

WSSC Testimony on Ten Mile Creek Limited Amendment Study

I would like to briefly share two key ideas about source water protection as a prelude to presenting WSSC comments on the Ten-Mile Creek study.

First, let us consider a young person, 29 years old, visiting his doctor. We can presume that the doctor reviews the results of his patient's tests and see nothing alarming. He shares that with him, but may suggest to him to follow a good diet and exercise regularly to avoid major health issues in years to come.

Our Little Seneca Lake is in a similar situation. It is 29 years old and is not in an alarming condition at this time. But we need to think about its future for many generations to come. It needs a special diet and care. An ideal diet for the reservoirs can be provided by a fully forested condition for its source water and surroundings.

Let me briefly mention the second idea related to source protection. There is a saying that "Everything that can go wrong will eventually go wrong". This is what happened in the 1993 Milwaukee Cryptosporidiosis outbreak which killed 100 people and sent 4,000 to the hospital, resulting in an estimated \$31.7 million in total medical costs and \$64.6 million in total lost productivity. It seemed that source water contamination had occurred while the treatment process was not working at its best.

This experience brought back the idea that water treatment alone is not a panacea for delivering safe water and that a multi-barrier approach is needed to protect water at every step of its trip from source to faucet, with source protection as its first step. This is more important for lakes and reservoirs due to the fact that contaminants reaching reservoirs can stay there for a long time and can also provide opportunity for algal growth, including several types that produce toxins.

Little Seneca Lake is a man-made reservoir built in the early 1980s. This reservoir, in combination with the Jennings-Randolph reservoir, provides a local source water solution for addressing periodic droughts that occur in our region. This local solution was much less costly than the 16-reservoirs solution suggested by the COE. The Little Seneca reservoir also provides recreational

opportunities for local communities, managed by the P&PC. The reservoir was funded by the WSSC, Washington Aqueduct and Fairfax Water. WSSC is considered the owner and operator of the reservoir. The Interstate Commission for the Potomac River Basin provides technical support and operational coordination for operation of the reservoir. Montgomery County conducts water quality monitoring in reservoir tributaries, including the Ten Mile Creek.

Water releases from the reservoir have been limited in the past decades; once in 1999 and once in 2002. However, we expect that with population growth and strengthening of the climate change the reservoir use as back-up source water will significantly increase. As such, WSSC strongly recommends that the Little Seneca Lake be protected against sedimentation which will reduce water availability for release when needed. This is needed despite the fact that the reservoir has three forebays that limit sediment reaching the reservoirs. These forebays are now more than half full and removing sediments from them will be challenging and expensive.

It is also important to protect the reservoir against nutrient pollution. A 2006 study by the Maryland Department of the Environment (MDE) concluded that the Little Seneca Lake meets “the criteria associated with nutrients” and that “a TMDL for nutrients is not necessary in this case”. Our quarterly water quality monitoring confirms MDE’s finding. However, the MDE study also notes that “Urban development is occurring in portions of the Little Seneca Lake watershed, and is expected to increase in the future....[and] the State reserves the right to require future controls in the Little Seneca Lake watershed if evidence suggests nutrients from the basin are contributing to water quality problems”. It is prudent to be proactive and consider this issue before embarking on major developments in this watershed.

Control of sedimentation and nutrient pollution will serve as following a “good diet and exercise” advice for ensuring that adequate source water supply of acceptable water quality will remain available to our Metropolitan area for generations to come.

Sedimentation and nutrient pollution of the reservoirs occur mainly due to land use activity occurring in their watersheds. As such, land use management is critical for reservoir protection as a source of water supply. These important issues have not been explicitly addressed in the study. However, the study report includes recommendations intended to protect the Ten-Mile Creek watershed. Examples include minimizing disturbance of natural resources, minimizing impervious cover, providing 175-foot wide buffers on both sides of streams, and applying Environmental Site Design.

The effectiveness of these recommendations in pollution prevention is not fully demonstrated yet, but they are considered as the best practices available at this time for watershed protection, except keeping the watershed in a forested condition. Equally important is site control during construction phase.

Full implementation of these recommendations plus strict site control during construction can reduce the impact of development on Little Seneca Reservoir and are supported by the WSSC. We also recommend that the nutrient load changes associated with the new development be investigated before the decision is finalized.

Thank you for the opportunity to share our comments.