

WATER SYSTEM COMMITTEE

MINUTES OF April 16, 2009

Town Hall Annex
5 Highland Street
Main Conference Room

Meeting Opened: 5:00 p.m.

Members Present: Brian Carroll, John Edgar, Jonathan James, Chuck Palm (Selectmen's Representative), Paul Anderson, Tim Goodheart and Miller Lovett (Alternate Selectmen's Representative).

Absent: Dan Cornelissen,

Others Present: Brenda Vittner

Approval of Minutes: Minutes of the March 19, 2009 meeting were approved with two changes.

New Business:

- Brenda Vittner was asked to attend this meeting because the discussions regarding the Water Use Ordinance and the definitions of the service area and its future definition all will be influenced by costs and customer rates.
- Water Treatment Plant Update – Brian Carroll reported on the current status of the treatment plant capacity assessment and operations improvement program which is ongoing:
 - A purchase order has been released to replace raw water pumps A and B. Completion is expected in about 8 weeks. Repair parts for pump C are on hand and will be installed in about one week. At the same time adjustments to the finished water pumps will be made which is expected to bring them up to capacity.
 - Quotations for upgrading the generator system will be obtained soon. The present generator is about ½ the capacity required to operate the plant at full capacity.
 - The meter replacement program still has 50 to 60 more meters to be installed due to difficulty accessing the remaining homes.
 - The meter reading cycle in early April was completed in 3 days.
 - Finished water produced for the 1st quarter was 20,886,000 gallons; 15,817,208 gallons were billed resulting in 24.3% unaccounted-for losses. With 2009 production typically running only about 60% of the amount produced in 2008, these losses are expected to come down in the next quarter. Meters are being installed in town locations to better understand water use which is not billed and therefore appears to be losses.
 - The recently replaced effluent piping from the filter beds has allowed operating time between backwash cycles to be increased from about 8 hours in 2008 to about 40 hours in 2009. This has increased the capacity of each filter bed from about 130 gpm to well over rated capacity of 175 gpm (175 gpm x 4 filter beds = 700 gpm)

≅ 1,000,000 gpd). The longer run times and increased capacity have reduced operating time and chemical and electrical usage. For 2009 to date chemical savings from the 2008 rate have been \$6,003. The operating hours for April to date are 310 hrs. less than the same time period in 2008 and 830 hrs. less for the year to date. Brian will get the corresponding electrical savings soon.

- Hydrant flushing will begin April 28 and will include flow and pressure readings at each hydrant to allow the hydraulic model to be updated.
 - The updating of the hydraulic model will then allow an analysis of the distribution system to be done. This analysis then needs to be combined with a similar analysis of the street system to determine coincident needs.
 - The booster pump at Meredith Bay Colony Club was installed at an elevation higher than the base of the water storage tank. Discussions with the design engineer will determine the proper corrective action if one is required to allow the tank level to be dropped to the lowest desired working level.
 - Alarms from remote water booster stations will be tied to the upgraded SCADA system with an inexpensive web-based system via wireless connections avoiding hard phone lines.
- John Edgar reviewed the analysis he made to predict the town's need for additional water in the future. He showed a map of the service area and discussed the probable future needs of 5 areas of the town. During this discussion many issues were raised about how to accurately determine the properties within the service area, whether the service area should expand, contract or stay the same in the future and what effect rates and fees would have on the service area in the future. The results of his study have been compiled into two spreadsheets – one which gives a 5 year graphical and numerical projection and one which gives a 20 year numerical prediction. These will be reviewed at the next meeting.

Both of these studies allow all increased demand and requested new connections to the system to occur – perhaps or perhaps not the course of action we want to recommend to the Select Board.

A suggestion was made that we determine what goals the rate structure should accomplish in the future such as who pays for what, how variations of that decision would affect rates, fees, the service area and allowable connections to it. Thus decisions about the service area definition, allowed connections, future water demand and physical structure required would be the result of recommended financial policy decisions. Not easy work but perhaps the decision process and sequence that would yield the most logical results. Committee member's thoughts on this decision-making process are critical.

- A short discussion about the current rates and their structure was held with no decisions made.

- Miller Lovett again raised the very valid issue of how the committee's work (particularly the audit and analysis functions) becomes institutionalized. No conclusions were reached but it is a subject that deserves careful attention and a clear recommendation to the Select Board.
- A status report to the Select Board needs to be made in the relatively near future. In an attempt to start our thinking about the format and material to be presented, I wrote an email to John Edgar a few days ago which is attached for all members review and critical comments. Your thoughts by email prior to the next meeting would be appreciated.

Meeting Adjourned: 7:00 p.m.

Next Meeting: May 21, 2009, 5:00-7:00PM, Town Hall Annex

Respectfully submitted,
David Thorpe