Groundwater Quality Evaluation Committee for the Beaumont/Cherry Valley Area

Minutes
Location: San Gorgonio Pass Water Agency
1210 Beaumont Ave., Beaumont, CA 92223
December 18, 2008, 7:00 p.m.

Item	Discussion	Action
1. Committee Members Roll Call	Present: John Covington, Cindy Li, Mark Norton, John Watkins, Bruce Cash, Brian DeForge, Nancy Hall, Luwana Ryan, Carl Workman Absent: Dr. Hal Marlow, Behrooz Mortazavi, Joe Zoba, Joe Aceto, Sarah Eberhardt	
2. Approval of Minutes of 11/13/08	There were minor corrections to the minutes. Motion to approve the minutes as written was given by John Covington and seconded by Brian DeForge.	
3. Presentation: Andy Schlange, General Manager of the San Timeteo Watershed Management Authority	Mr. Schlange outlined why the San Timeteo Watershed Management Authority was formed as well as look at some of the Watermaster activities on the Beaumont basin. He also discussed why they are involved in water quality in this area. The San Timeteo Watershed Management Authority covers the Yucaipa Valley Water District, South Mesa Water Company, Beaumont/Cherry Valley Water District and the City of Beaumont.	
	Presentation Q & A: Q. Nancy Hall – Has Yucaipa pulled out of the San Timeteo Watershed Management Authority?	

A. Mr. Schlange – Yes. However, they have been invited to continue as an associate member of the committee.

Q. Nancy Hall – I understand that the state has two grants, one in the amount of 11 million and the other for 4½ million, placed on hold pending a grand jury investigation. Tuesday night didn't the City of Beaumont vote to apply for that money?

A. Mr. Schlange - The project is under way again thanks to the Beaumont/ Cherry Valley Water District.

Q. Nancy Hall – Who is applying for those grants?

A. Brian DeForge –The Beaumont/Cherry Valley Water District. The City voted to apply for the grants if it did not work out with the Beaumont/ Cherry Valley Water District.

Q. Nancy Hall – We have been looking at possible future Nitrate levels. I would like to see what we are looking at today with respect to nitrate levels. We all know what kind of growth we are having in this area. If we were to look at what the situation looks like today, where would we be?

A. Mr. Schlange – Our findings are based on the existing situation. These wells are producing a certain kind of nitrogen coming from the septic tanks surrounding the systems. They are not starting to reach the water table.

Q. Luwana Ryan – How many wells in the Beaumont basin currently have well head protection.

A. Mr. Schlange – We don't have exact numbers but we have adopted regulations of Riverside County for well head protection. There are some existing wells that have houses with septic tanks very close to them. New wells being drilled are using the current regulations of Riverside County for Well head protection. I would be happy to get specific information to you in this regard.

	Q. Luwana Ryan – All the new wells that are being drilled have well head protection? A. Mr. Schlange – Let me make this clear, the watermaster does not drill the wells. The companies drilling the wells must follow regulations of Riverside County. Q. Luwana Ryan – Have you considered the exacerbation of the overdraft of the Beaumont storage unit if we took all the septic systems that are, at this point, recharging your basin? How do you figure that into your equation? A. Mr. Schlange – I believe you are speaking of return flows. Return flows are part of our water supply. If we take that water out of the septic tanks then it will reduce the return flow to the basin. However, it goes into another treatment process. Whether it's these advanced treatment systems or some other system, that water will ultimately get back into the system. The grant mentioned earlier will return the water to a non potable system back into the water supply and we will take current ground water from golf courses and substitute it with recycled water. Q. Luwana Ryan – In reference to Joint Powers organizations, are they formed for a specific purpose or are they being formed to last into eternity. A. Mr. Schlange – When you develop a Joint Powers, you have to cite the reasons for forming the organization. Q. Luwana Ryan – When those reasons are met, do the joint powers dissolve? A. Mr. Schlange – It depends on the Joint Powers. Years ago when we put together the Sana Ana Watershed Project Authority, no one believed that it would be still in existence almost 50 years later. They do have a function that is beneficial.	

	John Watkins – For clarification, there have been comments about County regulations. I assume you are referring to the set backs of the wells to the septic tanks. In the early 1990's the standard was 50 feet from the septic tank. The new Ordinance and the Department of Water Resources standards were changed to a 100 feet setback from the septic tanks. Of course, the further the well is from the septic system or other contaminates the better. One hundred feet is the minimum distance that is now allowed. A. Mark Wildermuth – This question came up earlier about the proximity of wells to septic tanks. If you are an individual resident with a septic tank and you have a well, I think the issue of 100 feet or 50 feet is a packaging issue. Well 16, which is a municipal well is very near to a septic tank. If you look at what it produces in a months' production, it far exceeds what comes out of a smaller well. The dilution capacity is so huge. Q. Bruce Cash – Mr. Schlange, just for clarification, your organization reviewed the USGS findings? A. Mr. Schlange – Yes. We have reviewed the latest report from the USGS. Q. Bruce Cash – You mentioned in your presentation that specific action was taken with respect to the Wildermuth report dated March 2007. You also stated that the watermaster took specific action to that report. A. Mr. Schlange – Since I manage both the Watermaster and the San Timeteo Water Management Authority, as a group we want to make sure that all of our members are aware of what is going on. One way to do that is to get their concurrence on work that has been done.	
4. Presentation: Wildermuth Environmental – New Modeling Results	Mark Wildermuth introduced Samantha Stevens and Dr. Wenbin Wang who gave the presentation. The original 2005 model was briefly presented which showed a scenario of what would happen with continued growth using conventional septic systems installed through the year 2100.	

	The second model shows a projected scenario of what would happen if all current conventional systems were switched to advanced septic systems by 2015. The last model shows a projected scenario of what would happen if the area switched to a sewer system.	
	Presentation Q & A: Q. Cindy Li (for Behrooz Mortazavi) – Do we have or is it out there, the technology to treat the high nitrates down to 10 milligrams per liter? Also, is there technology for a mass treatment system? A. Samantha Stevens – That technology is beyond the scope of our ability. Mark Wildermuth – If they could do it, which I have my doubts, but if the technology were available, the cost of maintenance would be substantial. Q. Mark Norton – Is this the same model that was used in the previous model runs? A. Mark Wildermuth- This far exceeds it. The ambulor quality work assumes static use. But this takes into account time. We are able to give projections using our best tools to estimate how technology changes. Q. Mark Norton – What is the size of the individual modeling units? Is it a multi-layer model? A. Mark Wildermuth – Its 300ft x 300ft; 2 layer model. Samantha Stevens - I wanted to show you this slide to get back to your original question of 'what is happening now?' This is 2005 based on real measure concentrations of the wells discussed in this presentation. What you can see in the majority of the basin is that the baseline nitrate concentration is between 1-4. But there are levels as high as 8 milligrams per liter. As a result of the 1,900 Onsite Water Treatment Systems, this is what we see today. If we don't manage development and eventually change our systems, this is what we'll have.	

	Q. Luwana Ryan – So you don't just have the basin? You management zone goes further up? That's Well #16. A. Mark Wildermuth – That's correct. Bruce Cash - introduced the December 11th Letter to County of Riverside The letter contains a combination of questions. Attendees were asked to review the response. Q. Nancy Hall – The last USGS report and presentation said there was no nitrate problem and the water was fine. What's different? A. Mark Wildermuth – Not certain that was the conclusion of the individual committee member opinions. Supplemental information as a result of dialogue with your client will be provided in January. Bruce Cash – introduced the December 16th Letter to the Water Quality Control Board. This letter was originally sent out via email. Q. Mark Wildermuth – Regarding the assumption of why didn't we stay on supplemental longer to recharge? A. Mark Wildermuth – The planned recharge, in our opinion underestimates the magnitude of the bottom. We don't want to give credit for the discharged nitrogen lost. Q. Francis Flanders – On the map, the basin border, in red, is down aways from the top border. If they are talking about doing prevention measures along the top border – where the fault is – and nitgrogen is coming out next to that border, then why doesn't the red show there (on the map)? A. Mark Wildermuth – When I was a young engineer, there was a lot of nitrate by the river and none above. It has to deal with lag time. It isn't always completely obvious. Lag time can throw off your intuition.	

	Q. Robert Newman – What is the cost of the Wildermuth study, and then what is the cost of modeling? A. Mark Wildermuth – Roughly $80K to $90K for the study, which includes lab and simulation work. Don't know about the cost of the new modeling. Email me and I'll try to get that information to you. Q. Robert Newman – Is replicating the study feasible to determine the accuracy of the model? A. Mark Wildermuth – It would take 10 years time. Dr. Wong – We use lots of data to calibrate our model and establish the accuracy. I believe we reached our target. Q. Patsy Reely – This area doesn't address the septic systems in Beaumont and puts the burden on 1,900 residents of Cherry Valley to come up with an answer to this problem. I don't believe Cherry Valley will ever amount to the number of people they are basing their scenario on. A. John Halliwell – I was concerned that the recharge was not added to the parameters. But the fact is that the reclaimed water from Beaumont is going to be partially put into the recharge, so there's additional re-charged water. Also, Cherry Valley is in the process of building a treatment system that will intercept contaminated water at the fault line, taking it upstream. So to me, we're committed to re-charge – and yes that may change the parameters of what the final results are but it affects decisions being made on 'how severe' and 'what is the extent' of the problem. Q. Luwanna Ryan – When this report came out, Crystal Davis Bankey presented it. Is she the project manager? What inout was there from various people? A. Mark Wildermuth – I will find out if she was the project manager, but there were two other people on her staff with her.	

5. Correspondence Received	John Watkins – There are two different letters, one from Wildermuth Environmental and one from Mr. Covington providing nitrate levels from different wells. As soon as we get copies, it it will be sent out. Also, email from Blair Ball is forwared and will be posted on the website.	
6. Future Presentations/ Agenda Items	Bruce Cash asked if the panel would like to see any other presentations before initiating deliberations for 2009. - None.	
7. Committee Member Comments	Cindy Li – Requested corrections be made to the draft minutes and gave those corrections to John Watkins. Motion made to approve Cindy Li's changes. Changes Approved. Brian DeForge – Still questions regarding possible migration from North homes above. No development going on there, so what's going on with the nitrate levels today? Bruce Cash – We can certainly get current readings and make those available.	
8. Public Comments	Q. Unknown (female) – Will a new design of septic tank be available for several homes to be on one tank? If so, this would create overall savings. A. John Watkins – Regulations require the system to be on the same parcel that the house is on. Also, similar circumstances as a shared well….changes in ownerships, neighbor relations, etc. eventually could affect sharing of the maintenance and upkeep issues. However, sharing could potentially work for mobile home parks as long as they go through the Water Board for oversight. Robert Newman – It would be helpful if a question period occurred after each presentation. Bruce Cash – Going forward, we will try to set up to allow this.	
9. Next Meeting Date	The next meeting will take place on January 15, 2009 at 6:00 p.m. and will be held in the San Gorgonio Pass Water Agency, 1210 Beaumont Ave., Beaumont, CA 92223	