

Options Under Review

- Build a new water treatment plant or rehab existing plant on the Glencoe beach
 - The preliminary cost estimates (also referred to as the engineer's opinion of probable construction costs, or OPCC) for a new plant are \$35 to \$50 million, which includes construction costs and costs for purchasing water from a neighboring community during construction.
 - Rehabilitation of the current plant would require substantial infrastructure and technology improvements.
 - Construction on the lakefront would likely impact use of the Glencoe beach during construction and the Village would plan to work closely with the Park District, should construction occur on the lakefront.
 - The location and size of the plant would be evaluated as construction options are evaluated in greater detail.
- Intergovernmental Cooperation
 - The Northwest Water Commission approached the Village in 2012 regarding their interest in a redundant water supply from Lake Michigan and the Village and Northwest Water Commission discussed the feasibility of a partnership where the Village would supply raw water to the Northwest Water Commission in exchange for financial assistance in building a new plant. While the Village remains a viable option, the Northwest Water Commission has told the Village that it may no longer be in its long-term plans for a water supply source.
 - The Village is currently evaluating alternative intergovernmental cooperation opportunities as well.
 - Highland Park has indicated it has the capacity to supply the Village with water. If the Village purchases water from Highland Park, the Village will need to build new water infrastructure, such as a booster station and water transmission mains, for the Village's water system to handle the inflow of water from Highland Park.
 - The Village currently has emergency interconnections with its neighbors for emergency and short-term planned outages. These would not be sufficient for a permanent supply of water to residents and businesses.
 - If the Village purchases water from Highland Park, the Village will not have a water treatment plant in the future. If this option is evaluated further, an aspect of the evaluation would include options for reusing the land where the current plant is located.
 - The Village and Highland Park are required to meet the same regulatory standards for safety and quality of drinking water.
 - The Village is studying the cost of purchasing water from Highland Park, which would include one-time costs to build infrastructure necessary to purchase water and the ongoing cost of purchasing water.
 - Rates and length of a contract would be handled through negotiations with Highland Park. The Village has had preliminary discussions with Highland Park but has not begun negotiating a water purchase rate. Water rate negotiations would commence later in the evaluation process if the Village opts to further pursue the water purchase option.
 - The total opinion of probable construction cost for connecting with Highland Park is \$5,600,000. This includes necessary Village infrastructure improvements such as a

booster station and large water transmission mains, and does not include the ongoing cost of water purchased.

- The Village would no longer produce water but would still need to maintain and improve its distribution system to deliver water to residents and businesses.
- The Village would need to construct a new reservoir and pump station.

Non-Feasible Options

In the engineering feasibility study, Strand Associates recommended that the Village not consider some inland and lakefront water plant options, due to engineering feasibility limitations. Accordingly, the Village determined some options are not feasible, based on location, access needs and capability, and/or cost.

- Water tower site: This would require substantial infrastructure costs to construct a water transmission main through the Skokie Lagoons. There are also environmental restrictions from the EPA, as the site is an abandoned landfill, which impact this option's feasibility.
- Site near the Glencoe Golf Club: The available land for this project is Cook County Forest Preserve property and the County has indicated that it will not sell the land for the purpose of constructing a water plant. Additionally, infrastructure costs would likely be prohibitive, as there are no existing municipal water facilities located near the site.
- Street Ends or the Takiff Center: Street ends are not feasible due to the elevation of the bluffs and the need for the building to be built at street level, as it is not feasible for the Village to pump water up the bluffs to a plant. The Takiff Center is located on Park District property and has not been offered as a potential site.
- Other beach locations on South Avenue or Dell Place: The Village's right-of-way parcels are only 66 feet in width. A water plant facility with the capacity to serve Glencoe would need 1 – 1.5 acres of buildable land. Neither of these locations meet these requirements. Additionally, these sites would require significant infrastructure construction as they are not located near the existing water distribution system.
- Agreement to purchase water from Northbrook: Northbrook does not have capacity at its water treatment plant to provide water to Glencoe, and the necessary infrastructure improvements would be cost prohibitive as compared to other options.

Financial Considerations

- The Village is studying the total costs of producing and purchasing water and will be presented to the Village Board in discussion of potential options.
- Because the Village has not selected an option or developed specifications for any possible options, the Village does not yet know the total project costs. There are several ways in which large water supply projects can be financed (such as issuance of bonds, low-interest federal loans and other methods), and the Village will evaluate potential financing methods as the Village studies potential project options in greater detail.
- The Village's current water rate that customers pay generates revenues to cover operating costs and capital replacement projects for the plant. However, the cost of any of the project options likely cannot be funded through the water rate alone.

- The total annual operating costs for the Village to produce and deliver water is \$1.9 million per year.
- As the graph on page 44 of Strand's presentation presented at the March 19, 2015 Village Board meeting illustrates, the overall costs for the Village to operate its own water plant are reduced over time. This graph is a general comparison of the cost to purchase water from Highland Park at its current wholesale rate to the annual cost for the Village to operate and maintain a new WTP on the lakefront.

Strand Feasibility Study

- To view the complete Strand Report, [click here](#). (link)
- The report is an engineering and feasibility study designed to provide information to the Village on the potential options it has for a long-term water supply solution. In the report, Strand identified several options as potentially feasible or unfeasible. Ultimately, the decision of which option to pursue will be made by the Village Board.
- The report outlines necessary infrastructure improvements the Village must consider when pursuing any of the potential options. This includes a temporary connection with Highland Park to insure water will be supplied to Glencoe if a new plant is constructed or the current plant is rehabilitated.
- The report provides cost estimates of options for producing specific amounts water. Strand's opinion is that if the Village produces its own water, the plant would need to produce 6 million gallons of water per day (mgd).
- The report contains information on new filtration technology and some considerations the Village must evaluate. This includes the amount of water that could be discharged into the Village's and the Metropolitan Water Reclamation District's sanitary sewer systems.

General Information

- The Village's primary goal in water distribution operations is to provide the highest quality drinking water to its residents as possible. The water the Village treats and distributes meets or exceeds all state and federal regulations.
- There are currently no regulations that would prohibit the Village from building a water plant on the beach in the future. However, as regulations change, it will likely be difficult for the Village to obtain the permits required to construct a water plant in the future.
- The IEPA's estimate of a water plant's expected useful life is 50 to 70 years; however, this does not mean it is mandatory for a plant to be decommissioned after a specific amount of time.
- Most lakefront towns from Evanston to Waukegan have water treatment plants.
- The Village's current reservoir is located under the tennis courts at Lakefront Park.
- The current capacity of the Village's plant can produce 8 mgd, and is sized to meet the Village's maximum daily and fire flow demands.
- The Village has not evaluated the overcapacity of area plants because the infrastructure necessary to transport water would be cost prohibitive as compared to other options.