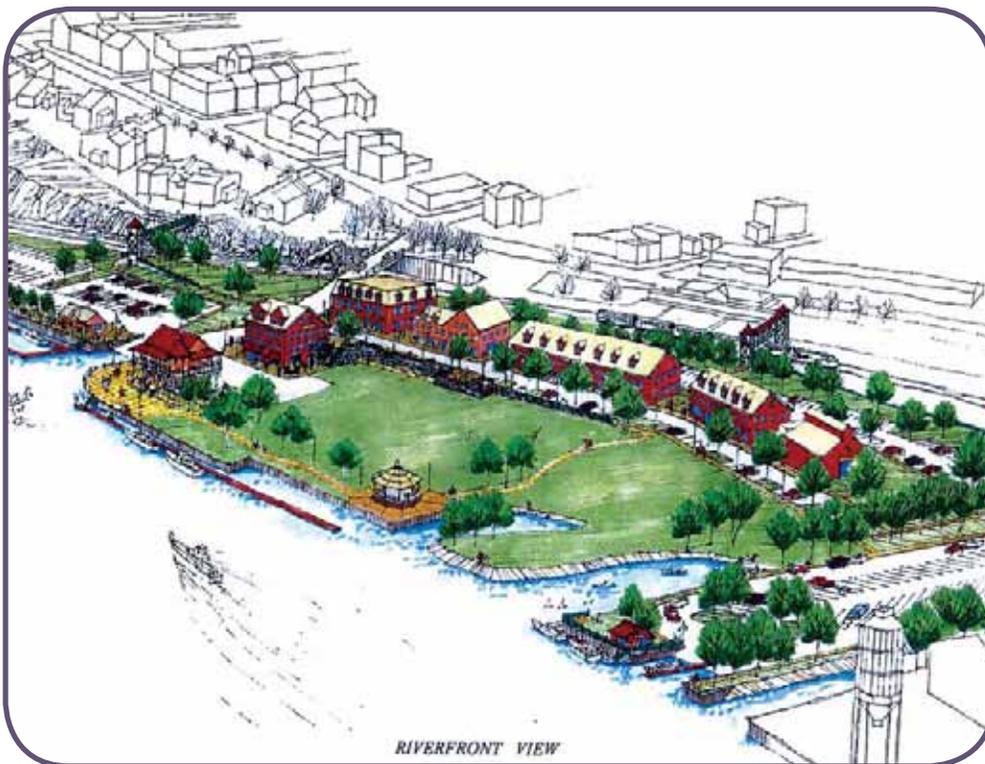


Waterfront Revitalization

The waterfront of the Hudson is being reinvented as a destination for tourism and commerce and as a great place to live, dine and enjoy river scenery.



The NYS Department of State (DOS) Division of Coastal Resources helps riverfront communities develop and implement Local Waterfront Revitalization Programs. DOS has funded 148 Hudson River projects, totaling more than \$23.9 million, since the first Estuary Action Plan was adopted in 1996. In the City of Hudson, a former oil tank farm is being transformed into a beautiful park, shown here in the City's concept drawing. DEC helped with brownfield cleanup programs designed to deal with contamination of old industrial sites and water and sewer lines for the park.

For 150 years, the Hudson was one of the leading industrial rivers in America. The establishment of the interstate highway system, along with shifting national and global economic trends, resulted in the slow abandonment of many river manufacturing sites and led to the decline of river cities. This left contaminated properties and tattered downtowns. Recently, the Hudson Valley economy began to diversify, and

now, a key element of the region's economic strategy is to strengthen and revitalize riverfront communities and waterfront areas as destinations for tourists and as vibrant places to live and work. In the valley's urban areas, this includes returning dormant waterfronts left vacant by the loss and relocation of heavy industry back to productive use with new businesses, a cleaner environment, and recreational opportunities.



Chris Bowser

Investments by several state agencies have brought new vitality to Kingston's Strand district on Rondout Creek, a tidal tributary of the Hudson. Improved water quality, restored bulkheads, refurbished buildings and lighthouses, and new museum exhibits all contribute to the revival of this part of the city.



Michael Nelson/Scenic Hudson

Public and private investments turned the run-down waterfront in Yonkers into a booming destination. Commuter ferries, new waterfront trails, and mixed commercial and residential development made the river the new "front door" of the community.

Michael Nelson/Scenic Hudson



Michael Nelson/Scenic Hudson



Michael Nelson/Scenic Hudson



Through the 1996 Clean Water/Clean Air Bond Act, the state has provided \$15 million for cleanup and reuse of old industrial sites. Investigation or remediation of 32 contaminated sites is under way. This park in Irvington is one of the first successful brownfield redevelopment projects funded by the Bond Act, replacing a lumber yard with recreation facilities. The state's Brownfields Opportunities Areas program provides Hudson River communities with additional funds to help plan redevelopment of former commercial and industrial waterfronts.



©Ken Allen

Riverfront communities have realized new interest in their waterfront parks as destinations for tourists and as a haven for local residents. Above, a family of kayakers relax on the shore in Cold Spring. Storm King Mountain is seen in the distance.

Ten years ago, New York State stepped up efforts to assist local governments, regional organizations, businesses, community organizations, and citizens with improving their river waterfronts in ways that advance economic development opportunities, and protect natural and historic resources. Today, increasing numbers of Hudson River communities have fixed up their waterfronts and returned abandoned industrial sites to

life as parks, trails and new business and home sites. As municipalities adjust to new economic opportunities, many riverfront communities find that environmental conservation plays a key role in successful redevelopment. DEC works with communities to identify sensitive natural resources before development plans are finalized so that adverse impacts can be avoided or minimized.

Websites for more information:

DOS Division of Coastal Resources
www.nyswaterfronts.com

NYSDEC brownfield cleanup program
www.dec.state.ny.us/website/der/bfield/index.html

NYSDOS Brownfields opportunity areas grants www.nyswaterfronts.com/grantopps_BOA.asp

Local Waterfront Revitalization Grants
www.nyswaterfronts.com/grantopps.asp

Hudson River Valley Greenway funding
www.hudsongreenway.state.ny.us/funding/funding.htm

Water Quality

Maintaining high water quality by reducing pollution and eliminating contamination has been one of the Estuary Program's biggest challenges and greatest accomplishments.



Ten years ago, the states of New York and New Jersey agreed to a \$12.4 million river-wide track-down of chemical contaminants, with a goal of reducing sources of pollution that make it difficult and costly to dredge port facilities in the harbor. Since many of these contaminants travel down river in waterborne sediment, it is necessary to learn more about where they come from, and how they move through the river and into the harbor. Phase 1 of this project, now nearing completion, has identified previously unknown sources of toxins, and will soon produce a scientific model that will help predict which sources of contaminants could be cleaned up with the greatest immediate impact.

Until 1965, the Hudson was an open sewer and the symbol of a polluted river. In summer, there were dead zones where state biologists found no living fish. That year, state voters passed the Pure Waters Bond Act, the first step in a stunning 40-year cleanup of the Hudson River. Today, recreational boating and fishing are enjoyed by thousands. Yet trouble spots still remain, especially in the urban areas of the Capital District and New

York City. Sewage treatment infrastructure is failing in some places and inadequate in others. Chemicals, such as PCBs, continue to be detected in Hudson River fish, though the levels are declining. Lead, mercury and DDT in localized areas also affect river life. The disposal of dredged material, needed to keep the New York-New Jersey Port viable, is costly and difficult due to the high level of contaminants in river sediment.



Above: At the urging of New York State, the federal Environmental Protection Agency signed an historic agreement with General Electric Corporation to clean up PCB hot spots in the upper Hudson. This will permanently remove dredged PCBs from the ecosystem of the Hudson, preventing their movement downstream into the Estuary, where they become part of the food chain of important migratory fishes.



DEC works with communities on the Hudson to provide disinfection of sewage waste and halt sewer overflows. More than \$50 million has been spent from New York Harbor to Troy making the river cleaner for fishing, swimming and boating.



Improvements in water quality have led to a resurgence of real estate values as more and more people seek to live, work and play on the river's shores.



Over the last 10 years, state programs have targeted pollution trouble spots. More than \$50 million from the Clean Air/Clean Water Bond Act has been spent on water quality improvements. The first-ever comprehensive track-down of chemical contaminants is under way. Working with the federal government, DEC supports the cleanup of the Hudson's PCB pollution hot spots.



Websites for more information:

PCB project
www.epa.gov/udson/

DEC, Division of Water
web page www.dec.state.ny.us/website/dow/

NY/NJ Harbor Estuary Program
www.hudsonriver.org/hep/about.htm

DOS Division of Coastal Resources
www.nyswaterfronts.com/waterfront_natural_water-quality.asp

Celebrate Progress and Partnerships

After more than a decade of hard work, New York State residents can celebrate a meaningful legacy for future generations.

So much has changed since 1996! At that time, the word *estuary* was unfamiliar to most valley residents. The program operated on a modest budget of \$100,000 per year.

Many plans for restoring the river had been developed, but not implemented. Agency programs were not coordinated, and no long-range goals had been adopted for the river.



The Hudson River Valley Ramble celebrates National Estuary Day through guided walks, hikes, paddles, pedals, river explorations, and cultural events from New York City to the Capital Region. It also honors the scenic, natural, and historic riches that earned the region its National Heritage Area designation. The Ramble is held during two consecutive weekends in September and draws thousands every year.



The Estuary Grant Program, started in 1999, provides assistance to municipalities and non-profits to implement the goals and objectives of the Estuary Action Agenda. More than \$8.3 million has been awarded to 267 grant recipients for projects throughout the region such as this new dock in Rensselaer.





The Estuary program undertakes many programs to track progress in meeting our goals. With help from the Estuary Program, the United States Geological Survey has established a monitoring station to track the movement of sediment in the river and some of its tributaries. The Hudson River National Estuarine Research Reserve monitors conditions at four stations on the Hudson and surrounding watersheds.



Grants to Beczak Center in Yonkers and partnerships with the county and Scenic Hudson allowed this education center to move to new facilities from a run-down structure next door. A new educational wetland, exhibits and aquariums serve the population of Westchester County.



Boscobel in Cold Spring, is part of the Hudson River Valley National Heritage Area (HRVNHA) designated by Congress in 1996 to recognize, preserve and interpret the historical, cultural and national resources of the Hudson River Valley. The area includes 250 communities in 10 counties bordering the Hudson River, from the confluence of the Mohawk and Hudson rivers to the northern border of New York City. The HRVNHA offers many events and programs that highlight the rich history, culture and landscapes of the valley.

Over the last 10 years, the Estuary Program has built a team for the Hudson River. We have developed a shared vision for its future among local, state and federal agencies, regional planners, private businesses, not-for-profits, and sportsmen. Many partners have adopted the goals of the Hudson River Estuary Action Agenda for 2005-2009 as their own, and we have planned, developed, and implemented hundreds of cooperative projects to achieve these goals. Sustained funding has made it possible to take full advantage of technological advances in mapping techniques and software.

Geographic information systems, radio tracking, side-scan sonar, internet capability and other state-of-the-art techniques have promoted scientific approaches that didn't exist a decade ago. As we move forward, measuring progress in meeting our goals and reporting that progress to the public is an important component of the Estuary Program. We are now developing a performance plan to ensure we will continue to achieve great things for the river and its watershed. The 2009 quadricentennial celebration will be an opportunity to celebrate more than ten years of success and our invaluable partnerships.

Websites for more information:

Hudson River Estuary Program Grants
www.dec.state.ny.us/website/nydec/hrep/grants

Hudson River National Estuarine Research Reserve
www.dec.state.ny.us/website/nydec/hrnerr.html

RiverScope:
<http://xtide.ldeo.columbia.edu/nydec/hudson>

Health of NY Harbor:
www.hudsonriver.org/docs/harborhealth.pdf

US Geological Survey:
www.usgs.gov

Beacon Institute for Rivers and Estuaries:
www.thebeaconinstitute.org

DOS Division of Coastal Resources
www.nyswaterfronts.com

Hudson-Fulton-Champlain Quadracentennial
www.ExploreNY400.com

Brian Houser



Carl Heilman II



Additional information and copies of this report are available from:

Hudson River Estuary Action Agenda
2005–2009



In Celebration of the
2009 Hudson-Pulchowc Champlain
Quadracentennial



The Hudson River Estuary Program

New York State Department of Environmental Conservation
George E. Pataki, Governor Donise M. Sheridan, Commissioner

New York State Department of Environmental Conservation
Hudson River Estuary Program
21 South Putt Corners Road
New Paltz, New York 12561

phone: (845) 256-3016

fax: (845) 255-3649

e-mail hrep@gw.dec.state.ny.us

www.dec.state.ny.us/website/hudson/hrep.html

All photographs are provided by DEC and our partners, except where noted.