

From: Andrea Giacoletti [REDACTED]
Sent: Tuesday, January 14, 2025 7:15 PM
To: Daniel Heimel
Cc: Bruce Gibson; rmunds@lososocsd.org
Subject: 1435 10th St. Neighborhood Flooding

Hi Dan,

I cannot make the Basin Management meeting, but I would like to serve as a messenger for my neighbors and me regarding the chronic flooding/stormwater runoff that occurs across our properties. I've included part of an email sent to me last week from John Waddell (highlighted below). Despite decades of efforts to get these "drainage" issues resolved, we are still told the same thing: there is no funding for this.

As the fires decimate Los Angeles, the irony that we have an excess of water, to the point of yearly flooding of our properties, makes me feel that sense of frustration that has been boiling under the surface for many for some time.

The truth is that I am the messenger for at least nine of my neighbors because the overwhelming majority of them have given up on our Supervisors, our county employees, and our LOCSD.

John Waddell himself sent me "several past emails" --- many of which, he does not add, were never answered (John Diodati has never responded to an email). The responses I do get tend to either point fingers at another entity (SLO County vs. LOCSD) or capitulate to a lack of funding. What is *not attached*, are the other phone calls, emails, letters, and meetings that my neighbors (before they gave up) sent or attended over the last 22 years. Leading to the obvious question...why is there no funding after such a long time?

There must be someone who will insist on obtaining funding.

Final note: John Waddell mentions hiring an engineer. My home was completely engineered in 1992 by Alderman Engineers and is built to handle 16cfs of stormwater (despite this, it flooded twice in 2023 alone). All of my neighbors, as you can imagine, have various engineering or construction built for large overflows of water. But, the issue remains. We are not responsible for the runoff that comes from blocks and blocks of streets—that water needs to be managed and put to better use.

From John Waddell:

I am attaching several past emails from the County and the Los Osos CSD regarding the drainage situation in the 10th Street area. The community does not have an extensive drainage system, so many areas have surface flow that crosses over streets and private property. The Los Osos CSD has the drainage authority in Los Osos, however, they have said that there is not a funding source to construct projects that will solve problems like the one you experience. Without funding for a larger project, the preexisting drainage pattern may continue to impact your property, and you may need to work with private engineers and/or contractors to determine if there are any improvements that can be made within your property.

"Now is the time to increase urban stormwater capture and improve how urban stormwater is managed throughout the state." California Water Plan Update 2023

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Docs/Update2023/Final/California-Water-Plan-Update-2023.pdf>

Thank you!

Andrea Peck
[REDACTED]

From: Lynette Brooks [REDACTED]
Sent: Tuesday, January 14, 2025 7:49 PM
To: Daniel Heibel
Subject: Comments for BMC January 15, 2025 meeting
Attachments: 20250115 LOBMC meeting Agenda Item 7.docx; 20250115 LOBMC meeting Agenda Item 9b.docx; 20250115 LOBMC meeting Agenda Item 9d.docx

Hello Dan,

I will be at the meeting and deliver these comments, but thought I would send you a copy. I plan on speaking on three agenda items.

Thank you,
Lynette Brooks

**Agenda Item 7—Public Comment on Items Not Appearing on the Agenda
Transient Model Construction and Documentation**

Comments by Lynette Brooks
LOBMC Regular Board Meeting
January 15, 2025

Hello,

I previously commented on some things that should be included in the transient model, but since I only get 3 minutes at a time, here are some more. Today, I would like to concentrate on the specific use of model parameter estimation software with models so that thorough analysis and documentation are possible. All variables (such as recharge, hydraulic conductivity, streambed conductance, pumpage, etc.) in a model can be considered parameters. It is critical that all variables be assigned as parameters in the software so model uncertainty accounts for uncertainty in each variable. All data used to calibrate a model (such as water levels, chloride concentrations, groundwater discharge to streams, etc.) are observations. Things the modeler wants the model to determine that are not observations (such as inflow and outflow to the ocean and Morro Bay Estuary, future water levels, future chloride concentrations, location of saltwater intrusion front, etc.) are predictions. Parameter estimation software allows for analysis and documentation of model parameters, observations, and predictions.

Setting up the model this way allows for documentation of numerous important statistics, of which I will highlight a few:

1. **Parameter correlation:** This occurs when parameters cannot be independently estimated and often involves recharge and hydraulic conductivity. In a simple linear system, with no discharge observations, recharge and hydraulic conductivity are almost perfectly correlated. They could both be doubled, or halved, and still match the water-level measurements.
2. **Composite scaled sensitivities:** These indicate the total amount of information provided by the observations for the estimation of each parameter.
3. **Prediction scaled sensitivities:** Prediction scaled sensitivities indicate the importance of parameter values to predictions.
4. **Prediction uncertainty:** The information provided by PEST statistics about calibration allows PEST to calculate confidence intervals for predictions. The need to report uncertainty was highlighted in the Stetson Engineers review of the steady-state model in 2010.

I have included references about these statistics on the printed copy of these comments.

REFERENCES PROVIDING MORE INFORMATION ABOUT THE ABOVE TOPICS

Brooks, L.E., Masbruch, M.D, Sweetkind, D.S., and Buto, S.G., 2014, Steady-state numerical flow model of the Great Basin carbonate and alluvial aquifer system study area: U.S. Geological Survey Scientific Investigations Report 2014–5213, 124 p., 2 pls., <https://doi.org/10.3133/sir20145213>.

Faunt, C.C., ed., 2009, Groundwater Availability of the Central Valley Aquifer, California: U.S. Geological Survey Professional Paper 1766, 225 p., <https://pubs.usgs.gov/pp/1766/>.

Hill, M.C., and Tiedeman, C.R., 2007, Effective groundwater model calibration: With analysis of data, sensitivities, predictions, and uncertainty: Hoboken, N.J., John Wiley and Sons, Inc., 455 p., <https://www.wiley.com/en-us/Effective+Groundwater+Model+Calibration%3A+With+Analysis+of+Data%2C+Sensitivities%2C+Predictions%2C+and+Uncertainty-p-9780471776369>.

White, J.T., Hunt, R.J., Fienen, M.N., and Doherty, J.E., 2020, Approaches to Highly Parameterized Inversion: PEST++ Version 5, a Software Suite for Parameter Estimation, Uncertainty Analysis, Management Optimization and Sensitivity Analysis: U.S. Geological Survey Techniques and Methods 7C26, 52 p., <https://doi.org/10.3133/tm7C26>.

Agenda Item 9d—Draft Fall 2024 Los Osos Basin Lower Aquifer Water Quality Monitoring Results and Updated Chloride Metric

Comments by Lynette Brooks
LOBMC Regular Board Meeting
January 15, 2025

Hello,

First, I would like to comment on the presentation of the water-quality data. The annual reports and tables in today's agenda packet state that Well LA10 has problems with borehole leakage and that some chloride concentrations have been adjusted to account for that. The reports and tables, however, have never made it clear if borehole leakage increases or decreases chloride concentration or how the values are adjusted. That should be better explained in the reports. The annual reports and the tables in today's report also indicate that water in wells LA15 and LA31 are affected by the upper aquifer, but should have more explanation. Are the lower chloride concentrations caused by upper aquifer influence, or by increased water levels and less saltwater upconing in the wells when they are not pumping? How much pumping was occurring before the relatively low chloride concentration for Well LA31 for October 16, 2024?

Second, I would like to comment on the chloride metric. The fact that pumping had increased at well LA10 prior to the sampling event should not be used as an excuse to minimize the significance of the high chloride metric. That excuse could be used for all wells, because if no wells were pumping, we would not be worried about saltwater intrusion. The Basin Plan states, "reductions in pumping from the Lower Aquifer should result in measurable declines in chloride concentrations at [Well LA10]". In fact, the ISJ Group was so sure that chloride would reduce at this well that it is double-weighted in the chloride metric. Despite years of the basin yield metric being below 80%, the chloride metric has not declined. Despite years of the basin yield metric being below 80%, chloride concentrations at Well LA11 have dramatically increased. Despite years of the basin yield metric being below 80%, the 250 mg/L chloride boundary has not been pushed back to the middle of Morro Bay Estuary as shown on Figure 38 in the Basin Plan. Given the dramatic increase in the chloride metric and the court-declared responsibility of the BMC to ensure sustainability, does the BMC plan to petition the County to postpone issuing building permits until additional water-quality data and water-level data are made public and the transient model is published?

Agenda Item 9b—BMC Consulting Services Proposals for CY 2025

Comments by Lynette Brooks
LOBMC Regular Board Meeting
January 15, 2025

Hello,

The proposed contract for Cleath Harris Geologists, Inc. should include that all water quality data and all water-level data be released by a certain time after collection. For example, within one month of the last data-collection (or complete analysis) date for spring and for fall. This allows time to check the data and calculations, while still providing timely information to the citizens of Los Osos who are funding the data collection and relying on the results to ensure the aquifer is being managed sustainably. Tables for all water-quality and water-level data should be prepared that show all historic results at each location for all data. These would be similar to the table currently prepared for water quality in the lower aquifer. As it is now, water-quality data in the upper aquifer and all water levels are not available until the annual report is released, and the annual reports only contain data for the current year. For the public to analyze yearly differences require each person who is interested to find the data in each annual report.

The proposed contracts for Cleath-Harris Geologists, Inc. should not include the condition that *“Documents including tracings, maps, and other original documents as instruments of service are and shall remain properties of the consultant except where by law or precedent these documents become public property”*. It is standard consulting practice that all work and documents paid for by a client become the client’s property. The client in this case is the Basin Management Committee, but because all people in Los Osos pay water bills that are being used to fund CHG, the clients are really the citizens of Los Osos. In the case of county or state money, the list of clients grows to include more citizens. In other words, all the data, documents, etc. should be considered public property.

The contract for the annual monitoring report should not specify that *“the report shall follow the 2023 Annual Monitoring Report format as a template, with updates for changed conditions”*. Some of the figures, tables, and text need modification to provide more data, be more internally consistent, and to highlight that saltwater intrusion is occurring despite pumping being less than the sustainable yield as estimated by the model.