LAKE LIMERICK WATER COMMITTEE
Minutes
April 13, 2013

The Meeting was called to order by Chair Phyllis Antonsen at 9:00 a.m.

Members Attending: Chair Phyllis Antonsen, Treasurer Scott Carey, Committee Members Brian Smith, Ken Ayres, and Steve Saylor. Secretary Don Bird was excused
Employees: Sheila Hedlund
Guests None

Approval of Minutes
A motion was made by Steve Saylor, seconded by Ken Ayres and passed with no nays as follows:
To Approve the Minutes of March 9, 2013 as written

Additions to Agenda
Correspondence from Mrs. Ord for a forgiveness request.

Comments from Guests None

Financial Report
1) Review
2) Service disconnect report, 27 accounts paid in full and 10 accounts made partial payments on their accounts.

A motion was made by Brian Smith, seconded by Steve Saylor and passed with no nays as follows:
To Approve the Financials for March 2013 as presented

Action Items
1) Roof leaks – Bids will be presented at the May Meeting

Water Distribution Manager's Report ~ Report attached

Action Item List - Additions
1) Annual Consumer education Meeting is to be held annually in November, this should be added to the Action Item list as a reminder
2) Other additions - None

Correspondence
A motion was made by Scott Carey, seconded by Brian Smith and passed with no nays as follows:
To Approve the one time forgiveness for Mrs. Ord, for the amount of $132.00

Old Business -
1) Well #3 roof warranty
There is a warranty on the roof although the contractor's partner has been in a serious accident so they are running behind on their scheduled projects.
2) Sprinkler system capping,
no report was available on this project
3) Water tasting event,
Lake Limerick Water System came in Third Place!
4) Spare CPU – rescind approval?
The approval was rescinded as the manufacture has the right conditions for storage of the units and can ship in 48 hours or less.

New Business -

) Well #6 pump status update

A motion was made by Scott Carey, seconded by Brian Smith and passed with no nays as follows:
To Approve the bid from Arcadia Drilling not to exceed the bid amount of $12,757.43

2) Assessment for Back Flow Assemblies

The Water Committee would like to report to the Board of Directors that the $3.00 charge initiated in 2006 for installation of the cross connection control devices has been paid in full. The Water Committee has determined that the $3.00 charge will remain on the monthly billing and will be used for the installation of the 44 new Back Flow Assembly units as required by the results of the Hazard Survey. Once those units are installed the future collection of the $3.00 will be used for testing and ongoing maintenance of the assemblies.

3) Backup for Steve

Sheila will consult with the staff and recommend that Jason and Joe stay as on call back up for water emergency calls. They currently have basic training for emergency shut offs and restarting of wells. Steve has been on call 24/7 his entire time of employment with Lake Limerick. NWS will be contacted to determine if we can set up an every other weekend commitment from them to give Steve some well earned time off.

4) SEPA - State Environmental Policy Act

The Committee approved processing fee as it is a requirement to get the Water System Plan approved by the Department of Health. The approximate fee is $150.00.

5) Backflo Pros – Bid

This bid will be sent to NWS for their opinion on the pricing of the assembly testing as it has risen from $18 - $25. Should we seek other bids? The Committee determined we will not do any testing on the secondary units until our CCC Policy has been approved by the State

6) Well #4 Reservoir Design

This project can begin once the WSP is approved as it is part of the entire packet.

Announcements Next meeting date - Saturday, May 11@ 9:00 am

losed Session None

Motion to adjourn.

A motion was made by Brian Smith, seconded by Scott Carey and passed with no nays as follows:
To Adjourn the meeting at 9:58 a.m.

LAKE LIMERICK WATER SYSTEM
Meeting Notes
April 13, 2013

A meeting was held after the regular meeting with Jester Purtteman from NWS regarding Financial Goals and Reserves as laid out in the Water System Plan (WSP).

The largest long term expense for the Lake Limerick Water System is the main line replacements. It is advised that we set up a reserve account and continue contributing to it for the next few years at a rate of $80,000 to $90,000 if possible. The lines are not in any danger of failing for at least 20+ years, with that in mind it would be advisable to begin the replacement of the lines in 10 – 15 years and do approximately 1 to 1 ½ miles at a time, and to continue this pattern until the entire system has been replaced.

Other advisory issues in the WSP are as follows:

Well #6, when the SCADA/electrical/pumping system has reached the stage of needing replacement it is advised that we replace the current system with a smaller pump and replace the electrical with a more basic system as used in our other well houses.

Well #5, when this pump system needs replacing it is recommended that we change to a more appropriate set up as there is no reservoir at this well.

Over all it is felt that our system is run properly, has a good amount of reserves, has plans for future expenditures and has no pending large expenditures.

LAKE LIMERICK WATER SYSTEM
FINANCIAL STATEMENTS
FISCAL YEAR 2012 - 2013

	TOTAL	Annual Budget	YTD %
Ordinary Income/Expense			goal 50%
Income			
Gross Revenue - Administration			
NSF Check Fees	-2.00	0.00	0%
Total Gross Revenue - Administration	-2.00	0.00	0%
Gross Revenue Water			
Water Disconnect Fee	0.00	150	0%
Water Excess Use Charge	3,070.00	10000	31%
Water Meter Hookup	0.00	2000	0%
Water Meter Lock/Lockout	180.00	120	150%
Water Meter Locked	4,290.00	10000	43%
Water Metered	182,250.00	364000	50%
Water Non Metered	11,496.00	22200	52%
Total Gross Revenue Water	201,286.00	408470	49%
Total Income	201,284.00	408,470.00	49%
Gross Profit	201,284.00	408,470.00	49%
Expense			
Accounting			
Accounting Assistance	270.00	2,000.00	14%
Accounting Audit	0.00	0.00	0%
Accounting Review	384.30	2,000.00	19%
Total Accounting	654.30	4,000.00	16%
Bank Service Charges	103.90	400.00	26%
Credit Card Service Charges	952.48	2,500.00	38%
Depreciation	30,000.00	60,000.00	50%
Dues & Subscriptions	643.00	800.00	80%
Employee Expense			
Education of Employees	261.00	1500	17%
Health Insurances	0.00	0	0%
L&I Insurance	613.00	1100	56%
Payroll Tax Expense	3,400.49	6600	52%
Salaries & Wages	32,097.62	56580	57%
Retro Tax Expense	-651.95		
Vacation & Sick Leave	34.00	3800	1%
Total Employee Expense	35,754.16	69580	51%
Engineering Services	0.00	17000	0%
Equipment Rent	279.53	1000	28%
Insurance	3,932.07	9500	41%
Legal Fees	0.00	1000	0%
License & Permits	1,436.64	1500	96%

LAKE LIMERICK WATER SYSTEM
FINANCIAL STATEMENTS
FISCAL YEAR 2012 - 2013

	TOTAL	Annual Budget	YTD %
N Equipment Purchase	50.49	0	0%
Newsletter Expense	768.18	2000	38%
Office Expense	2,238.35	3300	68%
Postage	5,152.82	6500	79%
Professional Services	45,247.97	47500	95%
Repairs & Maintenance			
Equipment	750.56	5000	15%
General	2,385.56	23000	10%
Auto Maintenance	383.14	0	0%
Total Repairs & Maintenance	3,519.26	28,000.00	0%
Security Service Contracts	3,003.00	6400	47%
Service Contracts	0.00	1500	0%
Supplies	1,616.37	5000	32%
Taxes			
Property Taxes	0.00	2500	0%
WA St Excise Tax	9,024.03	19200	47%
Total Taxes	9,024.03	21700	42%
Telephone	1,367.91	2000	68%
Utilities	8,739.04	20000	44%
Vehicle Expense	1,835.99	6000	31%
W Testing	0.00	200	0%
Well # 6 Annual Payment	0.00	18000	0%
Total Expense	156,319.49	335,380.00	47%
Net Ordinary Income	44,964.51	73,090.00	62%
Other Income/Expense			
Other Income			
Interest Income	-512.25	4000	-13%
Miscellaneous Income	0.00	500	0%
Service Charges	3,161.57	5400	59%
Total Other Income	2,649.32	9900	27%
Other Expense			
Interest Expense Well #6	0.00	3800	0%
Misc. Expense	35.73	200	18%
Total Other Expenses	35.73	4000	1%
Net Other Income	2,613.59	5900	44%
N Income	**47,578.10**	**78,990.00**	60%

Lake Limerick Water System
Statement of Income and Expenses - Fiscal Year Oct 2012 through Sept 2013
Status as of 3/31/13

O.C.C.U. Savings Account	$ 9,007.08	
O.C.C.U. Checking Account	$ 166,470.03	
Key Bank Checking	$ 500.00	
[illegible]ones Designated Savings	$ 149,852.51	
OCCU Meter Replacement Account	$ 4,449.72	<this account will be closed in May 2013
Key Bank Main Line Replacement Account	$ 8,543.87	
Accounts Receivable	$ 64,466.95	
	$ 403,290.16	

Capital Improvements	Budget	Actual Cost	Budget Balance
Meter Replacements, budget $ from FY 10/11 & 11/12	$ 99,918.00	$ 237,821.13	$ (137,903.13)
Back Flow Assemblies	$ 62,500.00		
Well #4, Redesign of pumping system	$ 5,000.00		
Reserve Acct for Main Line Replacement Engineering	$ 11,490.00		
F.Y. 2012 - 2013 Totals:	$ 78,990.00	$ 237,821.13	$ (137,903.13)

Non Budgeted Capital Improvements
Well #6 Repairs:

St of WA Dept of Public Works Loan Well #6	Loan Amt	Int Pymts	Principle Paid
Loan Amount	$ 343,941.00		
October 2005 Loan Payment #1 (Int Only)	$ 343,941.00	$ 4,467.75	
October 2006 Loan Payment #2	$ 325,838.85	$ 5,159.13	$ 18,102.15
October 2007 Loan Payment #3	$ 307,736.70	$ 4,887.58	$ 18,102.15
October 2008 Loan Payment #4	$ 289,634.55	$ 4,616.05	$ 18,102.15
October 2009 Loan Payment #5	$ 271,532.39	$ 4,344.52	$ 18,102.16
October 2010 Loan Payment #6	$ 253,430.23	$ 4,072.99	$ 18,102.16
October 2011 Loan Payment #7	$ 235,328.07	$ 3,801.45	$ 18,102.16
October 2012 Loan Payment #8	$ 217,225.91	$ 3,529.92	$ 18,102.16
October 2013 Loan Payment #9	$ 199,123.75		

T[illegible] Cost of Cross Connection Control Devices:	(project completed June 2009)		$ 252,626.01
Date	#of Payments @ $3/pymt	Total Collected	Balance to pay off project
amt collected F.Y.06-07,07-08,08-09,09-10,10-11&11-12		$ 2,229,560.32	$ 23,065.69
Oct-12	1431	$ 4,293.00	$ 18,772.69
Nov-12	1312	$ 3,936.00	$ 14,836.69
Dec-12	1300	$ 3,900.00	$ 10,936.69
Jan-13	1193	$ 3,579.00	$ 7,357.69
Feb-13	1630	$ 4,890.00	$ 2,467.69
Mar-13	1251	$ 3,753.00	$ (1,285.31)

Payments Collected for Meter Replacements

Date	#of Payments @ $5/pymt	Total / Month	Total Collected
amount collected F.Y. 09-10, 10-11 & 11-12		$ 204,065.00	$ 204,065.00
Oct-12	1337	$ 6,685.00	$ 210,750.00
Nov-12	1210	$ 6,050.00	$ 216,800.00
Dec-12	1184	$ 5,920.00	$ 222,720.00
Jan-13	1028	$ 5,140.00	$ 227,860.00
Feb-13	1337	$ 6,685.00	$ 234,545.00
Mar-13	1115	$ 5,575.00	$ 240,120.00
COST TO COMPLETE METER INSTALLATION:			$ 237,821.13
DIFFERENCE TO MAIN LINE REPLACEMENT ACCOUNT:	Deposited 4/13/13		$ 2,298.87

Reserve Acct for Main Line Replacement Engineering	Date deposited	Amount / Qtr	Deposit Balances
[illegible]ember 2012 Deposit (holding for new acct @ Key Bank)	13-Apr	$ 2,872.50	$ 2,872.50
[illegible]rurary 2013 Deposit	13-Apr	$ 2,872.50	$ 5,745.00
May 2013 Deposit		$ 2,872.50	$ 8,617.50
August 2013 Deposit		$ 2,872.50	$ 11,490.00

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April 9, 2013

Lake Limerick Water System March Meeting

The general condition of the water system is good with no concerns as to system pressures or water availability to the customers.

Well Conditions:
Well #1 booster pump is operating with the timer to prevent it from "competing" with the other booster pumps on the system with pressure settings. It is important to keep a turn-over of water in the reservoir and this will ensure proper consumption.

Well #2 is still in stand-by and its use will only be required in extreme cases.

Wells #3A and B is operating normally.

Well #4 is operating normally.

Well #5 is operating properly.

Well #6 was found with the reservoir empty in late March. An investigation found the submersible well pump was running, but no water was flowing across the meter and into the reservoir. Coincidentally Don Bird was on site that morning to work on the SCADA system and we asked him to help with the trouble shooting. We found three errors inside the control panel.

1. The well depth indicator was not registering correctly. Don made an adjustment to the programming which appeared to correct the problem; however, later it began flashing "OLOL" and provided an inaccurate reading. He later determined that the "OLOL" indication represented a high signal value.
2. An electronic relay inside the panel read "alarm input fault".
3. The well pump was only drawing 25 amps (normally 55-62 amps) as indicated on the controller.

This is a very, very complex control cabinet and we decided to call in Arcadia Drilling to troubleshoot the well pump.

Arcadia came out and tested what they could but again, this has very, very complex controls. Arcadia recommended Dan at Simply Controls to come and troubleshoot the well. The company that installed the system (McConnell Construction out of Port Townsend) no longer appears to be in business. I called Flowtronex, the company that made the panel, and they have two certified repair providers in Washington, the closest in Woodenville. We decided to go with someone more local (Lacey).

Dan came out and began tracing wiring, checking circuits, and programming. He was able to trace the electronic relay (with the "alarm input fault") and found a pressure sensor for the booster pump outlet manifold sticking. When that sensor was freed, the relay fault cleared. This fault may have been locked in for a long time and not associated with the submersible well pump failure.

Dan determined that;

1. The well depth sensor had failed. According to our documentation the sensor is rated to send a 4-20 mA signal and we are actually receiving a 49 mA signal causing an error.

2. The well pump was not operating properly. The Submersible pump drive was sending 60 hertz and 500 volts to the pump and drawing 25 amps. This indicates the pump is spinning at full speed, but not pushing water. If it were pushing water the amperage would go up; and if it were pumping its full capacity, we would see the 55-62 amps expected.

I spoke with another well driller and explained the indications we are seeing and he said that we have 3 possible problems;

1. We are deadheading the pump. Which would be a stuck check valve or some other obstruction to the discharge side of the submersible pump.
2. We have broken suction on the pump. Which would mean the well was dry or the level of the water in the well has dropped below the level of the pump.
3. We have a broken pump. Meaning the motor is spinning but the pump impellor is not.

He had no explanation why the well level sensor would be providing a faulty signal.

I went out and verified that there is water in the well at the level that we would expect (240 feet from the surface). We have two well level indicators inside the pumphouse. One is part of the SCADA system and the other is a "red lion" indicator that actually provides an input to the control complex. The level I measured with the sonic sounder was close to the level indicated on the SCADA panel leading me to believe that this indication is accurate. The red lion indicated that water level was 100 feet lower and was blinking "OLOL". I tried to enter the programming and put it back to the way it was before Don changed it but was unable to figure it out. When I exited the programming screen the level indication matched that of the SCADA screen (and my sonic sounder). I am not sure what is going on with the level sensor. Jester followed me out to the site on his way home and stopped in to take a look. I asked him to verify that if we were sending 60 hertz and 500 volts to the well pump should it be pumping water if it could. He confirmed that the pump should be moving water if it can.

Arcadia is going to pull the pump and inspect the piping and equipment on Wednesday the 10th. I am hoping to find a stuck check valve or other obstruction that is preventing the pump from discharging to the reservoir. The next likely scenario is that the pump has somehow sheared from the motor and the pumpend will need to be replaced. The next worst scenario would involve replacing both the pump and motor. The worst scenario involves a problem with well capacity.

I have also asked Arcadia to install a sample tap on the fill line to the reservoir while they are there. This was a deficiency noted in the last sanitary survey. It is also very nice to have a source sample tap for investigating coliform bacteria failures.

I will get an addendum to this report after Arcadia pulls the pump.

Water Sampling:
The monthly routine bacteria samples were satisfactory.

Water Usage:
I had Jester on site for the end of month meter reads to go through the entire process. He did not have to do anything and we have an indicated loss of 1.9%. He believes our erratic loss percentages were a result of the final meter replacements and the system has worked itself out. Our yearly loss is 5.7% which is still a little high but should lower as more accurate readings are added. Stand-by for next month.

Steve drove around the entire system twice during the dry weather and did not notice any leaks.

Customer Concerns:
Steve had 7 utility locates, repaired a backflow assembly that was run over, had one water shut-off and one water turn-on. Steve installed a meter at the maintenance shop and investigated 8 potential customer leaks.

Cross Connection Control:
Steve and I went to visit all of the properties which indicated that they had a hazard on the survey form. We located any existing assemblies and verified that an assembly is needed on those without.

These are the totals that we have;
44 – That we know will need an assembly installed.
40 – Test existing assemblies installed by the customer

Backflow Pros has prepared a formal estimate for the installation and testing of assemblies and it is attached. We contacted H.D. Fowler about purchasing the assemblies ourselves and we were quoted $92 an assembly. I have not asked if Backflow Pros would accept us buying our own assemblies (they may have counted on the mark-up and need to add more somewhere else to make enough profit). I will let everyone know when I find out.

Water System Plan:
The Water System Plan has been sent to Mason County for review. They will have it for about 30 days and then it will be submitted to the State.

Thoughts:
Lake Limerick finished 3rd in the South Sound Subsection of the PNWS-AWWA Annual Water Tasting Contest. Hooray!

Lake Limerick was not selected as the "Most Improved" water system for WSDOH Drinking Water Week. A nice letter is attached letting us down easy.

H.D. Fowler is also researching inexpensive Fire Hydrant caps that we can use for replacements.

We plan to bury the communication wire between the two pumphouses at Well #3 in May.

We are going to start a flushing program on the distribution system. We will flush 1,000 gallons from each blow-off and hydrant to ensure any low flow areas and sediments are removed from the pipes before the nice weather comes and more people start to use the system.

Steve has met with 2 roofers about the pumphouses. He has one estimate in hand and has one more coming. The 3rd roofer is scheduled to come in the next week. All estimates will be available for your review by the next meeting.

Steve was called in while clam digging on the coast this month and also had several long phone calls while trying to go to a movie with his family. He was able to contact Joe and talk him through the customer problem, but still nearly missed the movie. This has raised the issue that Steve is the 24-7 contact for the water system. Should we visit this? Maybe some kind of arrangement where Steve, Joe, and Jason can share "on-call" weekends? I have not given this too much thought yet, I just wanted to open this for discussion.

Should you have any questions, or require further information, please call.

William Bernier

WATER COMMITTEE MEMBERS
ACTION ITEMS LIST

	ITEM	DATE TO BE DONE	STATUS
1.	Loan for Well#6	20 year loan annual payments	Loan paid off 2026, Next Payment Due 10/1/12
2.	Radio Communication License Fee	10 year Renewal, next due May 2015	Includes Rules and Updates
3.	Budget for periodic pump replacement	Pump expense added to annual budget yearly	Well#1 booster slow, may need replacement
4.	Install Back Flow Assemblies	September 2013	Install where required as per Survey Results.
5.	Map Update/ERU increase Water Distribution System	2006 in-house update by hand converted to CAD (computer) version 2007 by JWM (Morrisette).	CAD map posted in Inn Dec 07. ERU increase request to JWM 4/2010, sent to WDMII For review and Signature, never sent to DOH. GM has requested JWM submit to DOH, done February 2011, pending DOH decision.
6.	Water Meter replacements w/Badger meters	Goal is to complete all installs by Spring 2014.	All Installed except for 30 as of January 12, 2013 **COMPLETE REMOVE FROM ACTION ITEM LIST**
7.	System wide water line replacement	Long-range planning. Continue investigating financing opportunities.	JWM system evaluation for total replacement completed Feb 2009: estimated cost $10,000,000. Feb 09 applied & Aug 09 reapplied for 20-yr 1% DWSRF $1 million loan for first section - denied. Explored USDA loan options. We qualify but how do we pay? Need to check health AC pipes.
8.	Cross Connection Control Program (Back Flow Prevention Device installation)	Contractor done 7/2/09. Final unit completed in-house March 2010..	Backflow devices tested April 2012 with 8% failure rate CCCP program approved by BOD April 2012, approved by Attorney May 2012, will be sent to DOH upon completion of Hazard Survey. Hazard Surveys completed January 15, 2013
9.	WSP updates required every 5 – 6 years.	Next update required April 2013.	Meeting 9/19/12 @ 10a.m. for 2013 WSP Plan
10.	Well #1, Clonakilty Loop	Included in Eng. Design for Div 5 main upgrades.	Incorporated into main upgrade plan.
11.	4" water main, 04-030: Eliminate from the lot, relocate to greenbelt.	Include in Div 4 Eng. Design for main upgrades.	Add to Div. 4 future main upgrade.
12.	Ballantrae/Aycliffe Valve Replacement	WC agreed to defer this project until it can coincide with other projects	Valve not operative, no emergency, but must be replaced Cost $2,000.
13	Annual Consumer Education Meeting	November of Each Year	Next Meeting November 2103