



# **Mill Creek Recreation Area Riverside Station Road Trail System 2025 Recreation Assessment Report & Map by: Wilderness Property Management**

**May 7, 2025, 10:00 am draft**

## **Recreation Assessment**

This assessment evaluated approximately 177 acres of Town of Johnsbury property for the development of human powered recreation and specifically high-quality mountain biking (MTB) experience, hiking and nature experience while maintaining the environmental and historical integrity of the site. Unique aspects of this property are its location adjacent to Mill Creek and the Hudson River, relatively gentle topography, and natural forest environment. The information acquired through the site assessment allows informed discussion on the development of a sustainable and modern high quality trail system on the designated site.

The assessment creates a starting place for an environmentally sound and recreationally valid trail system and gathers the information necessary to establish a working relationship between collaborating parties and funding sources. The assessment also provides the information necessary to move forward with the development of recreational infrastructure in a timely and fiscally prudent manner (phased development) while maintaining open communications. A continuous tuning process will naturally take place as more information is gathered and issues are identified throughout the project.



Mill Creek immediately above the confluence with the Hudson River.

## Community Interests

It is important to note that we don't start the planning process by laying out trails, rather we start by integrating the client's recreation interests with the natural environment and historical uses of the site. The intent is to create a working relationship between the site-specific environment and the forms of recreation that are desired for this specific property.

There is interest in offering hiking, mountain biking, snowshoeing and nature experiences that are less arduous than is normally found in the mountainous northwestern region of Warren County. This type of trail experience is suitable for a large cross section of outdoor enthusiasts. There is also interest in developing a single track mountain bike (mtb) trail system on the property that offers a less arduous yet diverse high-quality riding experience unique to this area. The type of trail described above is currently very limited in the northern Warren County area.

Interest in trail based recreation experiences such as nature observation, hiking, snowshoeing and mtb riding by residents and visitors has always drawn people to this area. Trails with 5% avg grades that work well for families, outdoor enthusiasts of average fitness and mixed groups are rare in the Adirondacks. The creation of high quality hiking and mtb trails that have gentle grades that are assessable to a large cross section of users was a design objective of the Mill Creek Rec Area trail system.

## Recreation Economy

Trails that are suitable for the majority of hikers, nature observers and mountain bikers give the greatest opportunity to capture the interests of large numbers of outdoor enthusiasts. Providing high quality trails with reasonable grades and awesome natural experiences is integral to successful trail systems that draw users and repetitive visits.

This need would be best fulfilled with intermediate and advanced level machine built natural surface single track trail. Offering a variety of forms of hiking and riding experiences and difficulty levels capture the interest of a diverse group and is attractive to the traveling recreationist. Traveling enthusiasts generally possesses upper intermediate, advanced and expert level skills. The Trail Implementation map shows trail corridors appropriate for hiking, all mtn. and cross-country trail (xc) in novice, intermediate and advanced difficulty.

Snowshoeing will work well on all the trail corridors outlined in this assessment. All trails should require the use of snowshoes, skis, or fat bikes when the trails are covered by more than 6 inches of snow.

WPM has walked and assessed the property with the above concepts in mind. Trails were developed on the site that could easily provide novice and intermediate/advanced level riding experiences. MTB trail focus on the intermediate rider group, which makes up of the largest percentage of riders, provides the largest recreational opportunity. Advanced and Expert riders can take advantage of B lines to have the challenging experience they seek. Developing the novice riding area adjacent to the parking area is a unique and perfect situation that will also serve as a good warm up loop.

WPM has developed a Trail Implementation map showing the areas capable of meeting the above interests and maximizing hiking, mtb riding, and nature experiences, while making the interests interact smoothly with the environment, and provide high level recreational experiences. Individual trail design, needs to be done onsite, to appropriately correspond with administrative requirements and the site-specific micro-environment of terrain, soils, vegetation, site distances, etc. A Design-Build approach should be taken for trail construction to allow each individual trail to meet a specific hiking or riding experience (flow, cross country, free ride, etc.) and difficulty rating.



Hudson River looking downstream at Gage Mtn.

## **Recommended Recreation Development**

The Mill Creek Rec. Area Trail Implementation Map illustrates the recommendations for trail corridors and recreational use. The conceptual intent is to keep the highest impact concentrated on the most suitable ground, provide the least arduous level of recreation possible and choose areas that allow the most reasonable build and cost.

The best trail development areas were determined by: evaluating soils, slope grade and aspect, density and type of vegetative cover, surface rock and bedrock exposure, surface roots due to subsurface water flow, bedrock or tree species, surface water flows, distance from sensitive areas, level of disturbance in construction, control/critical point restrictions, logical access routes, quality of riding experience, Management Guidance, destinations, etc. The single track mtb trail corridors listed below have been designated for their ability to balance the many factors associated with the property and sustainable mtb trail development standards.

Trail construction on the Mill Creek Recreation Area will generally be difficult. The preponderance of large rock and bedrock outcrops and limited areas with mineral soil create higher than normal construction costs. The one exception to this situation is the Shared Use/Social track and half trail that won't require full construction.

The shared use trails that end at the north and south Hudson River Overlooks would have trail tread excavation stop 100 feet prior to the railroad tracks as they will be on existing roadbeds for this eastern most section of trail. The trails from the railroad tracks to the actual riverside overlook locations need only be brushed out as the preponderance of rock on the ground surface negates the need for further trail tread improvement.

A portion of the property has been excluded from trail development as it is excellent wildlife winter habitat. The area identified on the attached map has a dense mature softwood canopy that provides thermal cover in very cold weather and has an adjacent steep southern aspect hardwood slope that provides excellent solar warming area during the cold seasons.

## *Mill Creek Recreation Area - Riverside Station Road Trail System*

Three trail building phases have been identified.

### Hudson River Loop

1. Shared Use Single Track – 5,092 ft., 1.5 kilometers approx.\*: MTB/hiking trail design, Full Machine built single track trail construction, 5% avg. grade, with approx. 3 ft. trail tread, and 4-6 ft. cleared width. This trail will be the northern most trail and go from the parking lot/trailhead to the Northern Overlook of the Hudson River. The Northern Overlook vista point will require approx. 230 ft. of walking on the railroad tracks. The trail is shown as a yellow/gold dashed line on map.
2. Shared Use & Social Track & ½ - 6,600 ft., 2 kilometers approx.: 95% of trail is based on existing sound & sustainable roadways. Easy, low cost construction requires mtb/hiking/side by side strolling trail design, 5 % avg grade, cleared width minimum of 6 ft., drainage clearing, 3 short sections of trail construction, 25-30 ft. of boardwalk, and leaf blowing trail tread location. This trail will be the southern most trail and go from the parking lot/trailhead to the Southern Overlook of the Hudson River. The Southern Overlook vista point will require approx. 542 ft. of walking on the railroad tracks. The trail is shown as a yellow/gold solid line on map.

### MTB Trail

3. MTB Intermediate/Advanced Single Track - 6,564 ft., 2 kilometers approx.\*: All mountain /Cross Country type design. Machine & Hand built single track trail construction with approx. 1 ½- 2 ft. trail tread, 4-6 ft. cleared width, A line main trail and B line feature riding opportunities. This trail starts at the parking lot/trailhead and the and ends at the SW corner of the Shared Use/ Social Trail. There is also a connection to the Shared Use/Social Trail near the Black Hole. The trail is shown as blue dashed lines on map.
4. MTB Novice Single Track - 2,590 ft., .8 kilometers approx.\*: Cross country type design. Machine built single track trail construction with approx. 2-2 1/2 ft. trail tread, 4-6 ft. cleared width, A line main trail and B line feature riding opportunities. This trail is a loop starting at the parking lot/trailhead. The trail is shown as red dashed lines on map.

\*track distances plus 5% for the twists and turns of single track.

### Parking Lot/Trailhead

One parking lot is proposed to support the trail system and control access to the area. The area designated on the attached map was a homestead site and a log landing in the past. The parking area would require an entrance driveway approximately 50 feet long. The topography is flat and the vegetative cover is 6"dbh or less white pine so building a parking area will be relatively easy. It is reasonable to believe that parking lot construction is within the scope of the local municipalities ability. I suggest an 8-10 car lot that has parking depth for vehicles with hitch mounted bike racks.



Hudson River looking upstream at Picnic Mtn.

## Trail Standards

Trail development discussed in this document is focused on sustainable, modern recreationally valid design and construction of human powered recreational trails. Natural surface single track trail treads of 1 ½ to 3 feet in width and cleared trail corridors approximately 4-6 feet wide are the standard. Sustainably built trails are required to withstand long term use and provide durability with minimal routine maintenance requirements. Trails of this type require intensive hand or machine construction. Machine construction allows for bigger drainages, more soil applied to the trail tread and maximum trail construction production to produce a superior sustainable trail tread. See representative pics on pages 9-10.

The ground disturbance associated with machine built single track trails in the Adirondack Mountains is generally 2 to 4 feet in width. Rubber tracked Mini Excavators appropriate for trail construction in this environment are less than 3 ft. 4 inches in width and weigh approximately 2 tons. Hand construction has an equivalent or greater level of disturbance due to standing beside the trail when excavating portions of the trail. Trail cutting and clearing is limited to a 6-foot-wide corridor with trees 3 inches in d.b.h. and larger left in the corridor if they are more than 2 feet from the centerline of the trail tread unless they present a safety hazard. Banks and berms for insloped turns are limited to less than 2 feet in height and overburden is placed discreetly along the trail. Individual trails are separated far enough from each other to prevent cross over and trail density experience impact. Risk management is applied through appropriate trail design measures.

Trail tread that is located under a hemlock and pine canopy that has less than a 3% grade should not be excavated as the hemlock root matt is a durable surface that makes a good trail tread.

## Maintenance of Recreational Infrastructure

The nature of the forest environment in the areas suggested for trail development will require a reasonable level of maintenance. The forest maturity, low density of understory consisting of beech, birch, white pine and hemlock regeneration should minimize blowdown but require routine trimming of branches. The majority of maintenance will require low skill and be completed with hand tools. Little chainsaw maintenance will be needed. Trail corridor locations were purposely kept out of wet areas with sub-surface seeps and excessively rocky areas with deep organic duff between the rocks.

Hiking and biking trails require an annual walk through in the springtime and after major storms to remove blow down, clear drainages and lightly leaf blow in the early spring (dries the trail tread out so it can become stable). Trimming branches and sprouts back is best done after leaf out.

Access to a local mtb volunteer pool for trail-based maintenance needs is generally a huge asset in taking care of routine maintenance. Trail user group volunteers generally take personal responsibility for keeping the trails in good riding condition. The Upper Hudson Trails Alliance (UHTA) is a local not for profit trail organization that works on northern Warren County trail systems. They have been instrumental in the development of mtb trails in the towns of Johnsburg, Chester and Horicon. They have stated an interest in providing support for the Mill Creek Trail System.



Rock exclusion area ground surface.

## Cost Estimates

Trail construction costs for non-publicly funded projects generally vary from \$7.50 to 10 ft. for completed trail depending on the size of trail tread, site difficulties and trail features included. Publicly funded public works projects utilizing prevailing wage and benefit packages generally run 33-35% more than private wage projects.

### *Mill Creek Recreation Area – Riverside Station Road Trail System*

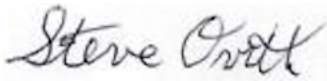
Trail construction of the Mill Creek Rec Area single track trails would be on the high side of trail construction costs due to the difficult site. Under 2025 prevailing wage requirements:

1. the #1 shared use single track trail with a 3 foot trail tread would be approximately \$13-15 ft.
2. the #2 shared use/social 1 ½ track would be approximately \$7-9 ft.
3. the #3 single track intermediate/advanced mtb trail 1.5-2 ft. trail tread, approx. \$12-14 ft.
4. the #4 single track novice mtb trail w/ 2-2.5 ft. trail tread, approx. \$12-14 ft.

## Summary

The lands in this project would provide an excellent trail experiences for a large cross section of outdoor enthusiasts.

The recreation development discussed in this assessment would provide modern recreationally valid experiences, which are the drivers in a viable recreation-based economy and a community lifestyle improvement opportunity. The development of human powered recreation opportunities closely tied to the community will improve the local community through healthy recreation and an improved economy.



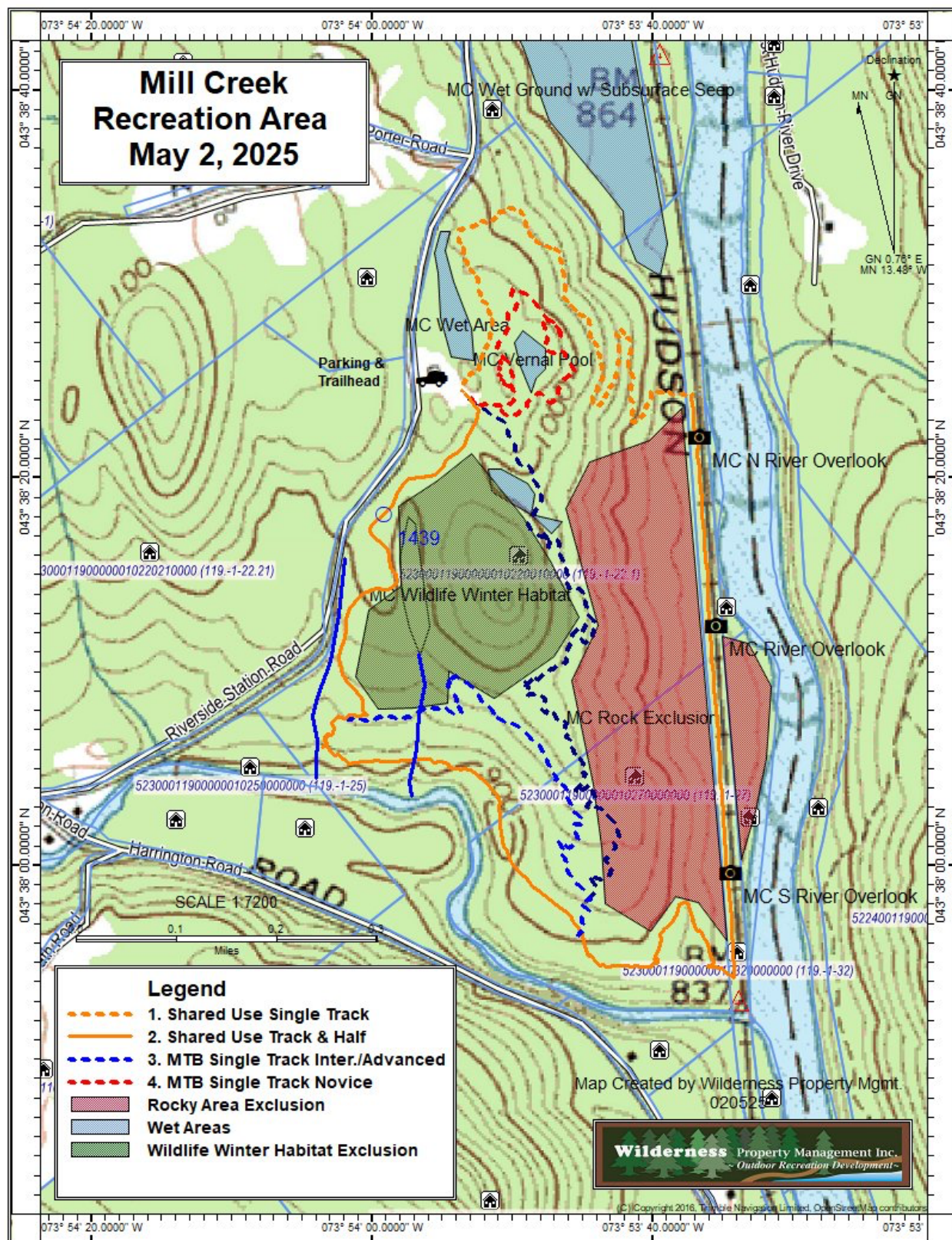
May 30, 2025

Steve Ovitt – Chief Operations Officer  
Wilderness Property Management Inc.



Homestead foundation by Riverside Station Rd parking lot and trailhead.

# Trail Implementation Map



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## **Photos of: WPM Trails - Excavator Built Trails in the Adirondacks**

XC MTB trail: 4-6 ft. cut & 2 ft. Trail tread, slight in-slope on turns

All photos by WPM Trails. Permission required to distribute outside of this document.



Flow Trail - 4-7 ft. cut, 2-4 ft. trail tread, optimized in-sloped turns



Ski Bowl Park – Town of Johnsbury, Machine & Hand built trail  
Stone Tread on an All-Mtn. MTB Trail