



Village of Glencoe

Board Agenda Memorandum

DATE PREPARED: March 12, 2015

MEETING DATE: March 19, 2015

AGENDA SUBJECT: Discuss Water Supply Planning Study

RECOMMENDATION: That the Village Board Receive the Water Supply Planning Study from Strand Associates

Background: The Village operates and maintains a water treatment plant (WTP) on Village owned lakefront property at the east end of Park Avenue. The current WTP, originally constructed in 1928, has the capacity to produce 8 million gallons of drinking water per day (8 MGD). The Village's WTP produces high quality water that meets or exceeds strict state and federal compliance standards.

While the quality of water produced at the WTP has been maintained at the highest level, the physical condition of the plant is nearing the end of its useful life. According to the United States Environmental Protection Agency (USEPA), modern water filtration plants and pumping stations typically have a life expectancy of between 60-70 years. The Village's WTP is 87 years old, and despite careful maintenance and the timely replacement of process equipment, much of the plant's significant infrastructure is deteriorating and in need of replacement.

As part of the Village's long range plan for capital improvements, a review of the water supply system, including the WTP, was programmed in 2012. A request for proposal (RFP) was issued at that time for preparation of a water system master plan that would help guide the Village's comprehensive review of the options available for the WTP and a long term water supply. At that time, the Village was contacted by representatives of the Northwest Water Commission (NWC) about their interest in securing a secondary source of water from Lake Michigan. The NWC, which was formed in 1957, provides drinking water to approximately 225,000 customers with four (4) member communities located in the northwest suburbs, including Arlington Heights, Buffalo Grove, Palatine and Wheeling.

The City of Evanston currently supplies finished drinking water to the NWC. There have been some preliminary meetings between the Village and the NWC to determine the feasibility of a partnership that could potentially benefit both parties; however, neither the Village nor the NWC has made any commitments of any kind.

In 2013 the Village hired Strand Associates of Joliet, Illinois to prepare a Water System Facilities review that was intended to evaluate all feasible and practical options for upgrading the Village's existing WTP. The initial Strand Agreement was expanded as the scope of the review expanded and the final product is a Water Supply Planning Study that includes review and analysis for the following alternatives:

- 1) Rehabilitation of the existing WTP
- 2) Construction of new WTP at the Lakefront
- 3) Construction of new WTP at inland location; and,
- 4) Purchase of water from a neighboring community

Analysis:

The Water Supply Planning Study developed by Strand Associates evaluates the Village's existing water distribution system, water treatment plant and water storage facilities, and through the development of a water model evaluates the performance of the existing system. An analysis of the existing storage and supply is utilized to evaluate future water supply alternatives for the Village Board and the community to consider. This study presents conceptual options that will need to be further evaluated in a more detailed design review after the Village Board has made a decision on a direction on the future of the WTP. Representatives from Strand Associates and the Village staff will make a presentation on the Study at the meeting on March 19.

The full text of the report will be provided to the Village Board at the meeting on March 19 and will be made available to the public on Friday, March 20.

At this time, the Board is not being asked to make any decision or determination based on the information provided by the report. A comprehensive public information process will be outlined on March 19 to highlight efforts the Village will undertake to gather public feedback on the options outlined in the report. Only after this public process is completed will the Board consider options on how to move forward. The timeline for decision is not imminent; there is more than sufficient time to consider community input.

Recommendation:

Staff recommends the Village Board receive the Water Supply Planning Study prepared by Strand Associates as part of the ongoing evaluation and determination of the status of the Village's WTP and a long term water supply.

Motion:

This item is being presented for Village Board review and discussion only at this time. No action is required.