves arrived during Item 1; Vice Chair Tucker Caitlin and Bill Trautman arrived during Item 2; Michelle Benvenuto arrived during Item 5.f; and Charles Slutzkin and Susanne von Rosenberg were excused. (Jim Verhey left during Item 5.d.)

2. WELCOME & OPENING REMARKS

Hillary Gitelman, Director, Conservation, Development and Planning, stated that staff would like to move through the agenda on a quick pace due to the number of items but wanted to ensure the items would be covered and move some items to a future agenda or to an ad hoc committee as appropriate. There was background material that wasn't covered during the previous two meetings and it was staff's goal to begin substantive discussions on education outreach – how to approach it, and developing a groundwater monitoring program, both of which are part of the GRAC's charge.

3. ORGANIZATIONAL ITEMS

a. APPROVAL OF ACTION MINUTES AND MEETING SUMMARY

Action Minutes and Meeting Summary approved.

MB	TC	AG	DG1	DG2	MH	PM	CS	SS	MT	BT	JV	SVR	DW1	DW2
X							X					X		

b. REVIEW MEETING AGENDA AND PROCESS

Patrick Lowe, Deputy Director, Conservation, Development and Planning, went over the agenda, noting that a cover memo included with the agenda packet was to provide the GRAC with more background information on which items to put more focus on for the meeting and which items need to be delayed. Dr. Harter (Item 5.a) was running late due to a meeting in Sacramento. Marcus Trotta (Item 5.b) would provide a presentation on Sonoma County's groundwater monitoring program. Mark Nordberg (Item 5.c) would provide a hands-on demonstration of groundwater monitoring tools. Phil Miller's item (5.f) would be moved up in the meeting to

Item 3.b...Continued

accommodate his attendance at another meeting later this afternoon. The updated workplan/schedule would be reviewed after the presentations. Vicki Kretsinger Grabert will go through Luhdorff & Scalmanini's scope of work, as well as recap previous items from the original recommendations. There will be just an introduction to the groundwater monitoring program, as outlined in the agenda. Time constraints may limit discussion of the communication and education plan, and the assistance of an ad hoc committee may be desirable.

4. PUBLIC COMMENT

None.

5. PRESENTATIONS AND DISCUSSION ITEMS

f. WELL LOCATION MONITORING/CONFIDENTIALITY (Item moved up in meeting order)

Phil Miller, Deputy Director-Flood Control and Water Resources, Public Works, presented a PowerPoint presentation on suggestions for developing a groundwater data confidentiality policy. Mr. Miller went over the purpose of the policy, key components, and considerations for developing the policy. A handout containing definitions of California water code sections 13751 and 13752 pertaining to well completion reports was distributed. Hillary Gitelman, Director, Conservation, Development and Planning, added that the purpose of the agenda item was to let the GRAC know what staff believes are the issues with confidentiality and hopes the GRAC will help draft a confidentiality policy that will be incorporated into the groundwater monitoring program. One part of the policy will be specific to the State's CASGEM program, and another part will be for any additional wells the County chooses to monitor and include in its expanding program. An annotated outline of what a groundwater monitoring program could look like will be provided at the April meeting, which will contain a section on confidentiality. The confidentiality policy could allow property owners to either opt in or out of the CASGEM program while allowing them to still participate in well monitoring even if they aren't interested in participating in CASGEM.

a. GROUNDWATER AND GROUNDWATER-SURFACE WATER INTERACTION: HOW DOES IT WORK?

Patrick Lowe, Deputy Director, Conservation, Development and Planning, referred to a handout in the agenda packet that contained a glossary of groundwater terminology excerpted from the Department of Water Resources' website. Additional information can be added in the future as needed. Dr. Thomas Harter, Ph.D., University of California-Davis, presented a PowerPoint presentation on groundwater. The focus of the presentation was on how groundwater works and how it fits in the bigger picture. Dr Harter went over the definition of groundwater and the available amount, the speed of its movement, how it's measured, from where it originates and where it goes, how it is used in California, and groundwater management and quality.

b. SONOMA COUNTY GROUNDWATER MONITORING PROGRAM

Marcus Trotta, Hydrologist, Sonoma County Water Agency, presented a PowerPoint presentation on the Sonoma Valley Groundwater Management Program. The presentation included an overview of the Sonoma County Water Agency, their groundwater management program, and more specifically, their groundwater monitoring program. Mr. Trotta went over their voluntary groundwater level monitoring, program outreach materials for participation in groundwater monitoring, data sharing, groundwater conditions according to areas, a hydrograph that displays groundwater elevation, the installation of nested groundwater monitoring wells, geologic findings, well construction and data collection, groundwater quality monitoring, surface water to groundwater interaction, monitoring data utilized to support ongoing activities, challenges and lessons learned in developing a groundwater monitoring program, and funding sources for their groundwater management program. Dr. Thomas Harter, Ph.D., University of California-Davis, mentioned an introductory short course offered by the Groundwater Resources Association of California that will take place Tuesday, February 28, and Wednesday, February 29 at U.C. Davis. Topics of discussion will include well drilling and construction, water quality and transport on the groundwater side, watersheds and watershed management/best practices, how to use and access the DWR's well data, how to geo-track water quality data, and water rights. Dr. Harter referenced the Groundwater Resources Association of California's website for further information and encouraged anyone interested to attend.

d. REVIEW & ADOPT UPDATED GRAC WORKPLAN/SCHEDULE (Item moved up in meeting order)

Hillary Gitelman, Director, Conservation, Development and Planning, stated the Board of Supervisors wants a community-based information gathering program developed so that informed decisions can be made in the future. Ms. Gitelman referenced the second version of the draft work plan contained in the agenda packet, which incorporates the GRAC's charge as noted in the creating Resolution. The work plan will need to be continually revised and revisited every two to three meetings to ensure the GRAC and staff are on course for accomplishing its goals. The focus of the next two to three meetings will be the development of a groundwater monitoring program – what does it mean, what does it constitute, how to get people to participate, and what data will be collected. An annotated outline of the groundwater monitoring program will be provided in April. It is the hope of staff that working sessions will occur during the April and June meetings with a communication and education plan that will outline how to reach out to the community, the roles of the GRAC and staff, other partners that will be used, what data will be collected and the means for obtaining the data. Staff also hopes that in July we will have the first opportunity to check in with other organizations, such as the Water Information Conservancy Center (WICC) and the Board of Supervisors and other elected entities if desired. This can be further discussed at the same time as the communication and outreach plan. With the exception of assisting in revising pump test protocols and standards under the County's groundwater ordinance, the GRAC's charge is not to work on a management plan or regulations, but rather, to assist staff and consultants in developing a monitoring program in which the end product will include articulating objectives to sustain groundwater resources.

e. HYDROLOGIC CHARACTERIZATION/MODELING/RECHARGE – NEXT STEPS

Vicki Kretsinger Grabert, Principal Hydrologist, Luhdorff & Scalmanini Consulting Engineers, provided a short summary of her agenda item due to time limitations but will return in April with a more detailed presentation. Ms. Kretsinger Grabert commended today's presentations and added there were a lot of similarities that she wanted to get into about the work LSCE has begun in January going forward and how it would be linked to the work done in 2009 to 2011. A lot of foundational work has been done with recommendations made in the groundwater conditions report and executive summary. Of those, there were selected highlights and priority recommendations, all of which are relevant to a formalized ongoing long-term systematic groundwater monitoring program. The key is having the physical setting understood and better defined. The Napa Valley floor is a key piece, as well as the recharge that occurs off the mountain front and in the valley floor. LSCE's current work has four main tasks: 1) creation of hydro-geologic cross sections largely up the Napa Valley floor, 2) connecting well construction information to wells that have measurements, 3) recharge through the Napa Valley floor, and 4) issues relating to surface water to groundwater interaction and questions of the new development of wells. The GRAC's input on the design of the monitoring program, as well as input on detailed objectives for groundwater monitoring in the groundwater conditions report, scope of work, and CASGEM report, would be of tremendous value.

g. DEVELOPING A GROUNDWATER MONITORING PROGRAM FOR NAPA COUNTY

Rick Thomasser, Watershed and Flood Control Operations Manager, Flood Control and Water Conservation District, went over the memo provided in the agenda packet. Mr. Thomasser noted a key purpose of the program is to provide essential data needed to evaluate changes in the resource over time. The monitoring program for Napa County is viewed as being very similar to the Sonoma County monitoring program. Some of the key components of the monitoring program include hydro-geologic conditions, elevation monitoring, quality monitoring, how data will be stored and reported, and how to adapt the program to changes that occur over time. When the monitoring program is designed, we won't immediately have all the wells in place to implement the program. We'll either have to do outreach efforts to get the wells from voluntary sources or consider drilling and funding wells. Some challenges to date are relying primarily on private well owners, and there isn't adequate geographical coverage county-wide to evaluate the resource. Private wells designed for water supply are not typically the best constructed for monitoring purposes. Confidentiality will be a big component of the monitoring program. An annotated outline will be brought to the April meeting with a draft of the monitoring program brought back in June that will coincide with LSCE's work.

h. DRAFT PLAN FOR COMMUNICATION AND EDUCATION

Dorian Fougères, Ph.D., Mediator, Center for Collaborative Policy, CSUS, asked if there were two to three volunteers to assist Deborah Elliott, Water Resources Specialist, Flood Control and Water Conservation District, with the development of a communication and education plan. Jim Verhey was delegated, and Michael Haley and Don Gleason volunteered. Suggested topics for the plan include explaining how and why the public will be involved with data gathering and managing, data sharing and confidentiality, the latest study results, and defining the groundwater monitoring program as non-regulatory.

c. WHAT IS INVOLVED IN MONITORING A WELL? (Item moved back in meeting order)

Mark Nordberg, Department of Water Resources, brought three examples of well measuring equipment: steel tape, an electric sounder, and a pressure transducer with datalogger. A steel tape is used by chalking up the bottom 10' – 15' and then lowering it into the well from the top of the casing. After the number is indicated, the tape is pulled back up and the well depth is obtained by adding/subtracting wherever the chalked rubbed off. An electric sounder has a probe that makes a noise once it hits the water. After the device is lowered from the top of the casing and the probe makes a noise, the number is recorded and then added/subtracted to obtain the well depth. The steel tape and electric water sounder have a limit of 300' and collect a single number. An electric sounder is not recommended to measure well depth on pumping wells. A pressure transducer is attached to a cable and lowered into a well completely submerged and is connected to a hand-held computer that can be set for multiple readings. A pressure transducer with datalogger is commonly used for monitoring surface water to groundwater interaction.

6. OTHER BUSINESS

a. UPDATE ON PRESENTATION TO ST. HELENA CITY COUNCIL RE: WELLS

Patrick Lowe, Deputy Director, Conservation, Development and Planning, mentioned Steve Lederer's memo in the agenda which basically outlined his presentation to the St. Helena City Council, but he will discuss it when he returns to the April meeting with an update of the MST area.

7. ANNOUNCEMENTS

None were mentioned.

8. FUTURE AGENDA ITEMS

- **Annotated outline of groundwater monitoring program**
- **Luhdorff & Scalmanini Consulting Engineers scope of work**

9. ADJOURNMENT to the NEXT MEETING

Adjourned to the next regular meeting of the Napa County Groundwater Resources Advisory Committee on Thursday, April 26, 2012 at 2:00 p.m.

PETER McCREA, Chairperson

ATTEST:

PATRICK LOWE, Secretary

By: GREG MORGAN, Supervising Office Assistant

Voting Key

If not unanimous, member votes will be tallied (N = No; X = Excused; A = Abstained) using the following Committee Member abbreviations:

MB = Michelle Benvenuto; TC = Tucker Catlin; AG = Alan Galbraith; DG1 = Donald Gleason; DG2 = Dave Graves; MH = Michael Haley; PM = Peter McCrea; CS = Charles Slutzkin; SS = Steve Soper; MT = Marilee Talley; BT = Bill Trautman; JV = Jim Verhey; SVR = Susanne von Rosenberg; DW1 = Duane Wall; DW2 = Dale Withers

Example Key:

MB TC AG DG1 DG2 MH PM CS SS MT BT JV SVR DW1 DW2

MEETING SUMMARY

Napa County Groundwater Resources Advisory Committee Meeting February 23, 2012

Produced by the Center for Collaborative Policy, CSUS

Meeting Synopsis

The Napa County Groundwater Resources Advisory Committee (GRAC) held its third meeting on February 23, 2012. Dr. Thomas Harter, UC Davis, presented foundational information on groundwater hydrology and surface water interactions. Mr. Marcus Trotta, Sonoma County Water Agency, presented an overview of the Sonoma Valley Groundwater Management Program, emphasizing strategies for groundwater monitoring and associated lessons learned. County staff updated GRAC members on the confidentiality of data in the California Statewide Groundwater Elevation Monitoring (CASGEM) program, and outlined potential components and considerations for a County groundwater data confidentiality policy; members stressed that such a policy would be essential for any groundwater monitoring program to succeed.

Members also reiterated that their role focuses on developing a monitoring program, not water supply planning or other planning issues, and agreed to develop a concise mission statement. The GRAC also adopted a revised work plan, and identified two members to serve on an ad hoc committee to develop the communication and education plan. The scheduled review of recommendations from Luhdorff and Scalmanini Consulting Engineers' (LSCE) Napa County Groundwater Conditions and Monitoring Recommendation Study, and the LSCE scope of work, was postponed to the April meeting. Please see the GRAC's webpage (www.countyofnapa.org/bos/grac) for copies of the February 23, 2012 presentations and handouts.

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Action Items

1. **COUNTY STAFF** to work on including confidentiality concerns in the annotated outline of the monitoring program to be reviewed in April 2012.
2. **MR. LOWE** and **MR. NORDBERG** to draft a definition for “without adverse effect.”
3. **CHAIR MCCREA** to draft a mission statement for GRAC member review and vetting in April.
4. **GRAC MEMBERS** to review the LSCE scope of work and the 2009-2011 study recommendations for the next meeting. The one-page memo on the disk may serve as a bookmark to help members read through materials.

1. Call to Order & Roll Call

All members of the Napa County Groundwater Resources Advisory Committee (GRAC) were in attendance except for Ms. Susanne von Rosenberg and Mr. Charles Slutzkin.

2. Welcome & Opening Remarks

Ms. Hillary Gitelman, Director, Conservation Development and Planning welcomed GRAC members. She noted the full agenda and prefaced that some items may be moved to April’s agenda to accommodate discussion, if needed. The agenda was designed to provide sufficient background to enable GRAC members to have substantive discussion, begin developing the monitoring program, and start education and outreach efforts.

3. Organizational Items

a. Review Meeting Agenda and Process (item addressed out of order)

Mr. Patrick Lowe, Deputy Director, reviewed the agenda and highlighted a change to start with the presentation on well location confidentiality.

a. **Approval of Action Minutes & Meeting Summary**

AGREEMENT: The December 12th meeting minutes were approved.

4. Public Comment

Chair McCrea invited public comments. No public comments were provided.

5. Presentations and Discussion Items

f. Well Location Monitoring/Confidentiality (item addressed out of order)

Mr. Phil Miller, Deputy Director of Public Works, provided an update on confidentiality considerations for well monitoring. He stressed the need for a policy to address potential landowners concerns, encourage participation in both the CASGEM and County monitoring programs, and provide staff with guidelines for data use and storage.

As relayed at the December 12th meeting, it is possible to identify the location of participating wells from the CASGEM website. CASGEM is a voluntary program administered by the Department of Water Resources (DWR). Well data is published in a valuable, non-proprietary water data library which researchers use to better understand California's groundwater. When Napa County invited well owners to participate in CASGEM, the County had not realized data could be mined to identify well location.

Ms. Gitelman added that County staff members identified confidentiality as an issue, and requested the GRAC's help in developing a policy. Likely there will be two pieces, one addressing how information will be used for CASGEM and the other how data will be used for wells included in the expanded County groundwater monitoring program. The April meeting will include further discussion on confidentiality and what other groups are doing.

QUESTIONS and DISCUSSION:

- **State responsibility with confidentiality.** GRAC members expressed concern that the State had not developed sufficient safeguards against disclosure of well locations. Well data sensitivity may result in lack of sufficient or accurate data being reported.
- **Use of confidential data.** Question: If the data is confidential, how does it provide useful information to GRAC and the County? Answer: LSCE have access to the data and will use the data to improve a groundwater model.

- **Unintended use of information.** Members expressed concern that the unintended uses of information (i.e. the use of data may for regulation or assigning fees) may curtail landowner participation. GRAC and County staff members should identify potential concerns and proactively address them in the confidentiality policy and education materials.
- **Public Records Act.** Question: Would well data collected be subject to the Public Records Act? Answer: No, it's not considered subject to public review.
- **Drill wells versus solicit participation.** Question: Would resources be better spent drilling monitoring wells rather than engaging in a solicitation effort for volunteers? Answer: Drilling wells requires resources the County may not have and offers limited data points. The County has a good history of maintaining confidential information and staff are confident that the County can secure sufficient participation if there is a clear and robust confidentiality policy.
- **Impact to land value.** Question: Could well monitoring reduce land desirability and value? Answer: A new landowner may choose to opt out of the program. Loss of participation and data points weakens the model. Hence, a policy to encourage landowner participation and confidence is vital for long-term success.
 - **Record monitoring on title.** Question: Given monitoring is voluntary and right of entry resides with the landowner, would the County consider listing right of entry on the title? The new owner may then decide to continue or discontinue participation. Answer: The County will look into that suggestion.
- **Confidentiality policies in other counties.** Question: How have other counties handled confidentiality concerns? Answer: Mr. Mark Nordberg of DWR relayed the sensitivity around this data varies county by county. For some counties this has not been a concern. Mr. Miller added talks with legal counsel of other counties revealed legal advisors have not yet considered this issue. A confidentiality policy that Napa creates may serve as an example for others.
- **CASGEM requirements.** Question: If only a limited number of participants opt in for disclosing data for CASGEM (i.e. 15 participants), will that fulfill the County's obligation? Answer: Yes. Comment: There are landowners such as residential and recreational landowners who have no objections with their data being public. It may make sense to assess, subarea by subarea, whether there is sufficient public information to suite CASGEM needs.
 - **Two sets of confidentiality rules.** Question: Would having two separate policies, one for CASGEM and one for Napa County's monitoring program,

create confusion? How would it work? Answer: The County may have a stringent confidentiality policy for the larger dataset and an “opt-in” option for those who wish to participate in a subset provided for CASGEM. Elevation data and well completion data from the “opt-in” subset would be exported to DWR on an annual basis.

- **Simplify messaging with “Opt-in.”** If we elect for the “opt-in” practice, it may simplify messaging and secure more participation from land-owners.
- **Serial data gathering approach.** Comment: The County could take a serial approach to data collection? The County may start with well completion data, which is not considered obtrusive. The County may then identify what wells are needed for water level monitoring. This two-step process may reduce the amount of outreach needed.
- **Board Intent.** Question: What is the Board of Supervisor’s focus? Is it quality or quantity of information that is most important? Answer: The Board knows there are problems in MST and Carneros. They want a robust enough program to serve as an early warning system for emerging issues in other areas. Additionally, they want a model to help inform decisions for long-term sustainability of the resource. **Current participant understanding on confidentiality.** Question: Are there landowners who think their information is confidential? Do we need to address this? Answer: Not at this time. The County reviewed the “Right of Entry” form shared with CASGEM participants. It specifies the well completion information would be made public. Still, the County wants to ensure participants understand what is shared.
- **Incentives.** Question: Would adding incentives, such as providing landowners information on water quality, increase participation? Answer: CASGEM doesn’t collect water quality data. The County can, however, and that may serve as an incentive.
- **Parallel tracks for program and policy development.** Question: How can we identify what should be included in the confidentiality program without knowing what will be included in the monitoring program? Answer: Development of the confidentiality policy and monitoring program should be on parallel tracks.

ACTION ITEM: COUNTY STAFF to work on including confidentiality concerns in the annotated outline of the monitoring program to be reviewed in April 2012.

a. Groundwater and Groundwater-Surface Water Interaction: How Does it Work?

Mr. Lowe referenced a glossary of terms developed by DWR and included in the packet. Over the course of meetings, terminology may be added for common understanding.

ACTION ITEM: MR. LOWE and MR. NORDBERG to draft a definition for “without adverse effect.”

Mr. Lowe introduced Dr. Thomas Harter, Ph.D., of the University of California at Davis. Dr. Harter’s presentation covered groundwater-surface water interactions, and how water flows, what impacts recharge, and the hydrologic cycle. Dr. Harter’s presentation was designed to provide GRAC members with a solid foundation of information.

The Groundwater Resources Association of California sponsors similar introductory talks such as one provided the week of February 27 at UC Davis. Information can be found at <http://www.grac.org> (Groundwater Resources Association of California – not to be confused with Napa County Groundwater Resources Advisory Committee’s website, which is <http://www.countyofnapa.org/bos/grac>)

QUESTIONS and DISCUSSION:

- **Groundwater to surface water politics.** Question: Why is the groundwater to surface water interconnection a hot topic? Answer: Pumping may impact stream water levels. When no rain or snowmelt is entering the stream, and groundwater is being pumped, water may be pulled from the stream to replenish groundwater levels. This may impact fish habitat and spawning grounds.
- **Basin confines.** Questions: Are basins confined or does water leak out into other basins? Answer: Basins are not perfectly sealed but generally the amount of water that moves between basins is very small.
- **Water budget.** Question: How do you determine if you are irrigating more than what is being replenished by rainwater? Is there a water budget for Napa? Answer: Water budgeting involves complicated calculations that approximate surface water, irrigation use, rainfall, etc. Models help estimate a water budget for a valley. Estimating a budget for a smaller area, such as a ranch, is very difficult. There is a historic Napa County water budget. As part of LSCE’s scope, the estimate will be updated for greater accuracy.
- **Model predictability.** Question: How does modeling work and what is the level of accuracy for predicting water issues and shortages in the subareas and basins? Answer: A hydrogeologist takes hydrogeologic data for the region and constructs a

conceptual model. Uncertainties are identified (i.e. sediment around wells, river geology, direction of water flows, water dynamics, etc.) and a computer model is developed to refine the model. “What if” scenario planning is conducted and water level data helps test the model and understand how the system responds.

b. Sonoma County Groundwater Monitoring Program

Mr. Marcus Trotta, a hydrogeologist with Sonoma County Water Agency, a wholesale water supplier, presented on Sonoma County’s groundwater monitoring program. The Agency partnered with the US Geological Survey to characterize the geology and water quality in Sonoma County basins. This was to inform planning and management of surface and groundwater supplies. They are also engaging Lawrence Livermore Labs to conduct isotope testing to date water being pulled from aquifers. Such testing provides insight into the time required to recharge aquifers and can confirm if a nearby water source is a source of recharge.

Through this exercise, they developed a groundwater flow model and identified challenges such as increased pumping, decline in groundwater and some salinity issues. The groundwater flow model serves as a key instrument to explore scenarios such as impact of dry years, changes in water sources, and how local management strategies may sustain or even enhance groundwater (i.e. stormwater recharge, using water from Russian River in winter time for storage, increase use of recycled water and conservation). The study resulted in a Basin Advisory Panel and a voluntary groundwater monitoring program. They are now in the fifth year of the plan. Sonoma County continues to build on the model. Next steps will include modeling the impact of management practices (i.e. recycled water use).

Mr. Trotta also shared lessons learned and offered advice to GRAC. Collecting multiple types of data from multiple sources can be overwhelming. He suggested GRAC create a protocol to ensure the groundwater data is collected in a consistent manner. A plan for data management is highly advisable early in the process.

Initial outreach included letters with FAQs to encourage participation in the monitoring program and CASGEM. They found it was important to clearly communicate that data assessed groundwater levels and not the amount of water pumped. They also found it important to be clear on how data would be kept and displayed. Public data shows well location as a large dot so that exact well location cannot be identified. Although

Sonoma County would argue the information is not subject to Public Records Act, if challenged they cannot guarantee the information would not be shared.

They found only 10 to 15 solicited landowners either did not respond or said they were not comfortable in participating. As an incentive, the agency worked with a professor at Berkeley to develop a data-sharing portal. This portal enables well owners to plot and monitor well data, which can be kept confidential or shared on the portal. Returning information to participants in a timely manner was also important, as information has been a key incentive for participation.

Sonoma County experienced some limitations of using private, voluntary wells. Well completion data is not always known and some wells are completed across multiple aquifers. Each well is different and presents unique challenges. The County installed two groundwater monitoring wells. Detailed geologic information, such as locations of sand and gravel, is made available with the installation of monitoring wells. This geologic information informs the creation of separate well streams. Finding funding for wells however can be a challenge. A county may find funds through a water agency, the city, the county, the agricultural preservation and open space district, etc. DWR has been a large help with Sonoma's process. A representative from DWR, Mark Nordberg, attends most meetings and provides technical support.

QUESTIONS and DISCUSSION:

- **Dimensions of monitoring wells.** Question: A typical production well is 6" – 10" in diameter. Does a monitoring well have a larger diameter? Answer: Yes, at the surface, the diameter is 22" and it narrows to 9" in diameter at the bottom. The well is 500' deep. Each chamber is roughly 3" in diameter. Monitoring wells are strictly used for monitoring to provide information on water levels, differences in water quality between aquifers (i.e. where may be issues with salinity), etc.
- **Distance between wells.** Question: How far apart are the two wells? Answer: A few miles. Sonoma was surprised to find a lot of continuity between the two wells given the hydrogeologic complexity of the area.
- **Location of wells.** Question: Where are the wells located? Answer: The wells are located near Route 121 in the public right of way and on water agency property.
- **Data used in assessment.** Question: What data is used in your model? Answer: Existing well data information, information from the two monitoring wells, and historical data provided by DWR and other sources.

- **Identifying geophysical characteristics of existing wells.** Question: Can you conduct electro conductivity sampling with an existing well? Answer: Yes, on PVC cased wells you can also use some geophysical methods. Depending on how the well is constructed, emerging technologies may help identify the source of the well water (the aquifer) and water quality at different levels.
- **Database outputs.** Question: How did you design the outputs for the database you created with UC Berkeley? Answer: We asked the basin advisory panel to identify groundwater data of interest. For the beta, the primary function was to develop hydrographs with the data. Since then it has evolved to provide groundwater contour maps. At this time, water quality data is not included.

d. Review and Adopt Updated GRAC Workplan/Schedule (item addressed out of order)

Ms. Gitelman, reviewed the updated work plan and schedule. She recognized that GRAC's charge may still be unclear for GRAC members. Ms. Gitelman clarified GRAC's purpose is to gather information and design a program that enables Napa County to make informed decisions. She emphasized that GRAC's work is not to develop a management plan or produce regulations. One caveat is that the Board has asked GRAC to develop revised well pump test protocols and related revisions to the County's groundwater ordinance.

The work plan, included in the packet, proposes work and a timeline associated with this effort. The work plan will be revisited every two to three meetings and amended as needed. This second work plan version details desired outcomes for the February, April and June meetings. Through June, GRAC will focus on the groundwater monitoring plan and design a program that extends beyond what was developed for CASGEM. April's meeting will include an annotated program outline for discussion. Ad hoc groups are likely to form to help complete this work. In July, GRAC will provide an update to the WICC Board and Board of Supervisors.

To enhance understanding and discussion, Mr. Fougères, facilitator and consultant, wrote on a flipchart and asked for feedback on this phrasing of GRAC's purpose:

To proactively gather enough data to understand the groundwater system well enough to make informed assessments and decisions about issues that may emerge in the future.

QUESTIONS and DISCUSSION:

- **Emphasize “non-regulatory.”** A suggestion resonated with GRAC members to specify the mission and work as “non-regulatory.” This was thought to help alleviate landowner concerns and enhance participation.
- **Limit the amount of data.** It was emphasized that GRAC should use caution not to get overwhelmed with data and to decide in advance what data is needed and should be collected.
- **Roles in program development.** Scientists and County staff should form recommendations on the “what” to collect. GRAC may help with the public relations portion of the effort and the “how” to collect data from the public.
- **Build on other programs.** Rather than reinvent the wheel, GRAC should build on existing programs. Sonoma County’s “voluntary” model seemed like a best practice. Further, Sonoma’s program focused on how water moves and how much groundwater was available rather than what people are using.
- **Benefit to participants.** For buy-in, it will be essential to demonstrate to a well owner what they will get out of their participation in the program.
- **The goal is not management or planning.** Central in this discussion is a shared understanding that GRAC will not be doing the water management and planning piece. Information on water demand and use is not needed for GRAC’s work.
- **Responses to GRAC questions.** Question: Many GRAC questions submitted have not been addressed. Why? Answer: Some questions, such as questions on agricultural and residential water use, are not part of GRAC charge. The Board’s intent is to obtain ideas and advice and recommendations on issues identified in the charge. Other questions will be answered in the LSCE presentation or have been included in LSCE scope of work.
- **Preparation for meetings.** Question: There is a phenomenal amount of information provided to GRAC members; some of the documents are hundreds of pages long. How can staff help GRAC focus on the important items? Answer: County staff included a cover page in the packet with “How to Prepare for the Meeting” guidelines. The County will continue to highlight key items in advance of meetings, and including which sections of large documents to review.
- **Focused outreach.** Question: How did Sonoma County narrow outreach efforts to select landowners? Answer: Sonoma developed a network of participants through the Basin Advisory Panel. Gaps were then identified and outreach

prioritized accordingly. Too much data may overwhelm the effort, and advance goals and game plan are essential. LSCE can help GRAC prioritize outreach efforts.

- **Include surface water and groundwater interaction.** GRAC charge should include understanding the surface water to groundwater interaction. The City of St. Helena pulls 500 acre-feet of water from the Napa River. We will need to educate community members about this interaction and impact.

ACTION ITEM: Chair McCrea to draft a mission statement for GRAC member review and vetting in April.

e. **Hydrological Characterization/Modeling/Recharge – Next Steps**

Due to time limitations, Ms. Vicki Kretsinger Grabert of LSCE, provided a short update on LSCE work. The full presentation will be delivered at the April agenda.

LSCE's current scope builds on past foundational work and focuses on four key tasks:

- a. Provide a physical conceptual model to understand the location of the aquifer system, how it relates to tributary systems, and how Napa groundwater moves.
- b. Supplement groundwater monitoring in high priority subareas.
- c. Identify where recharge is occurring and areas of greatest recharge potential.
- d. Address issues relating to surface to groundwater interaction and impact new well development may have in more or less sensitive areas.

LSCE will support GRAC efforts with technical data and expertise. GRAC member understanding of local issues will be instrumental in both informing LSCE's work and in developing the program objectives and design.

ACTION ITEM: **GRAC MEMBERS** to review the LSCE scope of work and the 2009-2011 study recommendations for the next meeting. The one-page memo on the disk may serve as a bookmark to help members read through materials.

g. **Developing a Groundwater Monitoring Program for Napa County (item addressed out of order)**

Mr. Rick Thomasser, Flood District, directed GRAC member attention to a two-page document summarizing objectives and outlining considerations for Napa County's

groundwater monitoring program. It highlights the program's purpose to "provide essential data needed to evaluate changes in the resource over time."

Given Napa's geology and needs are similar to Sonoma's, the monitoring portions of the plans are likely to be similar. LSCE will identify key components to include such as elevation monitoring, water quality monitoring, salt water intrusion monitoring, etc. When the County and GRAC write the plan, not all necessary wells will be in place. Outreach will be needed and/or consideration given to drilling monitoring wells. As such, the program will be amended over time. County staff will present an annotated program outline in April and a draft program at the June meeting.

h. Draft Plan for Communication and Education

Mr. Dorian Fougères, Facilitator from the Center for Collaborative Policy, suggested the formation of an ad hoc Communication and Education committee. This committee will help craft messages and advise on communication strategies and vehicles. Mr. Fougères introduced Ms. Deborah Elliott, County planning staff, who will support the ad hoc committee.

AGREEMENT: Mr. Michael Haley and Mr. Don Gleason members agreed to participate on the ad hoc committee. Mr. Jim Verhey was nominated as a third participant.

c. What is Involved in Monitoring a Well (item addressed out of order)

Mr. Mark Nordberg of DWR provided a hands-on well monitoring equipment demonstration. This included metal tape, electric sounder and pressure transducer devices. The packet handout, "Groundwater Level Monitoring: What is it? How is it done? Why do it?" provides additional information. In short, the metal tape is used with supply wells. The electric sounder is used for groundwater monitoring wells. The pressure transducer provides continuous groundwater level measurements for draw-down data, plus groundwater to surface water flow and interaction.

6. Other Business

a. Update on presentation to St. Helena City Council Regarding Wells

Due to time limitations, the presentation was not provided. Mr. Steve Lederer, Director of Environmental Management, will present an update in April.

7. Announcements

No announcements were presented.

8. Future Agenda Items

Mr. Patrick Low briefly addressed proposed topics for the April meeting, which will include presentations postponed from the meeting such as LSCE scope. In addition, County staff will provide an annotated outline for a proposed monitoring program for GRAC discussion.

9. Adjournment to the Next Meeting

Thursday, April 26, 2012 – 2:00pm

Agricultural Commissioner's Office/UCCE Conference Room

1710 Soscol Avenue, Napa CA

Attendees

Groundwater Advisory Committee Members:

- | | |
|-----------------------|----------------------|
| 1. Michelle Benvenuto | 8. Steve Soper |
| 2. Franklin Catlin | 9. Marilee Talley |
| 3. Alan Galbraith | 10. William Trautman |
| 4. Donald Gleason | 11. James Verhey |
| 5. David Graves | 12. Duane Wall |
| 6. Michael Haley | 13. Dale Withers |
| 7. Peter McCrea | |

Public Attendees:

- | | |
|-----------------|---------------------------------------|
| 14. Laverne Mac | 15. Unidentified member of the public |
|-----------------|---------------------------------------|

Guest Presenters:

- | | |
|---------------------------------|---|
| 16. Dr. Thomas Harter, UC Davis | 18. Marcus Trotta, Sonoma County Water Agency |
| 17. Mark Nordberg, DWR | |

County Staff Members and Consultant Attendees:

- | | |
|------------------------------------|-----------------------|
| 19. Taralyn Atkins-Brown, CCP | 26. Patrick Lowe |
| 20. Deborah Elliott | 27. Phil Miller |
| 21. Dorian Fougères, CCP | 28. Greg Morgan |
| 22. Hillary Gitelman | 29. Jeff Sharp |
| 23. Vicki Kretsinger Grabert, LSCE | 30. Christine Secheli |
| 24. Steve Lederer | 31. Rick Thomasser |
| 25. Daisy Lee | |

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A Tradition of Stewardship
A Commitment to Service



Mission Statement

(April 26, 2012 - Draft)

Committee Members

Michelle Benvenuto
Franklin Tucker Catlin
John Alan Galbraith
Donald Gleason
David Graves
Michael Haley
Peter McCrea
Charles Slutzkin
Steve Soper
Marilee Talley
William Trautman
James Frederick Verhey
Susanne von Rosenberg
Duane Wall
Dale Withers

The Napa County Board of Supervisors has undertaken a major project to better understand the structure and behavior of the “groundwater system” in the Napa Valley with the goal of being able to respond in a timely and appropriate manner to any significant future changes to this system.

The two major components of this project are:

- Develop and implement a robust, non-regulatory basin monitoring program that will allow the County and its residents to track groundwater levels and groundwater quality on an ongoing basis.
- Develop a better understanding of the hydrogeologic conditions of Napa County’s groundwater basins over time, including the systems that recharge the basins and surface-to-groundwater interactions.

The basic role of the GRAC is to act as an advisor and to make recommendations to the County staffs and their consultants in the development of this program with particular emphasis on structuring the program in a way that will encourage the comprehension, acceptance and support of the program by a broad number of Napa County landowners, as well as the public at large.

RESOLUTION NO. 2011-79

(Adopted June 28, 2011)

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors hereby creates the GRAC as follows:

Section 1. Purpose.

The GRAC is hereby created to assist County staff and technical consultants with recommendations regarding (a) the synthesis of existing information and identification of critical data needs; (b) the development and implementation of an ongoing groundwater monitoring program; (c) the development of revised well pump test protocols and related revisions to the County’s groundwater ordinance; (d) the conceptualization of hydrogeologic conditions in various areas of the County and an assessment of groundwater resources as data becomes available; (e) the development of groundwater sustainability objectives that can be achieved through voluntary means and incentives; and (f) building community support for these activities and next steps.

The GRAC shall cease to exist upon completion of these purposes or on December 31, 2014, whichever occurs first, unless the GRAC is affirmatively perpetuated by resolution of the Board of Supervisors.

<http://www.countyofnapa.org/bos/grac/>

1195 Third Street,
Suite 210
Napa, CA
94559

Tel: 707-253-4417
Fax: 707-253-4336

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WHEREAS, both studies identified the need for a collaborative data gathering effort, including establishment of an advisory committee to guide the synthesis of existing information, additional data collection and analysis; and

WHEREAS, the Board desires to establish an advisory committee that is representative of various geographic locations and interest groups within the County to complement the work of County staff and technical experts; and

WHEREAS, to facilitate compliance with the Maddy Act, the Board desires to formalize the creation of the Napa County Groundwater Resources Advisory Committee (“GRAC”), including its purpose and the number, terms and qualifications of the members, in this Resolution as set forth below; and

WHEREAS, procedures relating to the formation and operation of the GRAC are defined by Section 15378 (b)(2) of Title 14 of the California Code of Regulations as administrative procedures not subject to the California Environmental Quality Act:

NOW, THEREFORE, BE IT RESOLVED, that the Board of Supervisors hereby creates the GRAC as follows:

Section 1. Purpose.

The GRAC is hereby created to assist County staff and technical consultants with recommendations regarding (a) the synthesis of existing information and identification of critical data needs; (b) the development and implementation of an ongoing groundwater monitoring program; (c) the development of revised well pump test protocols and related revisions to the County’s groundwater ordinance; (d) the conceptualization of hydrogeologic conditions in various areas of the County and an assessment of groundwater resources as data becomes available; (e) the development of groundwater sustainability objectives that can be achieved through voluntary means and incentives; and (f) building community support for these activities and next steps.

The GRAC shall cease to exist upon completion of these purposes or on December 31, 2014, whichever occurs first, unless the GRAC is affirmatively perpetuated by resolution of the Board of Supervisors.

Section 2. Member Qualifications.

The GRAC shall be comprised of fifteen (15) county residents appointed by the Board of Supervisors representing diverse interests from a geographical perspective and interest-based perspective including, but not limited to, environmental, agricultural, development, and community interests. A familiarity with water resources is desired but not required. When possible, membership priority shall be given to those residing within State designated groundwater basins, or surrounding watershed basins.

Members shall collectively address the following requirements (individual members may fulfill more than one requirement):

- A. At least one member shall be from each one of the five County Board of Supervisors Districts.
- B. At least one member should be from one of the following groundwater basins: Pope Valley, Clearlake Pleistocene Volcanic Area and Berryessa Valley.
- C. At least one member should be from each of the following sub-areas of the of the Napa-Sonoma Valley groundwater basin, Milliken-Sarco-Tulocay, Angwin, Carneros, Calistoga, St. Helena, Yountville and Napa.
- D. At least five members should work in agriculture and/or represent agricultural/wine industry interests; and
- E. At least five members shall represent environmental organizations, property rights organizations, or other community-based organizations.

Section 3. Term of Office & Recruitment of Members.

Members shall serve until December 31, 2014.

The County Executive Office is directed to immediately commence the process of seeking applicants for appointments of the GRAC in accordance with the procedures prescribed by the Maddy Act set forth in Government Code section 54970 et seq. and shall use the same process to fill any vacancies that may arise on the GRAC prior to December 31, 2014.

Section 4. Bylaws.

The GRAC Bylaws attached hereto as Exhibit "A" and incorporated by reference are hereby approved.

Section 5. First Organizational Meeting.

The GRAC shall conduct its first organizational meeting no later than October 31, 2011, for the purpose of adopting bylaws, setting its meeting schedule, and taking such other organizational actions as may be required, including the election of a Chair and Vice-Chair. The Secretary of the GRAC shall be a non-elected office filled by an employee of the County of Napa designated by the Director of Conservation, Development and Planning.

Section 6. Liaison & Technical Assistance.

The Conservation, Development and Planning Department shall act as a "liaison department" and the Conservation, Development and Planning Director or designee shall serve as "liaison officer" to the GRAC for purposes of complying with the Maddy Act.

The Department of Public Works shall provide technical support to the GRAC, and shall make staff and consultants with appropriate expertise available to the committee on an as needed basis as funding permits.

Section 7. Compensation and Budget.


The members of the GRAC shall serve without compensation but may be reimbursed for actual expenses incurred within the limits of a budget approved by the Board of Supervisors for the GRAC. The GRAC shall submit a proposed expense budget annually to the Board of Supervisors for consideration and possible approval by the Board, to the extent funds are available.

The foregoing resolution was duly and regularly adopted by said Board of Supervisors of the County of Napa, State of California, at a regular meeting held June 28, 2011, by the following vote:

AYES: SUPERVISORS DILLON, LUCE, WAGENKNECHT and CALDWELL

NOES: SUPERVISORS NONE

ABSENT: SUPERVISORS DODD



BILL DODD, Chairman
Board of Supervisors

ATTEST:

GLADYS COIL
Clerk of the Board

By: _____

Approved as to form:

By: Janice D. Killion (e-signature)

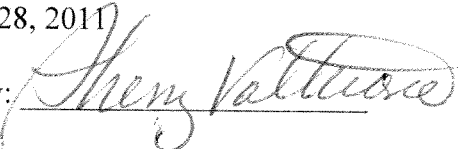
Napa County Counsel

Exhibit "A" – Bylaws

Approved by Napa County Board of Supervisors

Date: June 28, 2011

Processed by:

_____