Water Meeting, July 24, 2010

Board Member attendees: Kent Wolford, Sabine Shurter, Suzanne Star, Jeff Erickson, Barbara Van Ruyckevelt, and Laurie Lauer (prepared meeting minutes).

Absent: Judy Kilburg

Visitors: Ray Richardson, Roy Spencer, and Damien Spencer

Meeting was called to order by: Jeff Erickson, 1:22 p.m.

Shurter thanked Peter Nathanson who prepared our Phase 1 proposal and thanked Ray Richardson for coming to talk to us about the water system and answer questions. Mr. Rich is a certified water operator, he is a founder member, past president, and board member, of the New Mexico Rural Water Association (NMRWA).

Shurter reported we are putting together a plan that is safe and reliable for our water system. We are feeling the effects of our aging water system. Our system 1 is almost 40 years old. In May and June we had several shutoffs. The only way to monitor our system is to look at pumping times. Also, our electric costs are skyrocketing because of the amount of pumping. Our chlorination costs are going up because we are pumping a lot of water that is going into the ground instead of out to homes. We don't have an accurate way of acquiring accurate data for system evaluation. We don't know what our leak rate. Peter Nathanson told Shurter he can only provide an engineering report if we give him data. Our Operating funds are depleting quickly. Next we are going into reserve funds. We are using up our Operating budget, we are going into larger ticket items, we may have to go into the Hoovenweep well. We are looking at replacing the pump in Aspen Grove.

We need to: 1. Find and fix leaks, 2. Obtain a professional recommendation, 3. Have assessments based on specific projects. People want to know where the money is going so we have based the assessment on specific items. We need to be more proactive instead of reactive. It looks like our leak rate is 70%, but we really don't know.

Damien Spencer reported what they have been finding in the ground. They have been going to the households, listening to the flow of water with a "majic wand." They have found about 30 houses with detectable leaks, three fire-stand leaks, pump-house leaks, one at Aspen Grove and at Hoovenweep. They are finding isolation valves in System 1 and working them. The RF system on System 2 has been installed and allows us to monitor the amount of water in the wells. System 2 has a lot of frost fees and fire stands.

A question was asked if all homeownes had been notified when they find the leaks. Damien Spencer reported that all the homeowners have been told and added that most of the home owners have fixed their leaks. He also reported that because of the amount of leaks they have found and fixed they have been able to reduce the amount of pumping to 6 hours a day.

They are finding a lot of little leaks, but not a big leak. The overall system, looks good, have high pressures, the pvc seems to be holding together, the valves seem to be working (the ones they touched).

Shurter reiterated Peter Nathanson's report that he suggested we install household meters, install/replace isolation valves and install/replacement meters at the wells.

Ray Richardson - As we know we live in an arid country. Water is the most precious resource we have. We have to take care of the water, be accountable and conserve the water. Until you can account for water, there is no plan. Spencer's are doing their things based on assumption, because there is no way of knowing where the water is going. Water meters are for accountability. If you have leaks you have water going where it shouldn't be going. Is someone using 150,000 gallons of water? It helps us to be more accountable. I have to be more cognizant in water my plants. What is the accountability, right now? I have managed private and public water systems for 22 years. I don't like to be out in the ditch at midnight. I have been in their shoes. Accountability is the only way you know where your water is going. We didn't charge the fire department for water but put a meter there so we know where the water is going. If you are reading the meters, you are going to find a leak in the house, whether people are living there or not. There is no way to find leaks unless they use their magic wand. The meter will tell them where the water is going. That is the first step. The way you do it is through accountability.

Shurter said we are bringing up the system to a reasonable standard. It is very important for the operators, to have the tools to let them know what is going on. The items on this assessment will bring the system up to the minimum recommended standards. With the data we can go to Phase 2. We need the data in order to get a Preliminary Engineering Report. There may line sections that need to be repaired because they have a bunch of tiny leaks. We thought this approach by Peter Nathanson was good.

Additionally our water operators have been very active. We have been improving: the well site security, winterizing the pump houses, and working the management site of the pump levels. We are going to have a professional evaluation of the Hoovenweep well. We inspected and updated the System II electrical panel and are in preparation of being able to install the RF system. We are locating missing legal documentation, we have to go to the county and look for the files. We need to develop the system asset list, identify what we have and determine the life of these systems.

Water meters - if we have meters, it will be budget based. It will be based on the cost. We are going to have a financial oversight committee if the assessment goes through. They will be responsible for overseeing the costs of the purchases against the assessment.

Question – If you do go to water based are we are going to separate the water vs. the other assessment.

Star before we can have a rate structure we have to have a vote. It is not the board that sets the rate.

Sturm – are you going to lower the assessment?

Wolford said there are 5 board opening positions available. We need board members, we need volunteers, if the future boards goes with a Mutual Domestic, we need a task force. We are getting water and roads, for about $50.00 a month.

He invited people to come to the board meeting. He hasn't seen one detailed proposal on what the person has proposed to the board. Am I frustrated as a homeowner? We are losing home values because the realtors in Los Alamos are telling people we are having water problems. The board has one agenda that is to bring a good water system. It will give the board something to work with.

Erickson - explained the costs have gone up because we now pay for a water operator and electricity has increased. The leakage has been going up.

Shurter - The big difference for this assessment is we have a report from Peter Nathanson, NMRWA of advising us on the first actions to take for the water system.

Van Ruyckevelt – The board wants to have the water meters to find leaks.

Question - Brad Shurter – How much is the association paying for paying for fixing private housing leaks? Should we be spending our money fixing some personal leaks? People will have a personal investment for leaks if we have meters and the leaks are on their property.

Shurter - Told the attendees we would have bylaw changes and we need to figure out how would we do a budget based water rate structure. We have done a lot of work on Mutual Domestics. We have to concentrate on getting the water system going. We have been asking people to volunteer to help fix the water system. Sabine put together a report on why we haven't gone after Mutual Domestic.

Roy Spencer - Told the audience meters don't just measure water. Data can be down loaded from a meter. We can download 90 days prior data. We can determine, why are we using water, when, what is our peak using? Meters do leak detection. It is simple , we break the data into 96 – 15 minute periods. The main thing is the accountability of the water. This is the hourly use over the 96 days. It is not just billing people for water. We don't have to do anything, if we don't, what will happen, nothing is getting any cheaper. The cost will accumulate, one of these days, the water will be out.

Shurter - I came on the board to do long range planning, I can't do it right now, because I don't have data. The system outages will continue, and we will have crises some day. Local realtors know about this.

Roy Spencer - When you buy the meter, you get a check valve. As we turn off the water, we are sucking in the contaminated water and gets to your house. If we are chlorinate good enough, we will kill the bacteria.

Kurt Thompson - We replaced the valves with a double check valve. I would recommend that they are viable mechanical hardware and not be replaced.

Roy Spencer - Do we have any documentation of where these are?

K. Thompson – no.

Roy Spencer. If you go the meter route, you get some protection, and get your valve changed. I work a system down below. I was just a user, I would get up in the morning, try to take a shower, not able to have water. We had a problem with water and were always running out of water. They went out hired an engine firm, paid 10K for a report, you need a gallery, going to cost you X amount of dollars. At one

point, they asked me if I would work on their water system, what I was seeing, out of 100 meters, 40 were not being read properly. I worked on the meters and cleaned them up. He was finding people were going through 30,000 gallons of water. He had a vacant house going through 40,000 gallons of water. If I get a leak at someone's house, I can be right there and tell them why they have a leak. If it 1000 gallons, it is usually in the bathroom, if it is 8,000 they probably left a hose running.

The other water system has a rate scale, it seems to work, they are putting money in the bank, we don't need more money. I don't think you have a bad system. You have had fine volunteer people working on the system, the problem is that it was volunteer, they have a job, then after their job they have to go around and find leaks. You need some tool to find leaks. Kurt, if you would of had meters, it would have made your life much simpler. When he came out here he doesn't just look at the main lines, he has to look at your houses, bathroom. The chlorination goes down and electricity is going down. No one is trying to make money out of this. I don't think you have to put $2,000.000 in the system. You have a good system. What you are going to do is burn out your people, because it takes a lot of time finding the leaks.

Shurter –how small of a leak can you detect?

Roy Spencer - I don't know, maybe a half gallon.

Wolford - We have pvc system, with glue fittings.

Roy Spencer - said we have high pressures and there is no doubt there are areas, that we are going to have to replace.

K. Thompson – I think the pvc is getting to the point to be need in repair.

Roy Spencer - Said pay a little more, you get what you paid for. I don't think you will get any money out there.

K. Thompson – asked Mr. Richard, on those meters, those are a rf rating, can they discriminate between the two meters that are close together? He has a riser and an elbow tied to the two lots, that same hull is going to serve two houses, we are being charged to dig up two holes, those home owners are going to get charged twice for two holes.

Richardson - Meters have an ID number on it and it basically when it sends out the reading. The system uses the NIU number , when you put the data base into the system, the system cares about the NIU number, it takes the number. It is battery powered. The battery has a capacity of 20 years.

K. Thompson – will it work where the meters are in the same hole?

Shurter – People can dig their own hole, if 3 people share the hole, there is one price.

Shurter – We have decided to put in meter cans with every house and every lot. We are doing this to keep a consistent installation. We do not want different systems.

Question – is it possible not to install it at the time.

Shurter – it is not good to put in the meter when it is dry. Because it has to stay wet.

K. Thompson – I recommend that if we are not going to have an active connection, we not be charged. I do not want to pay for the connection I am not using.

Shurter – we have talked to people that have a developed subdivision, they put in a meter no matter what.

K. Thompson – I agree with Dave Sturm, we need to take the water out of the dues structure of the assessment.

Question - They are afraid the board is going to keep the dues we are paying now, we are going to have the water stolen for us.

R. Spencer – Isn't is the association running the board, can't you come in

K. Thompson - he wants to make sure he isn't paying for the water twice. Master meter replacement. Are these are readable.

R. Spencer - How old are the meters.

K. Thompson – those meters are 6-8 years old.

R. Spencer – Richardson AW standards states that the 2 inch meters be replaced every 4 years if they are not checked.

K. Thompson – Let Roy know he is available to help answer questions.

Question – Should we put additional meters within the distribution system, to be able to isolate areas that have leaks?

Shurter – That is not in this particular phase. If we have the data, this may be something we will want to include down the road. Again we will get an engineering opinion. In line meters may be something we may consider down the road.

Question - What about these meter loops?

Shurter – P. Nathanson said we are not there yet. The system is not ready for that. Just use portable equipment that can be attached to valves and portable ___. They are not cheap.

Question – I am not looking at putting these on all the valves.

R. Spencer – You are talking about zoning the system. There are probably different areas that have different lines going to them. Putting meters on the homes you are going to find a lot of leaks.

Brad Shurter. The equation factors are right there, water in and water out.

Roy Spencer. I would just put in a main line meter in. That is something to look in the future. We start with baby steps.

Ray Richardson - Software upgrades are warranted for the first year. There is a hand held and the crader. We ask for a software maintenance agreement and we do upgrades every 4-5 months. Some of the upgrades you need some you don't.

Roy Spencer - What is the cost of maintainance?

Ray Richardson – The maintenance on the software is $550.00 a year.

Brad Shurter – He feels if it works don't fix it.

Q – If the maintenance agreement, if it lapses, what are the costs.

Roy Richardson – It depends.

K. Thompson – Software maintenance contracts are valuable if you want to upgrade the software.

Shurter – The reason we have these types of radio read meter is because we cannot get into the ground for 4 months out of the year because of the snow.

Question - Is this a one-time assessment or is this yearly.

It is a one-time assessment.

K. Thompson – Does the frequency of the radio frequency read through snow.

Ray Richardson – Yes you can propagate through snow. The meter reads through the Taos Ski Hill meter.

Farquart - We have fairly low pressure, does the meter reduce the flow,

Roy Richardson - You are going to lose pressure but you can put a bigger meter on it. About 1-1.5 pound.

Farquart, - If we want a larger meter, is it possible?

Roy Richard – said a larger meter will cost you more. The bigger the meter the more the low side accuracy drops off.

K. Thompson – Do you have a pressure drop diagram curve? This may help the people with the lower pressure.

Star – Everything is in pdf.

Harold Corn – Can the home owner read the meter?

Ray Richardson – Absolutely.

Star – If a home owner wants to read their own meter, they could read their own meter. Mr. Richardson sent a bunch on information that Star put on the web site.

Shurter – Told the group there is a subdivision in La Cueva you could go look at.

Ray Richardson – The radio frequency will not open garage doors.

Question: When will work start? Where will be meters be placed?

Suzanne - In the easement area.

K. Thompson – Need to put as contingency, because sometimes the roads are off. You need to be careful we are placing them where they are in the easement.

Mark – Asked about the isolation valves.

Shurter - The valves seem still seem to be operable. We may not need to replace them. Shurter said that the money not used up in the assessment will be put on water related items.

Question - This assessment if for upgrades. If Hovenweep needs to be replaced, will there be another assessment.

Answer - Yes.

Jeff – This well is not part of Assessment.

K. Thompson –Said at times you are going to have to drain part of the system. Then you can knock out 10 of these.

Shurter – Putting in the meters will be planned.

Mark Stanley – Does anyone know how many votes are disqualified for people who are not current?

Star – 13 people have been disqualified to vote.

Shurter – Everyone has been notified that they need to be paid up in order to vote.

Question - What happens when this is passed, what happens to those who have not paid assessments?

Erickson –There are many ways. A lien can be put on the property and/or shut off the water.

Question - Technical question, Phase 1, Phase 2 what if there are major leaks.

Shurter – Hard to say, we don't know which areas, can area be salvaged. We try to do it in the most painless way. It will be a membership decision.

Shurter – The base rate is what it costs to run the system.

Erickson – Initially we are using them to find leaks.

Brad Shurter - You don’t have a legal basis to turn off meters, for those people who are using exceptionally a lot of water.

Roy Richardson – You can have rules and regulations. You have a year to set up the meters. This is a great committee.

Comment – I don’t think this is a waste of money, I am glad of putting this together.

Sabine – I thank everyone for their questions.