

Water Resources Committee

Summary Notes

Meeting Date: March 25, 2015

Start Time: 4:00 p.m.

Directors Present: John Greci
Bill Stevens
Jim McGrail

Staff Present: J. Duerig, K. Arends,
M. Katen, J. Chahal, Tom
Rooze

Director Greci called the meeting to order at 4:00 p.m.

1. Public Comment on Items Not on the Agenda

None.

2. Update on Status of Draft Nutrient Management Plan (NMP)

Staff provided information on the status of the NMP project in three parts:

- 1) A recap of the presentation made to the Areas of Concern (AOC) Stakeholders on March 23, 2015.
- 2) A summary of the stakeholder's feedback from the March 23 meeting.
- 3) A review of the Regional Water Quality Control Board (RWQCB) NMP comment letter dated February 9, 2015 along with the results of staff's meeting with RWQCB staff on March 18.

The presentation summarized the following:

- the purpose, methods and conclusions of the draft NMP,
- identification of the key nutrient sources of the Livermore Groundwater Basin;
- characteristics of the high nitrate AOCs,
- a new, simplified version of the septic tank permitting criteria proposed for unsewered AOCs;
- stakeholder and public outreach efforts conducted by staff; and
- some "Myths and Facts" about the NMP.

Staff then summarized the comments and questions received at the stakeholders' meeting which was attended by 30 to 35 homeowners living near the four unsewered Areas of Concern near Livermore. Staff stated that most of the attendees at the March 23rd meeting had not attended the previous stakeholder's meeting held in April 2014. Staff grouped the stakeholder comments and questions into four major categories:

- costs of installing and operating advanced septic systems;
- other sources of nitrate such as historical chicken ranching, equine facilities, vineyards, etc.;
- scenarios when the proposed special septic tank requirements would be applicable; and,
- county regulations, requirements and permit approval procedures regarding septic systems.

Staff reported that Alameda County Environmental Health (ACEH) staff in attendance at the March 23 meeting responded to the comments and questions from the latter category.

Staff then reviewed the RWQCB's February 9th letter commenting on the November draft of the NMP and the results of their meeting with RWQCB staff. Staff maintained that most of the RWQCB questions and comments could easily be addressed with edits to the NMP draft and by adding detail in appendices; however, there were four comments in particular that staff discussed with RWQCB staff on March 18. The four comments in question and the outcome of staff's discussion with the RWQCB were reported as follows:

- 1) RWQCB requested supporting detail in the form of cross sections and data points on the maps. At the meeting, staff gave the RWQCB digital files containing the requested map detail and offered to include hard copies in a NMP appendix, but explained how the lack of well logs with reliable geologic information precluded the creation of accurate scaled cross-sections specific to the Areas of Concern. However, staff agreed to prepare conceptual cross sections to help RWQCB understand the hydrogeologic setting in the areas of concern.
- 2) RWQCB questioned the volume-weighted calculation of average nitrate concentrations and a supposed discrepancy between the Area of Concern boundaries and the polygons used for calculating average nitrate concentrations. Staff explained that the polygons (nodes) were created in 1974 by DWR for calculating groundwater inventory and that they are still used today as a convenient way to calculate the volume of groundwater in storage from monitoring well water level data. For the NMP, staff maintains they were used appropriately for the calculation of average nitrate concentrations and assimilative capacities for each subbasin group, and that by definition, the Areas of Concern are above the basin objective and have zero assimilative capacity. However, staff agreed to re-check their average nitrate determinations.
- 3) RWQCB questioned the nitrogen loading factors and water application rates used in the NMP's nitrogen loading evaluations. Staff provided RWQCB staff with the reference documents and reports that formed the basis of the values used in the NMP. RWQCB will review the information provided, and staff agreed to analyze the sensitivity of the results for the loading factors in question.
- 4) RWQCB requested that the OWTS loading restrictions proposed in the NMP specify the upper limit of acceptable nitrogen loading. In response to the RWQCB and other similar stakeholder comments, staff simplified the special requirements table, added maximum allowable loading rates, and explained how the table was developed and how it could be used by the planning and permitting agencies. RWQCB staff indicated that they were going to review the new proposal and respond later.

Staff said they also asked what else is necessary for the RWQCB to endorse Zone 7's NMP. RWQCB indicated that they endorse the steps presented in the meeting to move the NMP forward, but were reluctant to give a full endorsement of the NMP until the extent of nitrate contamination was known and the NMP had more assurances of achieving its goals. Staff explained that the NMP was a "plan" that includes further investigation of the contamination and an adaptive management approach for the clean-up of local "hot-spots" while cautiously allowing reasonable but careful development to proceed in the unsewered areas.

Following staff's presentation, President Greci asked if Zone 7 has records of all domestic wells in the Buena Vista (BV) area, such as well depths, screens, and samples. Staff responded that they believe they have records for most of the wells, but that many don't include the reliable geological and well screen information needed to create accurate cross sections. President Greci then asked how many wells in the Buena Vista area does staff reference in its nitrate evaluations. Staff indicated that they use data from about ten wells in the Buena Vista area. Staff also explained that domestic water supply wells are often over 150 feet deep and pump from different levels than the shallow nitrate-impacted ones.

Director McGrail asked whether there is direct evidence that shows septic tank effluent is causing some of the high nitrate problems. Staff explained that the NMP identified multiple nitrate sources, and that on a mass loading basis, septic tank effluent is one of the major contributors for some of the Areas of Concern. Staff mentioned however, that an isotope study conducted by Lawrence Livermore National Laboratory in 2006 failed to identify septic tank effluent as an identified source of the Buena Vista area nitrate contamination.

Director McGrail also expressed concern about the RWQCB comment letter. He said that he sees it as a discouraging statement, and hopes that staff will be able to straighten out any misinformation or disagreement that the RWQCB may have, and eventually gain their support for the NMP. Staff reiterated that that was the purpose of the March 18 meeting and that a follow-up meeting was already scheduled to further discuss the issues.

Director McGrail commented that the permitting process may be confusing to some stakeholders. Staff explained that although ACEH has the permitting authority, the Zone 7 Board has historically adopted wastewater management policies (Resolutions No. 1037 and 1165), such as one Rural Residential Equivalent (RRE) per five acres for new development on septic systems. Staff stated that ACEH has added the Zone 7 requirements into the County regulations.

Director Stevens expressed concerns with adding Appendices to the NMP as it would add unnecessary complexity.

Director McGrail asked how much it would cost to drill three wells to further assess the nitrate contamination in an Area of Concern. Staff responded that the costs are variable depending on the depth and method of drilling. Director Stevens expressed concerns about Zone 7 spending public funds to investigate local nitrate conditions for new development's benefit. President Greci said it seemed to him that the RWQCB's main criticism was more about methodology used in the NMP and then talked about his experience at the LLNL and how much money they spent characterizing the contamination there. General Manager Jill Duerig stated that Zone 7 staff is willing to work with others to collect additional data necessary to improve characterization of the nitrate plumes, but that she thought it might be a better approach to work with the City of Livermore to extend the sewer to these Areas of Concern.

Director Stevens asked about the next step for addressing the RWQCB's concerns. He feels that staff should press them for an endorsement of the NMP so that there would be no question regarding State grant eligibility. He also suggested that if Zone 7 adopts the NMP in 2015, that they should think about delaying implementation of the special septic tank requirements until January 1, 2016. Director McGrail supported the idea of delaying its effective date until January. General Manager Duerig reiterated that the next planned steps are to meet again with RWQCB in April to see if we can make more progress towards

gaining their endorsement, rather than writing a response to their letter. Staff hopes to bring the NMP back to the full Board for consideration at the June Board meeting.

President Greci asked for any public comments. A member of the public, Mr. Tim Johnston, commented that this impacts his business since he works with property owners to design their septic systems for permitting approval and construction. He expressed that clearer requirements would be better to eliminate the confusion. Staff explained that the revisions made to the special OWTs requirement table was for that purpose. Mr. Johnston agreed that the new table is better. No other members of the public provided comments

3. Verbal Comments – No verbal comments.

4. Adjournment

Meeting was adjourned at 5:37 p.m.