

# 25 for 25: How the Winnepesaukee River Basin Program Helped to Save the Lakes Region

By Thomas S. Burack, DES Commissioner

In recognition of the New Hampshire Department of Environmental Services' 25th Anniversary, over the course of the year I will highlight 25 agency activities, programs, projects and accomplishments of the past 25 years. This article relates to the improvements to waters in the Lake Winnepesaukee River Basin that have resulted from the development and operation of DES's Winnepesaukee River Basin Program wastewater system.

Prior to the 1980s, fish kills, algae blooms, bad odors and beach closures due to bacteria contamination caused by polluted water were regular occurrences in Lake Winnepesaukee, Lake Winnisquam, as well as the Tioga and Winnepesaukee Rivers. In many locations, the water consistency was regularly described in the summer months as "pea soup" due to high algae levels. For decades, algae blooms caused by poor water quality in Lake Winnisquam required control by annual applications of massive quantities of copper sulfate powder that was dropped from boats and then mixed into the water by propellers. The principal culprits were sewage discharged from municipal facilities that provided only minimal treatment as well as septic systems located on lots too densely packed to support proper on-site wastewater disposal.

In 1972, the Governor and General Court determined that a regional solution was necessary and that the best way would be to give this responsibility to the Water Supply and Pollution Control Commission (predecessor to the Department of Environmental Services). So, the Winnepesaukee River Basin Program (WRBP) was established to plan, construct and operate wastewater facilities in partnership with the local communities. This resulted in the construction over the next 20-plus years of a wastewater treatment plant in Franklin, 14 wastewater pumping stations, and over 60 miles of sewer lines. The project culminated in 1993 when the Gunstock Recreation Area was connected to this system, thus eliminating the last major direct discharge to Lake Winnepesaukee. The total cost was over \$75 million, with about 75 percent provided by federal grants, 20 percent by state grants and 5 percent by local funds. Operating costs and debt service are now shared by the 10 communities served by the WRBP system.



Winnepesaukee River Basin Wastewater Treatment Plant (Aerial view)

The results of these efforts have been very dramatic. The water environment has improved and water bodies across the entire Lakes Region have been opened up to recreational uses including fishing, swimming and boating in areas where activities had previously been limited for decades. New Hampshire's Lakes Region now has a vibrant tourist industry focused on water recreation. And, economic development has occurred that has been supported by construction of miles of new sewers connected to the WRBP system. The WRBP continues to be a critical, if unseen, cog in the Lakes Region's economy.

But the WRBP faces challenges going forward because its infrastructure is aging — its major facilities range in age from 30 to 40 years. In fact, over the last five years, two major upgrades have occurred at the treatment plant and a third is underway. The 10 municipal members of the WRBP Advisory Board and DES staff are working closely together to ensure that future investments occur in a timely, appropriate and affordable fashion to make sure that this operation remains effective and efficient.

As DES celebrates its 25th Anniversary, the Winnepesaukee River Basin Program demonstrates the commitment of DES and our Lakes Region community partners to preserving the quality of the lakes and rivers in the Winnepesaukee River Basin that are so vital to the long-term health, prosperity and quality of life of all of New Hampshire's citizens.