

Barberville Natural Resource Area (BNRA) Plan

Intro

This plan was developed by the Town of Poestenkill Conservation Advisory Committee in 2018 to provide a baseline description of the BNRA and establish guidelines for managing it, as well as offer a vision for the future of the area. The BNRA is a complement to the Barberville Natural Area Law, Local Law Number __, which takes precedence in case of any conflict between the two documents. The CAC and Town Board intend for the BNRA Plan to be consistent with Local Law Number __ and to add detail to its provisions for Town ownership and operation of the BNRA.

Description

Location and Current Access

The Barberville Natural Resource Area (BNRA) is in the Town of Poestenkill, Rensselaer County, along 0.57 miles of the Poesten Kill and includes 138 acres of undeveloped land. A major tributary of the Poesten Kill, draining Davitt Pond, transects the property. A major feature of the BNRA is the Barberville Falls of the Poesten Kill, shared with neighboring private property on the west side of the falls.

The BNRA is currently accessed by the public from a limited parking area located on the east side of Plank Road (County Route 40) approximately 0.27 miles north of its junction with Blue Factory Road. The existing parking lot can accommodate 4-6 vehicles. There are no bus routes that access the BNRA. BNRA users may access the property via three existing trails:

1. **The Creek Trail** is located just north of the parking area along Plank Road. It is a smooth, unmarked trail except for signs at the ends. It goes down the slope to the banks of the Poesten Kill and then goes a short distance both upstream and downstream. Round trip is about a mile.
2. **The Falls Trail** is 0.1 mile east of the intersection of Plank Road and Blue Factory Road on the opposite side of the road from Banner Hill Road. The trailhead is well marked, and the trail is relatively flat to the top of the falls. The trail descends steeply from there to the bottom of the falls. Round trip is about 0.5 mile.
3. **The Ridge Trail** begins 0.1 miles east of the Falls Trail, along the Blue Factory Road. The trail loop is generally well defined and marked with orange diamonds or orange ribbon. The trail comes to the Poesten Kill opposite the southern terminus of the Creek Trail and then climbs a ridge alongside of the stream. Round trip is about 1.3 miles.

Existing Conditions

This description of the existing conditions at the BNRA is meant to be a summary highlighting the most important elements.

Physical Resources

Geology. BNRA is located at the escarpment of the Rensselaer Plateau. The Rensselaer Plateau is a sub-section of the Taconic Range, a physiographic section of the larger New England province and part of the Appalachian Mountains. The Taconic orogeny was the first Paleozoic mountain building event in North America, and the first of a series of mountain building plate collisions that contributed to the formation of the Appalachian Mountains, North America's oldest mountain range.

What underlies much of the Rensselaer Plateau today are the older rocks. Four ice ages continued to erode the surface geology of the area. Today, much of the rock record is eroded and the ancient Greywacke bedrock is at or near the surface across the Plateau. Topping the bedrock is a mantle of glacial debris left by the melting of the Wisconsin ice sheet approximately 15,000 years ago. As the Wisconsin ice age waned in the area, it left behind extensive deposits of glacial till and outwash (sand and gravel). It is likely that the falls has migrated eastward over the past several thousand years.

The Barberville Falls of the Poesten Kill is about 90 feet high and 50-60 feet wide plunging over the escarpment of the Plateau. The main bedrock at the falls is Rensselaer greywacke. Above the falls are beds of Nassau slate and limestone.

Soils. The soils in the BNRA are mainly Buckland Very Stony Loam series derived from the parent glacial till.

Topography. Eons of erosion in the area that includes the BNRA have developed a significant cataract and gorge which extends for several hundred yards to the west.

Water Resources.

This watershed is a significant tributary to the Hudson River and belongs to the Upper Hudson major watershed.

Two streams, flowing through the BNRA are classified as "C" by the Department of Environmental Conservation (DEC). This classification designates streams that support fisheries and are considered suitable for non-contact activities such as fishing and boating.

The most prominent stream in the BNRA is the Poesten Kill, which drains approximately 35 square miles of the Rensselaer Plateau — an area from Dyken Pond on the north to Taborton on the south. The Poesten Kill not only provides important water resources but also a habitat for fish and other aquatic life. Below the falls, the stream flows through a gorge as deep as 100 feet and 500-1,000 feet wide.

The second-most prominent stream is the Davitt Pond stream which has its origin as the main outfall of Davitt Pond approximately 2/3 mile north of the property boundary.

Natural Resources

The following information will be updated later as a natural resource inventory is conducted by the Town Conservation Advisory Council (CAC) in partnership with the Hudson River Greenway.

Ecological Communities

A 1999 survey of the dominant hemlock-northern hardwood forest at the Nature Conservancy Barberville Falls Preserve, conducted by ecologist David Hunt, resulted in an A rating reflecting it is a large, healthy, and an excellent instance of such a community. Most instances have been compromised by invasive species, extensive logging or development. Small stands of hemlock-hardwood swamp and Maple-basswood rich mesic forest are also found in the BNRA.

Invasive Flora. No invasive plant communities of significance have previously been identified on the property. It is noted that there is currently an absence of Japanese Knotweed which has invaded much of the plateau.

Fauna. The birds, fish, mammals, amphibians and reptiles that are found in the surrounding areas are representative of those found at the BNRA. The diverse ecosystems of the preserve provide a variety of habitats that support a variety of fauna typical of this area of New York State.

Invasive Fauna. Two destructive, invasive forest pests are either in the BNRA or represent a serious threat: Hemlock Woolly Adelgid is present in the areas near Rensselaer County; Emerald Ash Borer has been located in Rensselaer County.

Rare, Threatened and Endangered Species. The Natural Resource Inventory will attempt to identify and Rare, Threatened or Endangered Species community in the BNRA.

Cultural Resources

The area as a whole is significant from a Native American, early-American trading, Revolutionary War, and Industrial Revolution standpoint.

Archeologists estimate that Native Americans, specifically Mohican and pre-Mohican people, lived in today's Rensselaer County for about 10,000 years, thriving on the resources of the region's rich forests and waterways for thousands of years. Some archeological sites indicate continuous human settlement for approx. 5,000 years, until the area was colonized by the Dutch

From the early 1600s, European settlers - Dutch, English, then French and Norwegian - entered into economic and military agreements with Mohican and other neighboring Native American tribes. Native Americans got swept up in the wars Europeans waged for access to the fur trade and land, and their numbers plummeted, further exacerbated by losses from intertribal conflicts. The few remaining Native Americans of today's Rensselaer County in New York came to be known as the 'friendly' Stockbridge Indians.

In the early 1900's the Water Molder Power Co. was organized to harness the water power of the falls through the production of electricity. A small power house with a sluiceway was constructed. The investors abandoned the project before completion and left town. Remnants of the project remain most notably remains of the sluiceway.

Scenic Resources

The main scenic resources of the BNRA are the views of the Poesten Kill, Barberville Falls, and Davitt Pond stream from the various hiking trails. The Area trails also provide access to beautiful views of the mature beech-maple and hemlock hardwood forests found on the property.

Recreational Resources/Activities

The BNRA has a complex of approx. 2.8 miles of designated trails for hiking. The most frequently used trail is the Falls Trail. There is no parking at the Falls Trail head currently and visitors must walk along Plank Road to reach the trail from the small parking area. Trails on neighboring private property protected by a conservation easement, which connect to trails at the large Camp Rotary Boy Scout Reservation on Davitt Pond, do not provide access to the BNRA property since they are privately held. Swimming, wading, boating, and kayaking in the Poesten Kill are not allowed activities in the BNRA.

Hunting, with a state hunting license and a permit, is allowed in the Preserve at certain times of the year with very specific conditions and corresponding to DEC hunting seasons.

Fishing, with a state fishing license, is permitted on all waters within the BNRA boundary. **Portions of the west shoreline to the middle of the Poesten Kill are private property and trespassing on private property is against BNRA rules and is punishable by prosecution as trespassing.**

Town Mission

The mission of the Town of Poestenkill is to provide safe and enjoyable recreational and interpretive opportunities for all visitors and to be responsible stewards of our valuable natural, historic and cultural resources. The management of the preserve shall be consistent with all local laws adopted by the Town for the purposed of managing the BNRA.

Consistency with the Barberville Natural Resource Area Law

This plan must be consistent with the Barberville Natural Resource Area Law as adopted by the Town Board on ###/###/##### as local law number # and any subsequent revision there to. Should an inconsistency arise between the BNR Local Law and this plan, the local law shall supersede this plan.

Barberville Natural Resource Area Vision Statements

Introduction. The Barberville Natural Resource Area is the first town-owned natural resource area in the Town and is unrivaled in its importance to the Town's natural and cultural history. The property was protected for more than 50 years as a preserve of The Nature Conservancy.

Vision. As the first natural resource area under ownership by the Town of Poestenkill, the vision of BNRA is to remain a natural resource area for the public's enjoyment; to provide recreational opportunities; engage visitors about the environmental, historic, and cultural resources of the Area; and to be a place of inspiration and wonder at nature's splendor. It is the Town's vision to be a steward of the BNRA to protect and to enhance its natural habitats and species, and to remain available to the public for future generations. Development of facilities to support the public's use will be kept at a minimum and to the greatest extent possible the BNRA will be maintained in its natural state.

The BNRA will accomplish this vision as follows:

- Maintain and enhance the BNRA's biodiversity and existing natural communities. Protect rare and endangered plants and animals and control invasive species in the Area.

- Provide adequate access and trails to prevent infringement of the property rights of adjoining neighbors.
- Maintain and enhance the trail system to provide a variety of opportunities while safeguarding the habitats through which the trails run.
- Expand educational programming in the BNRA on environmental and historic themes.

Action Items

This section provides a narrative description of the plan, outlining what will be done in the Area for natural and cultural resource protection, recreation resource development, and management and operations, pending available funding. Action items are presented which have been guided by the vision for BNRA..

Natural Resource Protection Strategies

To the extent feasible natural resource protection shall be a leading goal of the management strategies combined with an appropriate level of public access and recreational opportunity. Adaptive management strategies are needed to manage forest health, invasive species, and potential impacts to water quality or fish and wildlife. Management strategies must also consider potential future impacts to BNRA.

Action Item. Develop a Comprehensive Invasive Management Plan, Including Early Detection and Rapid Response, Follow Recommendations of CAC and consult with the NYS Invasive Species Task Force and Invasive Species Institute.

Recreation Development

Action Item: Clean up the old farm dump located along the Ridge Trail and properly dispose of the material removed from that site.

Action Item. Improve parking to direct visitor activities away from neighboring private property. The current parking area places visitors on Plank Road with minimal space to park. To access a falls view, visitors most walk some distance up Plank Road and access the Falls from the Falls Trail located on Blue Factory Road. Many visitors seek short cuts to the falls through private property.

Action Item: Construct a new gravel parking area for 6-10 cars at the property which borders Blue Factory Road. The Parking area will be less than 1 acre (app. 4500 sq. ft.) and be gated on Blue Factory Road. The gate will be locked and closed when entry to the park is not permitted.

Action Item: Develop a new entry trail from any new parking area to the falls. This entry would parallel the private property line along the existing Ridge Trail and develop a new trail that will bring visitors to the base of the falls.

Action Item : Consider stabilizing the Falls Trail from the top of the falls to the bottom of the gorge .

Action Item: Develop new and clear signage regarding allowed activities at the falls and those activities which are prohibited.

Operations, Infrastructure and Facilities Strategies

Action Item. Facilitate New Signage for BNRA

- The new signage internal to the BNRA will be based on universal language signs (symbols instead of words) to guide use.

Action Item: Hire a part time BNRA steward

- Hire a steward to do interpretive and instructive communication at the falls, request the assistance of local peace officers when needed; open and close park gates at appropriate times; install and remove illegal parking boots as needed.

Action Item: Coordinate Enforcement Actions

- The Town will, to the best of its ability coordinate and ask for law enforcement agencies such as Conservation Police Officers and Forest Rangers, County Sheriff's Office and State Police to help provide enforcement of state, county and local laws in order to provide sound management of the BNRA and to ensure that visitors behave in a peaceful and non-intrusive manner to not adversely impact neighbors or neighboring communities. The Town shall ensure that local justices are aware of the goals of the BNRA and that the stewardship of those lands held in the public trust are considered should any involved matter come before the local court.

Barberville Natural Resource Area

Implementation

The first step in implementation is the Town Board's enactment of the Barberville Natural Resource Area Law, Local Law #___ of 2018.

Priorities

The pace and sequencing of recommended actions will be determined by the availability of funding, which is a function of the size of the Preserve's annual budget and the need to balance critical problems with long term goals. This plan will be reviewed annually by the CAC to select projects that will be added to the plan for implementation and to assess the progress of plan implementation.

Immediate:

- Clean up of old farm dump
- Development of Blue Factory Road gravel parking area
- Hiring of a part time BNRA Interpreter

Priority 2:

- Development of new trail to falls
- Stabilizing the Falls Trail down to the bottom of the Gorge

Long Term:

- Provide annual review of preserve operations. Examine impacts to the fauna and flora. Take appropriate actions to minimize impacts.
- Work with appropriate agencies to ensure that the Hemlock Woolly Adelgid does not get a foothold in the property.
- Establish a dedicated source of funding for the care and management of the preserve.
- Involve volunteer groups in the stewardship of the BNRA

Budget

The Nature Conservancy has provided \$30,000 with the transfer of the property to the Town of Poestenkill. The following is a proposed schedule of how that money will be applied to the Barberville Natural Resource Area for the purposes outlined in the proceeding plan. A future source of funding should be dedicated to the stewardship of the falls when the initial stewardship money is expended.

Barberville Natural Area Budget

	Year 1	Year 2	Year 3	
Environmental Cleanup	0	2500	100	100
Park Improvements	0	2500	2500	
Staffing 4 days a week to start / 5 months	0	6899.2	6961.92	7400.96
	11899.2	9561.92	7500.96	28962.08

The \$2,500 for cleanup assumes that we will need highway equipment to cut a larger trail to the old dump and we can get a dumpster relatively close by.

Wages are based on 28 hours per week at minimum wage plus fringe which must be paid.

