

Making the Hudson River Swimmable

by Shayne Mitchell

In 1939, in his groundbreaking book, *The Hudson*, Carl Carmer expressed the wish that the Hudson River would one day be safe for swimming. Notwithstanding the several environmental initiatives since that time, including the 1972 federal Clean Water Act, which called for “fishable, swimmable waters” by 1984, this goal has not yet been realized along the full length of the river. In 2004, New York State set a new goal of making Hudson River water quality suitable for swimming from its source in the Adirondacks to New York City by 2009 – the 400th anniversary of Henry Hudson’s voyage up the Hudson River.

To achieve the swimmable goal, additional water quality improvements are needed in some areas of the river – namely reductions in bacteria and “floatables.”

Achieving the necessary reductions will require implementation of effluent disinfection at certain sewage treatment plants (STPs) during the contact recreation season; control of combined sewer overflows (CSOs); management of stormwater runoff from construction sites and urbanized areas; and continued support for construction and maintenance of boat sanitary waste pump-out facilities.

Seasonal Disinfection and Other Water Quality Improvements

Instituting seasonal disinfection at STPs that do not already do so is expected to result in the greatest water quality improvement. The New York State Department of Environmental Conservation (NYSDEC) evaluated more than 500 STPs located within the Hudson River drainage basin, considering such factors as site-specific disinfection practices, discharge volume, and distance from the

Hudson River main stem. Ultimately, the NYSDEC identified 21 municipal and 23 industrial/private STPs as needing to institute seasonal effluent disinfection by May 2009 to support the swimmable goal. Forty of the necessary permit modifications have been issued and the remaining four are currently in the process of being modified. Design and construction of the necessary disinfection systems are already underway at many of these locations.

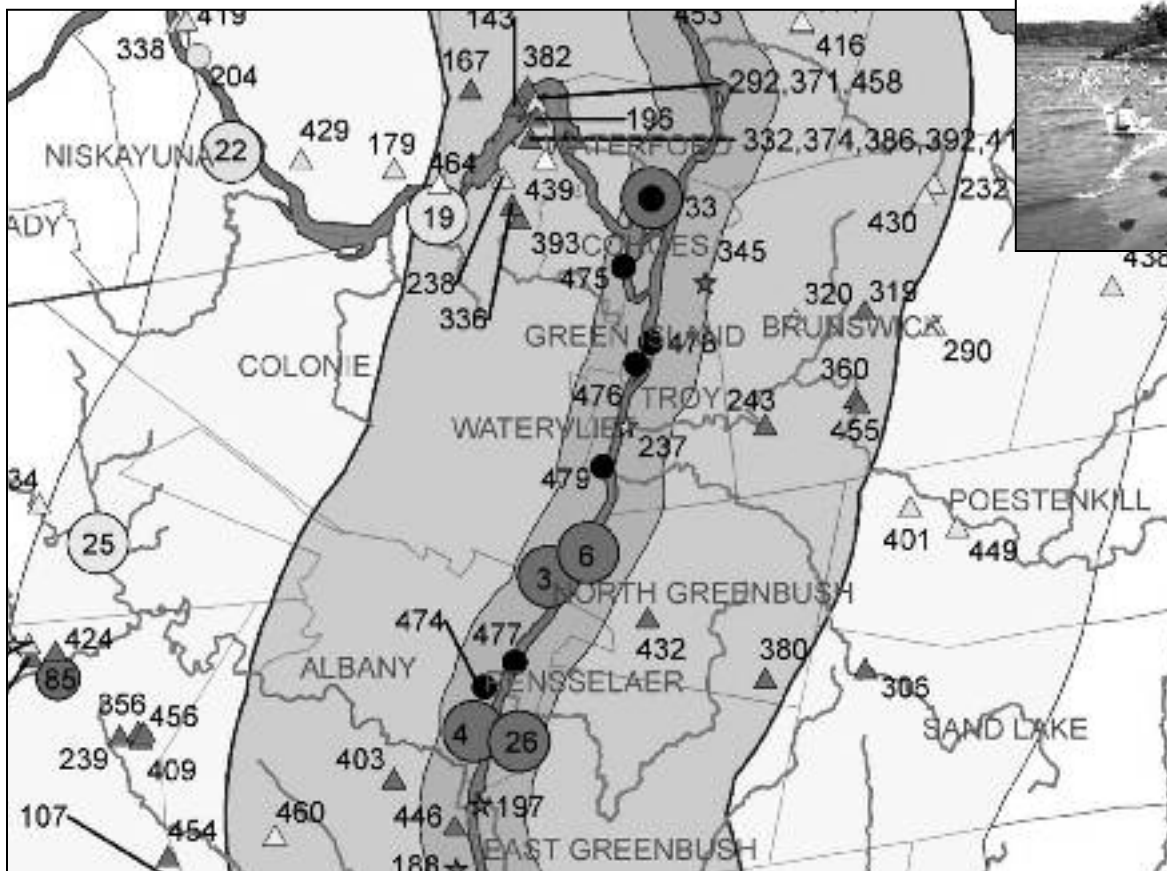
The second greatest water quality improvement is expected to come from CSO abatement. Most of the municipalities with CSOs have submitted their Long Term Control Plans (LTCP) and have begun to implement them. Water quality is also expected to benefit from implementation of stormwater management programs that are required of larger municipalities and construction sites.

To date, billions of dollars have been invested in making the Hudson “fishable and swimmable.” New York State has provided more than \$430 million to benefit the Hudson River since 1996. Recent items which directly support the swimmable goal include:

- \$2 million grant to assist municipalities in the “Albany Pool” area (also see article page 50) with CSO abatement studies
- additional \$4 million to help fund sewage treatment plant disinfection projects along the Hudson River
- 2005 completion of a two-year study to identify potential new swimming sites in the Hudson River

The swimmable goal has been realized for most of the Hudson River for a number of years now. For the remaining sections, hopefully, it will only take a little while longer.

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Above: Swimming at Kingston Beach

A small cross-section from the NYSDEC’s swimmable project study, “Sewage Discharges to the Hudson River and Tributaries,” map. The numbered shapes represent STP and CSO SPDES (state pollutant discharge elimination system) permittees as of January 2006. The map was used as a tool by the NYSDEC to assist identification of the STPs needing to institute seasonal effluent disinfection in support of the swimmable goal.

Photo courtesy of NYSDEC