

Palomino Lakes Water Newsletter

October 17, 2013

Communication...

During the last couple of years a lot has happened with our water system. The Directors have done their best, using e-mail, public meetings and personal contact to keep the community informed about issues, progress and problems. We realize however that some people don't have e-mail, others have not been able to attend meetings and seventeen properties have changed hands during the period. It seems appropriate to provide everyone with a review of the problems that surfaced in 2011, what we've done to address those problems, the work that still remains and some of the challenges and uncertainties ahead.

Under the direct influence of surface water...

In June of 2011, following months of rigorous water testing, the California Department of Public Health issued a determination that our well was "under the direct influence of surface water". The testing had revealed surface dwelling organisms – algae and diatoms – in our water and triggered the determination. These organisms, while themselves not a health concern, indicate that surface water was – and is – entering our well. Under state law, wells under the direct influence of surface water require special treatment to deal with potential contamination by harmful surface organisms – namely giardia and cryptosporidium.

California Department of Public Health...

The determination led the CDPH to issue two orders. The first order required PLMWC to immediately increase sanitizer (chlorine) injection to levels sufficient to inactivate both giardia and cryptosporidium, to install additional monitoring equipment to ensure that these levels were maintained and to provide detailed reports to CDPH showing the sanitizer level at 15

minute intervals. This is the regime we have been operating under since the state's orders in June of 2011.

The second order gave PLMWC two years to build a surface water treatment plant or to replace our existing well with one that was not under the direct influence of surface water – a groundwater well.

Which way to go...

The decision on which direction to take was relatively easy. Surface water treatment plants are very expensive – both to build and to operate. Our existing well was 33 years old and dropping water levels put it at risk. With strong recommendations from the state and our consultants we decided to pursue a new well.

Where to put a new well...

A few years before these issues surfaced PLMWC – concerned about the well's age and the dropping water level – had explored potential locations for a new well. Our consulting hydrogeologist strongly recommended that any new well be close to the Russian River as "that's where the water is." Water in the hills is an iffy proposition particularly when you need 120,000 gallons per day during peak periods. Again, the decision was relatively easy – look for a new well near the river.

The search...

Using the expertise of consulting hydrogeologists and geophysicists, testing was done near the river which revealed several promising sites. There was every indication that these areas could provide high quality groundwater in the quantities necessary for Palomino Lakes. The problem was that we didn't own these sites and

the two property owners were reluctant to grant us the right to put a well on their property.

The complications of a treatment site...

We also required a new location at which to treat the water from a new well. Regardless of whether a new well generated groundwater or water under the direct influence of surface water, that water would require some form of treatment – minimal for groundwater, extensive for water under the direct influence of surface water. We had met with the Sonoma County planning department and been told that, because of the river flood plain and zoning issues, no treatment plant would be permitted west of River Road and that serious concerns existed for a plant east of River Road. We started with eleven potential sites only to have them – one by one – ruled out because of interference with existing septic systems or seasonal creeks, esthetic concerns and homeowner resistance. After months of back and forth, we found a site suitable to everyone.

The negotiations...

With potential well and treatment sites identified, negotiations for the right to use those sites began. This was a protracted, back and forth process with the owner of the preferred treatment site and with the owner of the vineyard where we wanted to site the well. The discussions went on for months and months and involved lots of people but ultimately we signed contracts for both sites in June of 2012 – one year after we started.

The test well...

Our contract for the well site called for us to prove the viability of a well in that location before we were obligated to purchase the easement. This was obviously an important consideration as we had no intention of purchasing a dry hole. The test well was drilled in August of 2012 and delivered everything we needed – large quantities of high quality water at a depth that made surface water intrusion very unlikely.

The production well...

With the data from the successful test well, our hydro-geologist was able to design the final production well. The design included such things as the diameter of the final bore and casing, the size and location of the screens which allow water into the well bore and the depth and composition of the annular seal which prevents surface water intrusion. The production well was completed and preliminarily tested in September 2012.

On to the county...

With the well and treatment sites secured and a production well in place, it was necessary to secure a use permit from the county. In earlier discussions the county had insisted, because of zoning and environmental concerns, a use permit for the entire project was necessary. The 100 page application, prepared by our consulting engineering firm, was submitted to the county in late September 2012.

Back and forth with the county...

The county issued several iterations of a use permit – with us objecting to various provisions until a final permit was issued. While we now had the necessary permit, we were less than satisfied as it contained a number of conditions we felt were intrusive, unnecessary and expensive. We also felt that the county's accounting was incorrect and that we had been overcharged. We filed an appeal and, with the help of Supervisor Mike McGuire, met with county officials. There was a fair amount of give and take but, with pressure from McGuire, the offending conditions were removed and a partial refund was obtained.

Federal assistance...

Now with treatment and well sites, a new well and a county use permit, we needed money to finish the project. We had had a number of conversations with the Department of Agriculture Rural Assistance Program about

funding. They had funded our 1978 system improvements and had indicated they felt the new project worthwhile. We completed and submitted a pre-application in December 2012. Unfortunately, although we had submitted our pre-application, the congress had not funded the USDA and they were unable to act on any applications. We did have preliminary discussions and USDA did a site visit and inspection but they had no money. We would have to wait.

Great news from CDPH...

Through the winter months of 2012/2013 we had been conducting extensive testing on the new well. These tests would determine if the well was indeed a groundwater source and were also looking for environmental, agricultural or industrial contaminants. All tests were passed with flying colors and the state issued a determination of groundwater in April 2013. This is exactly what we were hoping as it means minimal water treatment and no surface water treatment plant.

With this determination we requested and were granted an extension of the state's original two year deadline.

Loan eligibility, but...

After four months of waiting, the USDA issued an official notice of eligibility in April 2013 and invited us to submit a complete application. This we did in June and went back to waiting. Unfortunately, because of the budget issues earlier in the year, the USDA quickly ran out of money and, although we were on the list, we would have to wait until next year.

So, where are we?

We're actually pretty far along. Well and treatment sites have been secured. A new well has been drilled and tested. The state has determined the new well to be a groundwater source. The county has issued a use permit and the federal government has issued a letter of

eligibility and accepted our loan application. All of this has been paid for and we still have (a little) money in the bank.

What's next?

The biggest issue now is the budget battle in Washington. We're depending on the USDA for a loan to complete the project. As this newsletter is being written, the congress has just reopened the government but USDA does not yet have its budget and nothing is happening on funding. Hopefully this is resolved quickly and we can move forward.

What work remains?

We need a county building permit and then we can equip the well, build a treatment building, get electrical service from PG&E, run about 1,000 feet of underground pipe, install the controls and cut over to the new well. If we get the money (about \$800,000) next spring, we can be done this time next year.

What if...

Under the terms of our easement contracts, we have until 2017 to complete the project so there's time for the federal government to get the budget sorted out. If the government is still broken at the time of the next annual meeting (which seems inconceivable) we'll have to discuss options. There are other options – including going to the state for funding or paying for it ourselves – but neither option is particularly attractive and so, for the time being, we'll keep our fingers crossed.

What about the assessment?

We are still incurring costs related to the new well project and without the assessment would not be able to pay those bills. The USDA and our consulting firm both have recommended that we keep the assessment in place until we have a loan commitment. We're hopeful a loan commitment will be coming in the spring but for now the assessment has to continue.

What about our water today?

As you are aware – by the taste and smell of our water –we are injecting high levels of chlorine to meet the state’s order to protect against giardia and cryptosporidium. Maintaining proper sanitizer levels is a highly complex task as the requirements change with changes in pH, water temperature and sanitizer strength. Adjustments are required two or three times each week. As of today, we have maintained required levels for 847 consecutive days as documented by calibrated measurements taken every 15 minutes and reviewed by us, Weeks Water Treatment and CDPH. We also have two independent systems that monitor sanitizer levels and which will shut down the well if there is a problem. There have been problems – many of them – but our systems catch them, shut things down, and then Lee Tolbert or Weeks fix the problem. Without Lee and Weeks – both of whom have performed heroically – we would have to issue a “boil water” notice.

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