

New York State Department of Environmental Conservation

The Hudson River Estuary Program: Making a difference together for the river and valley we share.

The Hudson River Estuary Program leads a unique regional partnership to restore the Hudson and support the quality of life so valued by Hudson Valley residents. Its mission is to conserve the natural resources for which the Hudson is legendary, promote full public use and enjoyment of the river and clean up the pollution that affects our ability to use and enjoy it.

The Estuary Program implements the Hudson River Estuary Action Agenda with partners, including the Hudson River National Estuarine Research Reserve; Hudson River Valley Greenway; New York-New Jersey Harbor Estuary Program; New York State's Office of Parks, Recreation and Historic Preservation and the departments of State, Health, Transportation and General Services; the U.S. Environmental Protection Agency; U.S. Geological Survey; U.S. Department of Commerce/NOAA, and many municipal governments, non-profit groups, academic institutions and private sector organizations.

For more information, visit www.dec.ny.gov/lands/4920.html

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Four centuries ago, native tribes along the Hudson River were careful observers of nature. One of their names for the river was Mahicantuck, translated as “great waters in constant motion” or “river that flows both ways.” Mahicantuck is an apt description of this estuary—a long arm of the sea in which salt and fresh water are sloshed back and forth by tidal currents.

These tribes had to possess practical knowledge of this environment because their lives depended on it. The same was true for the crew of the Half Moon which, on September 11, 1609, entered the river later named for its captain, Henry Hudson. In his journal, crew member Robert Juet recorded the river’s physical characteristics—its depths, shoals, winds, tides and currents. He noted a rich array of fishes, “...they tooke four or five and twentie Mullets, Breames, Bases, and Barbils...” and trees, “...goodly Oakes, and Wal-nut trees, and Chest-nut trees, Ewe trees, and trees of sweet wood in great abundance...” Describing an exploration of the Kill Van Kull between Staten Island and Bayonne, Juet wrote, “The lands they told us were as pleasant with Grasse and Flowers, and goodly Trees, as ever they had seene,

and very sweet smells came from them.”

Now tank farms and shipyards line the Kill Van Kull, and the dominant smells come from petrochemicals. Along much of the river, a sailor from 400 years ago or even 40 years ago would find the river very different today.

This State of the Hudson report documents the status of and trends in the estuary’s water quality, its natural communities and inhabitants and the health of the landscape that cradles and nurtures the Hudson. Today that knowledge may not be of immediate personal concern, but it is critical. We do depend on long-established patterns in the natural world and should consider how our society benefits from the Hudson River, its tributaries and its watershed.

The river shaped our past; we now shape its future. Much of the beauty Robert Juet recorded is still to be seen, but some trends described in this report are troubling. Others show how decisions based in ecological science can repair past damage and prevent future lapses. Our power to shape the Hudson must be informed by striving to understand—as did Juet and the Native Americans—the vital role the river plays in our lives.



FROM MAHICANTUCK TO THE MILLENNIUM

The river shaped our past; we now shape its future. Our power to alter the Hudson must be informed by understanding of the vital role the river plays in our lives.

Manhattan Then and Now

Combining information from old maps and natural history accounts with modern technology and understanding of landscape ecology, the Mannahatta Project has recreated the landscape of Manhattan as Henry Hudson saw it 400 years ago. These images show Manhattan’s Hudson River shoreline at the present-day sites of Battery Park City and Tribeca.

Markley Boyer / The Mannahatta Project / Wildlife Conservation Society
Photo: Stephen Amiaga