

WATER SYSTEM COMMITTEE
MINUTES OF January 20, 2009

Town Hall Annex
5 Highland Street
Main Conference Room

Meeting Opened: 5:30 p.m.

Members Present: Miller Lovett (Selectmen's Representative), Chuck Palm (Alternate Selectmen's Representative), Brian Carroll, Jonathan James, John Edgar, David Thorpe.

Absent: Chuck Lowth

Others Present: None

Approval of Minutes: Minutes of the December 23, 2008 meeting were approved as presented.

- Water Treatment Plant Update – Brian Carroll reported on the current status of the treatment plant capacity assessment and operations improvement program which is ongoing:
 - Filter bed flush frequency has been reduced to about half of the previous schedule – 3 per shift. Filter run times have been increased to 7 hours from about 3 hours and much more of the storage tank capacity is being utilized regularly.
 - Raw water pump capacity is 630 gpm (907,000 gpd) – two of the three pumps need to be replaced or repaired to achieve the 1 million gallons per day required for rated plant capacity. Replacement is less expensive and quicker than repair and is estimated to be \$28,000 plus installation.
 - Combined filter bed capacity is currently 600 gpm (864,000 gpd). A technician hired by Siemens, the manufacturer of the filter beds, believes the problem is a combination of undersized drain lines and discharge head of only 3 feet instead of the 5 feet specified. An estimate of \$25,000 has been received to replace the pipe and two actuators. Tests have shown the increase in pipe size should correct the problem without increasing the head which would be very difficult.
 - Finished water pumps are delivering less than rated capacity but a “no cost” adjustment is expected to bring them up to rated capacity of 1 million gallons per day.
 - The capacity of the clear well is still required but cannot be accomplished until the rest of the system can deliver rated capacity.
 - Brian believes there is no longer an advantage to installing a storage tank agitator so this item has been removed from the task list.

- Review of residential and business usage rates, residential occupancy rates, peaking factors and methods for calculating available spare capacity and future demand.
 - Dave Thorpe reviewed a number of information collection activities, the data collected, conclusions reached and reporting methods.
 - The committee agreed that Available Spare Capacity and Future Demand Requirements will be stated in calendar quarters, not billing quarters. The results of all billing data analysis will be converted to calendar quarters. Existing meters have been read in the first week of January to start the conversion process to billing on a calendar quarter basis for 2009.
 - Six quarters of actual billed water usage by account was used to develop usage rates for typical businesses, most of which were expressed in some unit of usage such as rooms for hotels, seats for restaurants, employees for retail and manufacturing, etc. The committee accepted the usage rates and units of measure presented.
 - A three year history of maximum day usage by year and by maximum quarter was reviewed and peaking factors for annual usage and for maximum quarter usage were accepted by the committee.
 - Six quarters of residential usage by account for typical residences was reviewed. Average annual and maximum quarter usage rates were accepted by the committee.
 - Methods and results of the population survey which was requested from residential customers in their 4th quarter 2008 water bills were reviewed. Average occupancy rates and usage rates for residential customers were accepted by the committee.
 - Agreement and acceptance of these data will now allow an updated Available Spare Capacity analysis and the first Future Demand Study to be generated in the next few days. The data agree upon will be shown in these reports.
- Progress on the distribution system analysis which Brian Carroll and Jonathan James are generating was briefly reviewed. This analysis will be overlaid with similar sewer system and DPW road system studies to look for co-incident needs and issues to help determine priorities and reduce costs on projects with joint responsibility.
- A short discussion about unaccounted-for losses was held. The committee needs to make a decision on the value to be used for future forecasts. Three events were discussed that could cause the losses to be less than reported. Dave will review these with Brian and email members with information to allow a value to be selected for future forecasts.

A decision was made to hold future Water System Committee meetings on the 3rd Thursday of each month from 5:00 to 7:00 PM.

Meeting Adjourned: 8:00 p.m.

Respectfully submitted,
David Thorpe