CASE STUDY: ATHENS FOURTH STREET KAYAK & CANOE LAUNCH

OVERVIEW

An eroding and littered shoreline was cleaned up and repurposed to provide greater recreational access to the riverfront. Major accomplishments of the project included aesthetic enhancements, parking lot expansion, shoreline stabilization, and installation of a pier, accessible ramp, and floating launch.

LOCATION & ACCESS

This property is located in the Village of Athens, New York, on Fourth Street off Route 385/South Washington Street. The site is publicly accessible and is part of the Hudson River Greenway Water Trail system. The site is located on the west side of the Hudson at river mile 117.3.

PARTICIPANTS

Owner: Village of Athens
Manager: Christian Pfister, Village of Athens
Design: Kaaterskill Associates & Kleinke Associates
Contractor: K.C. Sunshine Enterprises, Inc.
Cost: $350,000
Grants Awarded: Governor's Office for Small Cities/Community Development Block Grant ($84,870.87) , Hudson River Estuary Grant ($82,500), Catskill Olana Mitigation Fund ($75,000) [i]
Project Timeframe: 2006-2010

HUDSON RIVER SUSTAINABLE SHORELINES

The Hudson River Sustainable Shorelines Project is a multi-year effort lead by the New York State Department of Environmental Conservation Hudson River National Estuarine Research Reserve, in cooperation with the Greenway Conservancy for the Hudson River Valley.

The Project is supported by NOAA through the National Estuarine Research Reserve System Science Collaborative.

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BACKGROUND AND STORY

In 2002, a combined Town and Village Local Waterfront Revitalization Program (LWRP) identified projects to improve the Hudson River waterfront in Athens. The informal, unimproved boat launch at Fourth Street was a priority project. Hudson River Greenway listed it as a Water Trail site the same year, adding to the impetus to improve the site. As early as 2003, adjacent landowners, including Electric Launch Company, Inc., collaborated in the efforts to revitalize the boat launch and surrounding area. In 2006, supported by a New York State Department of Environmental Conservation Hudson River Estuary Program Grant, a thorough concept for stabilizing the shoreline and improving boater access was developed and implemented.

Figure 1: Prior to the project, the unimproved boat launch was overgrown and difficult to access.

Figure 2: Shoreline was previously protected with rip-rap and degraded pilings on the southwest shore.

ASSESSMENT, PLANNING & DESIGN

The Village of Athens was interested in enhancing the area in order to provide better public access for both boaters at the kayak launch and for pedestrians. The village wanted to create a convenient sitting and viewing area for this scenic stretch of the river which would not only encourage paddlers to stop but would also attract land-based visitors and residents. Specific goals for the site included:

- Create an accessible ramp to a floating launch for canoes and kayaks;
- Construct a pier overlook to extend over the river bank;
- Reinforce rip-rap, preserve natural features, and increase ecological habitats;
- Increase parking to accommodate 21 spaces;
- Install a kayak rack for water based visitors to store their boats and paddles;
- Install a kiosk to orient visitors to the village and nearby businesses; and
- Improve aesthetics including utility relocation, bench installation, and landscaping.

The Village believed this would be a valuable investment because the project would protect the shore from erosion and promote recreational and tourist activities. By improving the ease of access for river-based paddlers, the village also hoped to attract more visitors to local downtown businesses. The project received funding from a variety of state, county, and private sources.

PLAN IMPLEMENTATION & DESIGN

Construction began in October 2008. First the site was cleared of debris, old fencing, and some vegetation which would have interfered with the new piling installations. Weather and high tides delayed the construction schedule, thus pushing back the expected completion date to 2010.

The Village was interested in increasing pedestrian lookout points without significantly altering the shoreline and maintaining the slopes and sinuous curves present along the entire Athens waterfront. The existing concave shape of the cove was maintained. When possible, hard shoreline was enhanced with ecological features. At the head of the cove, a rock wall supports and borders the edge of the pedestrian walkway. A cobbled beach in front of the wall allows for the accumulation of vegetative debris, called wrack. Wrack and larger woody debris provides food and habitat for invertebrates and their prey and should be allowed to accumulate.

Figure 3: Washed up debris and wrack accumulate at the west corners of the cove, with a majority collecting near the northwest corner. Shore zones with wrack have better ecological function.

Figure 4: Floating dock with shoreline rip rap and pilings visible in the background.

Timber pilings were placed in front of the degrading piles at the cove entrance. The wood pilings serve a dual purpose: they provide shelter and habitat for aquatic life, while also protecting the corners of the cove from ice and wave action. (See figure 4.) The existing rip rap on the sloping sides of the cove was reinforced with new rock. The rip-rap absorbs wave energy and thus protects the shore from erosion. Vegetation which has grown-in on the rip-rapped south slope provides additional protection and habitat. (See below in figures 6-8.) Vertical shoreline protection was kept to a minimum. An elevated wood pier supported by pilings was installed over the rip-rapped north edge, allowing pedestrian access while maintaining the sloped bank. Trees and shrubs adjacent to the pedestrian pier and elsewhere provide aesthetic enhancement. Collectively, these improvements protect the riverbank from erosion while enhancing its ecology.

Pedestrian walkways and entryways were constructed above the mean high tide and floodplain elevations. Concrete pavers set in sand joints for the walkways allow infiltration of stormwater. The project and a majority of the site goals were accomplished by the summer of 2010.

Figure 5: Ramp leading to floating dock allows access. The elevated walkway allows for a sloped shoreline and protective rip-rap to be maintained underneath.

Figure 6: Completed pedestrian walkway, pier, and floating dock in summer 2010.

Figure 7: Kayak and Canoe Launch entryway in 2010. Reinforced rip-rap protects the southwest shore and provides vegetation an opportunity to grow.

Figure 8: By summer 2013, native vegetation such as dogwood, chokeberry, bayberry, serviceberry, and birch are well-established around the cove, particularly along the southwest slope. Species diversity and limited maintenance can improve an area's ecological value.

LESSONS LEARNED

- Construction timelines can be delayed due to unforeseen weather and storms. This project was expected to be completed by July 2007. However, delays extended the project until 2010.
- It is possible to preserve the shoreline while also improving the ease of pedestrian and boater recreational use.

Photos, drawings, and information in this case study courtesy of the Village of Athens, Kaaterskill Associates, Kleinke Associates, and the Hudson River Estuary Program.

[i] Additional grants and funding received include NYS DOS Eco Docks Program ($22,500), Athens Generating Regional and Community Historic Preservation Benefit Fund ($20,000), Hudson River Greenway Water Trail Grant ($10,000), Private Donation/Peckham Corporation ($10,000), and in-kind services.