



NYSDOT Forest Preserve Projects & Activities 2022

Table of Contents

Executive Summary	3
Adirondack	7
Parkwide	8
R1	18
R2	21
R7	39
Catskill	43
R1	44
R8	47
R9	49
Comprehensive Reporting/ Workplan Spreadsheet	50

Compiled by the Landscape Architecture Bureau, Office of Environment;
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With thanks to our Main Office and Regional partners from Regions 1, 2, 7, 8 and 9.

Executive Summary

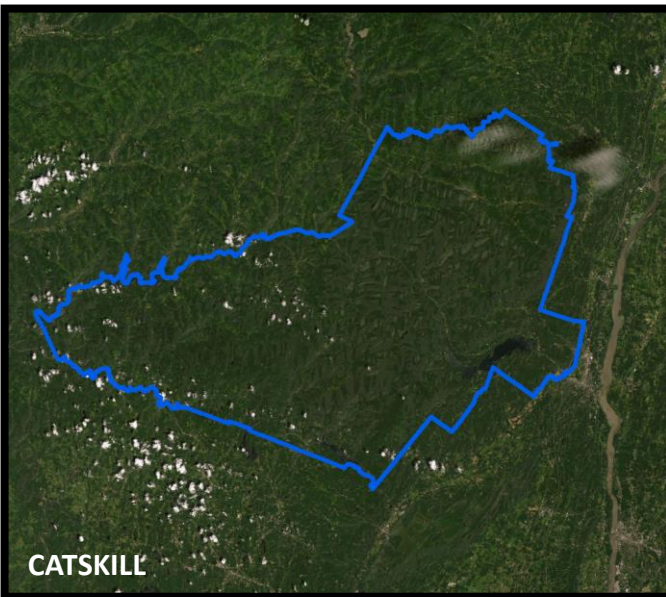
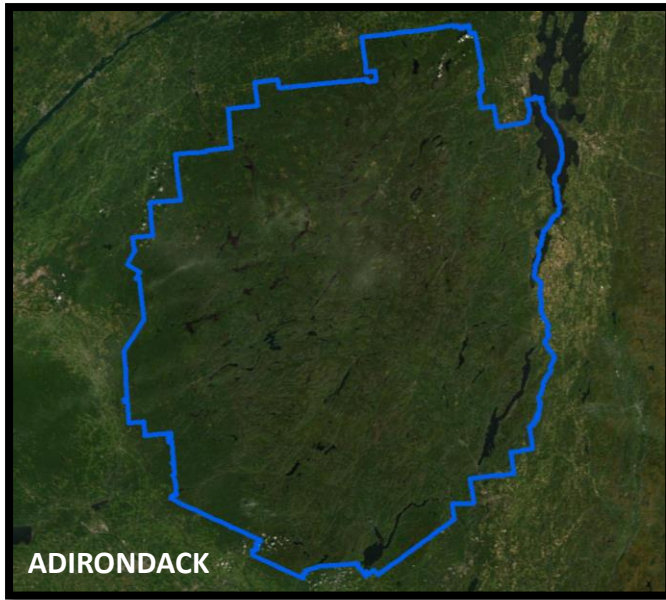


This 2022 report covers NYSDOT projects and activities in both the Adirondack and Catskill Parks. These parks constitute the NYS Forest Preserve, nearly 3 million acres of privately and publicly held lands, characterized by exceptional scenic, ecological and recreational qualities. The Forest Preserve is protected as “forever wild” by [Article XIV of the New York State Constitution](#) and includes pristine backcountry wilderness, campgrounds, and a network of travel corridors that provide access to, and in many cases, first or only impressions of the Parks.

Reporting on NYSDOT implementation of the Final Generic Environmental Impact Statement/ Master Travel Corridor Unit Management Plan for State Travel Corridors in the Adirondack Park (Master TCUMP) is a requirement. The document before you satisfies that requirement, while extending reporting to projects and activities within the Catskill Park, since the Department is committed to collaborative inter-agency coordination with stakeholders in all parts of the Forest Preserve.

This is a living document that captures accomplishments and ongoing activities from NYSDOT regions and functional areas while serving as a work plan for the future. The format is flexible and consists of a comprehensive reporting spreadsheet plus portfolio pages that highlight specific projects and activities.

There is a section for each Park, with content further organized by NYSDOT Region. The Adirondack section includes cross-references to relevant sections of the Master TCUMP. Both reflect a commitment to preserving ‘park-like character’, ecological integrity and safety for all modes of travel.



Topics include:

ADIRONDACK

- Capital projects including bridge, culvert, guiderail and wetland mitigation.
- Branding and wayfinding: including the iconic wooden entry signs and installation of new interpretive signage.
- Wildlife passage improvements, coordination & planning – both Aquatic (culverts and bridges) and terrestrial.
- Invasive species interagency coordination, community outreach and awareness, screening, monitoring, mapping and hands-on management.
 - Spotted lanternfly awareness, outreach, coordination and research
 - Continued boat wash partnership, in particular at Adirondack Welcome Center
 - Invasive species screening, treatment, equipment washing etc.
- Stream management for resiliency and floodplain connectivity improvement.
- Integrated vegetation management include altered mowing regimes.
- Continued development of ADK-specific guidance on seeding and soil management.
- Pilot programs for alternatives to imported topsoil and collection and sowing of local seeds of native grasses and forbs.
- Research projects for invasives including biological controls, soils, alternative mowing and eDNA.
- Inventory and asset management.
- Operations staff training in mowing, ditching and invasive species awareness.
- Continued participation in salt reduction task force
- Continued use of JIF and permit procedures for related activities such as tree removal.
- Joint development by DOT and APA of revised draft guidelines for wetland banking.

CATSKILL

- Capital projects that include bridges, guiderail, aquatic habitat and stream restoration, signage, native vegetation and addressing non-compliant curb ramps.
- Vegetation management including tree removals for safe sightlines, mowing, and pollinator conservation measures (gardens & plantings).
- Scenic byway coordination - working with Regions and Byways to finalize Corridor Management Plan updates.

Staffing Changes

Catskills

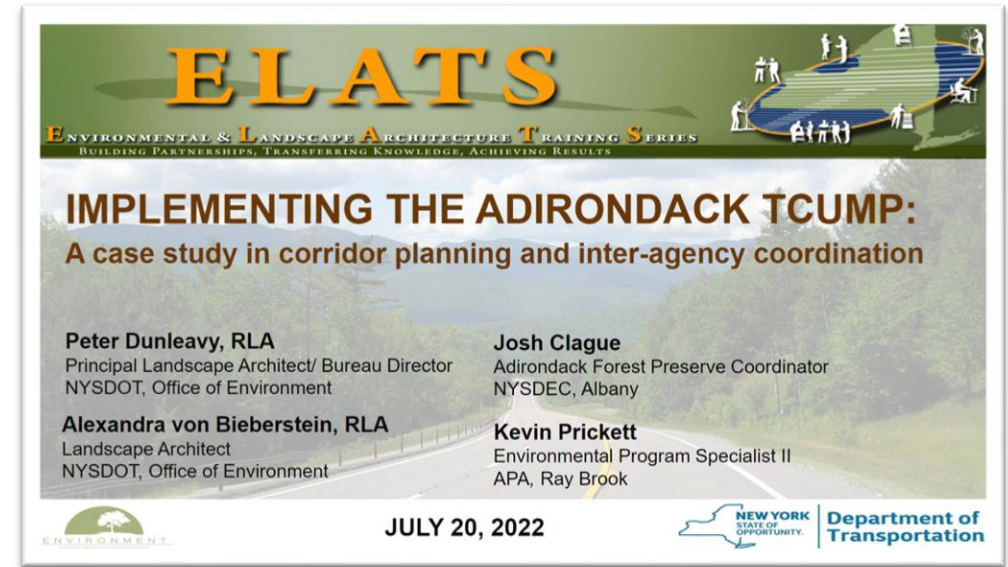
- Region 1 (Albany)
 - Hired three Environmental Specialist 1s, including a Cultural Resource Coordinator.
- Region 8 (Poughkeepsie):
 - Kyle Buser appointed to Regional Landscape Architect, replacing Jason Wolfanger
 - Stephanie Lewison serving as Acting Environmental Unit Supervisor, replacing Kathleen Wolfanger.
- Region 9 (Binghamton)
 - Hired an Environmental Specialist 1.

Adirondacks:

- Region 1 (Albany):
 - See above
- Region 7 (Watertown):
 - Alexandra Beck serving as Acting Regional Landscape Architect, replacing Lynn Godek.
 - Jim Ayers appointed to Construction Environmental Coordinator, serving as acting Maintenance Environmental Coordinator.

Training

- *Implementing the Adirondack TCUMP: A case study in corridor planning and inter-agency coordination*
 - Presented at NYSDOT’s Environmental and Landscape Architecture Peter Dunleavy and Alexandra von Bieberstein (Landscape Architecture Bureau), Kevin Prickett (Adirondack Park Agency), Josh Clague (NYSDEC’s Adirondack Park Preserve Coordinator) Link to [Recorded Webinar](#) (available to NYSDOT staff).
- *‘Ed Talks’ Training Series: Adirondack & Catskill Park– 2021”*
 - A pun on *Ted Talks*- Ed Frantz, Adirondack and Forest Preserve Manager (now retired), and other NYSDOT experts shared the virtual Ed Talk stage for a six-part training series on matters related to travel corridors planning and management in the Adirondack and Catskill Parks. In 2022 these training series, a table of contents and timestamps were uploaded to our website for staff reference.
- *Herbicide Trainings:*
 - Spring refresher courses offered for herbicide applicators and technicians.
- *Spring Safety Meetings/Tailgate Trainings:*
 - Offered by Regions: Topics included Ditching & Mowing BMPs, Invasive species inc. Spotted Lanternfly, spill response, and hazard trees.



introDOT Office of Environment

Adirondack & Catskill Park 'Ed-Talks'

Ed Talk Session #	Ed Talk Topics	Timestamp	PDF Page #	PDF Link	Recording Link
Session 1	Master TCUMP Overview & Background	0:00	2:58	ESE	Recording
	Ed Thoughts	46:50	55		
	Annual Reporting	52:30	56:52		
	Ed Thoughts	1:07:29	72		
	Individual TCUMPs: Water & Wetlands & Hydrology	1:08:15	79:43		
	Ed Thoughts	1:24:31	85:101		
Session 2	Wetland Mitigation Guidelines	1:36:59	102		
	Final Remarks	1:58:00	118		
	Overview	0:00	2:8	ESE	Recording
	Greenbook	2:31	4:16		
	Ed Thoughts	16:01	17		
	Operational Work Planning	25:22	16:27		
Session 2	ADK Viewer	35:18	41:41		
	Workbooks	41:22	52:44		

EDTALKS

View of Adirondack peaks - early fall snow.



Adirondack

Parkwide	8
R1	18
R2	21
R7	39

Travel Corridor Unit Management Planning



Final Generic Environmental Impact Statement/

Master Travel Corridor Unit Management Plan

for State Highway Travel Corridors in the Adirondack Park
—Volume I



Lead Agencies:
New York State Department of Transportation
50 West 16th Street

Update:

- Official issuance of the Final Generic Environmental Impact Statement/ Master Travel Corridor Unit Management Plan for State Highway Travel Corridors in the Adirondack Park – Volume I, (Master TCUMP) through an [Environmental Bulletin](#) on 6/30/2022.
- The Master TCUMP was incorporated into NYSDOT's [Transportation Environmental Manual](#) (TEM) as [Section 6.3](#) and is publicly available on the TEM webpage.

ADK Soil Management Guidance

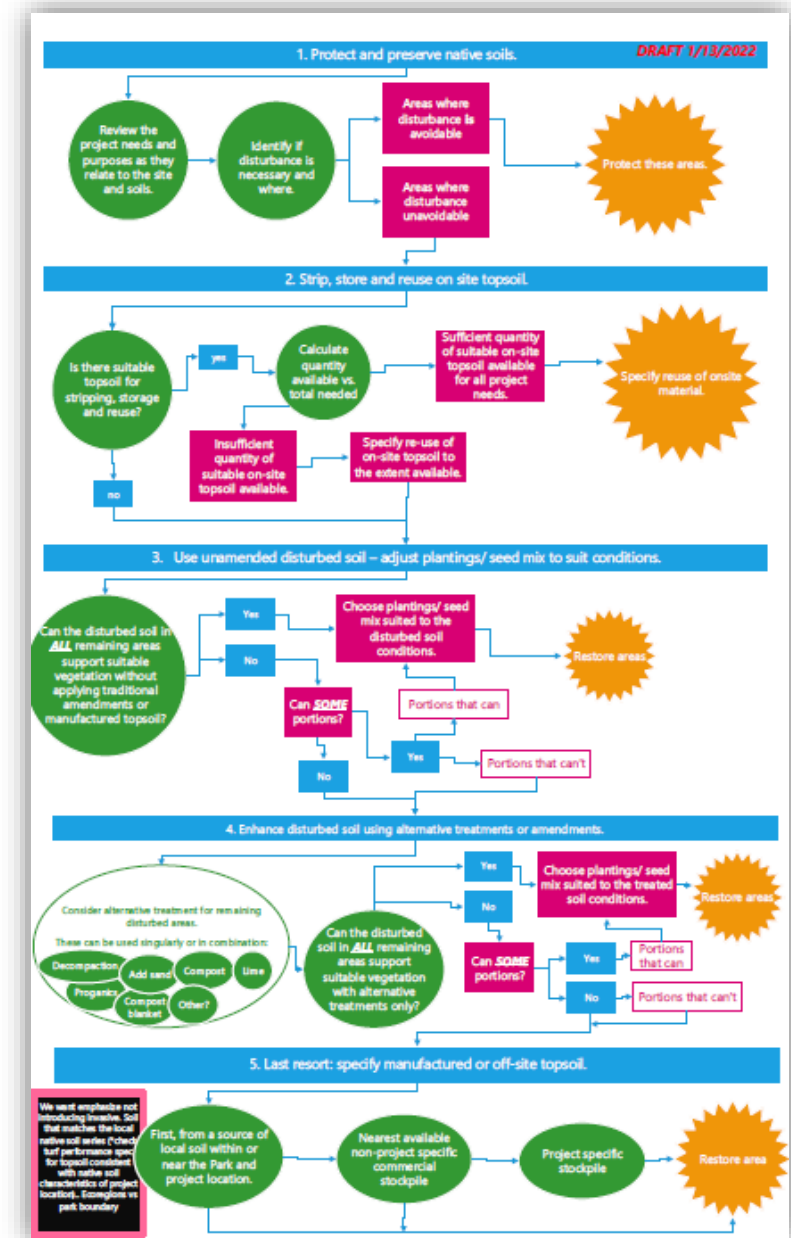
Update:

The Adirondack Soil Management Technical Working Group (TWG) continued developing soil management guidance for the Adirondack Park. This guidance will outline a hierarchy of soil use choices including protecting and preserving native soils, minimizing disturbance, reuse of existing topsoil, and restoration with alternative amendments before the use of manufactured or off-site topsoil. The guidance also directs the user to consider surrounding context.

The guidance will be issued via an Engineering Bulletin (EB) as an appendix to the 'Guidelines for the Adirondack Park' (Greenbook). Throughout 2022, the TWG met and coordinated for feedback with NYSDOT Adirondack Regions, APIPP, DEC and APA.

Looking Forward:

- TWG will continue meeting to finalize guidance
- EB Clearance Review
- Issuance



ADK Seeding and Turf Establishment Guidance

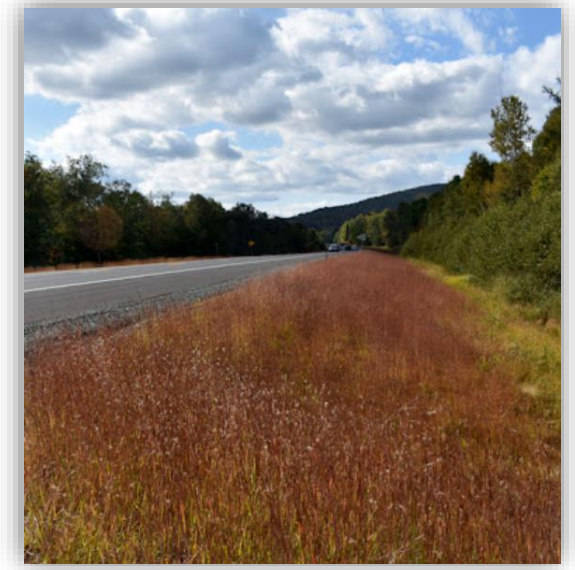
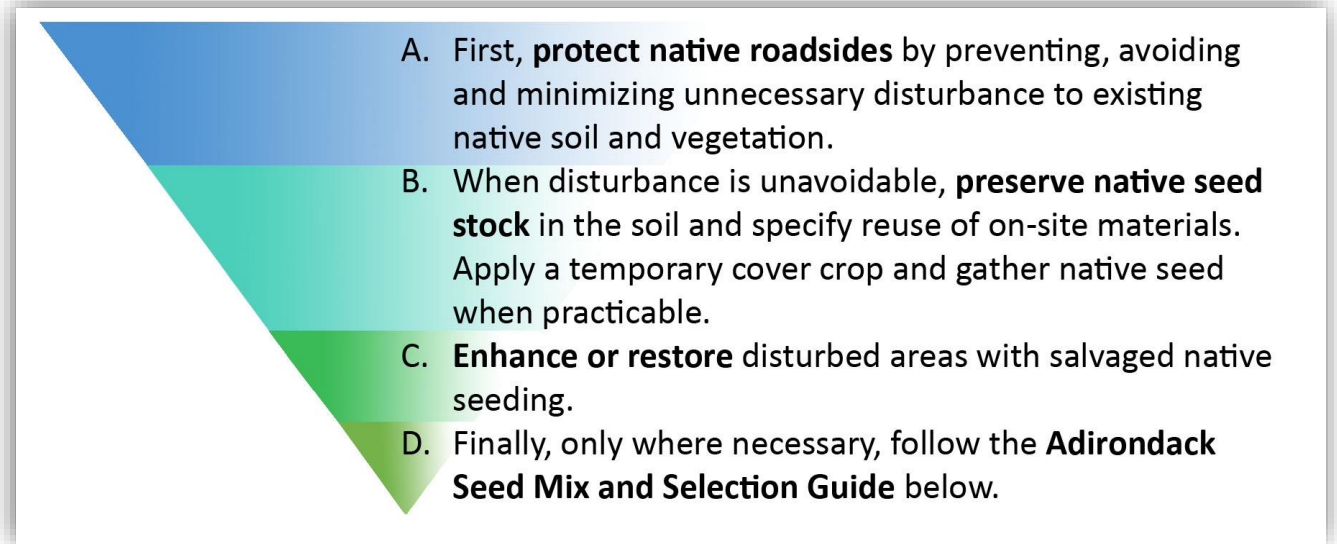
2022:

The Adirondack Seeding and Turf Establishment Technical Working Group (TWG) continued finalizing the Adirondack Seeding and Turf Establishment guidance. This guidance will outline a hierarchy of seed and establishment choices including protecting and preserving native soil and vegetation, minimizing disturbance, preservation of native seed stock, and enhancement and restoration alternatives.

Final revisions are nearly complete. The guidance will be issued via an Engineering Bulletin (EB) as an appendix to the 'Guidelines for the Adirondack Park' (Greenbook).

Looking Forward:

- Finalization of the draft document
- EB Clearance Review
- Issuance



Pollinator Initiative/ CCAA* & Vegetation Management Guidelines



*Candidate Conservation Agreement with Assurances (CCAA)

- The Pollinator Technical Working Group (TWG), comprised of OOE/ MO Operations/ Regional staff, revised the application for the Department to join this nationwide agreement, which is managed for the USFWS by the University of Illinois-Chicago (UIC).
- The agreement allows ROW agencies to enroll all portions of their ROW that could potentially support monarch habitat and commit to implementing conservation measures on a percentage of the ROW in return for allowing maintenance or construction to proceed on the remainder of enrolled ROW without having to follow endangered species procedures for individual activities such as mowing.
- The 11 recommended conservation measures include: mowing only outside of monarch season, selective brush removal to maintain as wildflower/grasses, and mowing every 2+ years.

<https://www.fws.gov/savethemonarch/CCAA.htm>

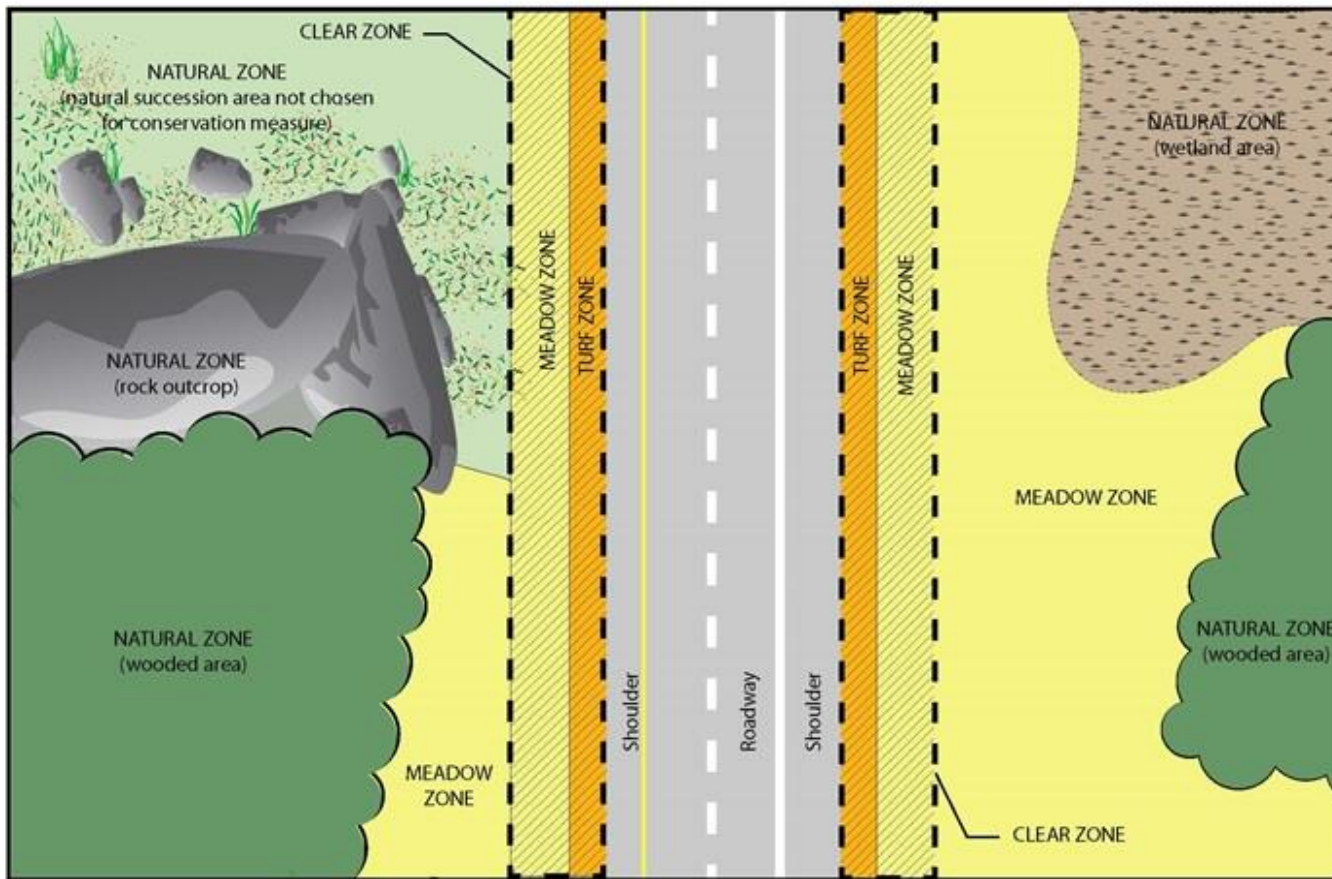
Vegetation Management Guidelines

- Final revisions to formally incorporate Integrated Vegetation Management (IVM) principles including control methods other than mowing.
- Include CCAA vegetation management practices (conservation measures).
- Mowing Guidelines (TMI-14-01) revision.

Seed Mix as Specified

- This special specification, in use since 2015, allows landscape architects to include custom seed mixes favoring native species by a special note instead of the current standard seed mixes. This broadens options for native area restoration and pollinator habitat.
- In 2022: LAB drafted an Environmental Bulletin (EB) to make this a standard specification.
- LAB is also creating a master list of all seed species used by Regions in the special spec to date.
- Looking Forward: EB will be circulated for clearance review and issuance.

Vegetation Management Zones

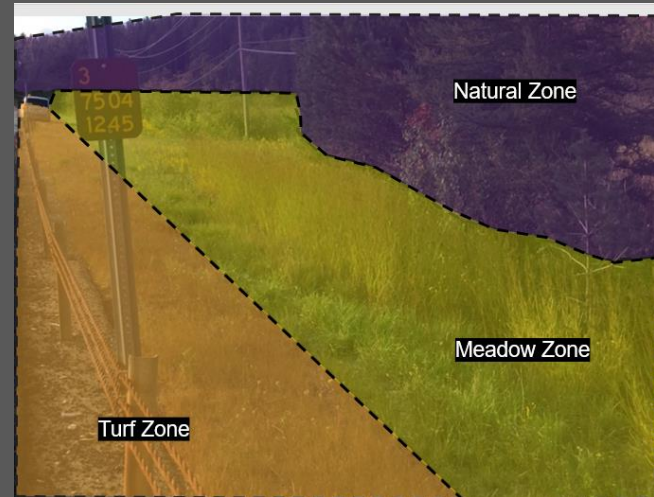
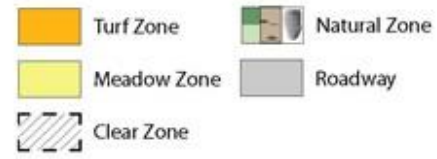


ROW Zones:

Turf Zone: High Maintenance (includes approx. 15' single pass mowing strip)
Meadow Zone: includes the remainder of the area maintained in a generally cleared condition beyond the Turf Zone. Within the clear zone the Meadow Zone may be managed by either traditional mowing or a conservation measure method. Outside the clear zone the Meadow Zone should be managed by a conservation measure method.
Natural Zone: Area not managed other than for safety hazards or for other specific reasons
Clear Zone: "that portion of the roadside border width, starting at the edge or the through traveled way that NYSDOT commits to maintaining in a cleared condition for safe use by errant vehicles" as defined in Chapter 10 (10.2.1) of The Highway Design Manual.

Conservation measure methods may include:

- Mowing within designated time frames
- Rotational mowing at intervals of 2+ years
- Selective brush/ woody growth removal (mechanical and/or chemical)
- Other specified management practices



Example of Vegetation Management Zones Overlaid on an example State Highway.

NYSDOT 2022 Highlights

Treatment /
Monitoring

- **Route 9L – Queensbury- Phragmites (R1)** – no activity in 2022, will monitor periodically, assumed eradicated.
- **Remsen-Lake Placid Travel Corridor (R2)** –invasives detected in 2021, treated in 2022, 2023 monitoring planned.
- **Route 8 (R2)** – Proganics Pilot Project, monitoring & manual removal of invasives continued in 2022, 2023 monitoring planned.
- **Limited Mowing (R2)**- mowed entire ROW in Hamilton Co. after 2+ yrs of limited mowing.
- **West Canada Creek Site (R2)**- monitored multiple times, pulled weeds in early November, 2023 monitoring planned.
- **Route 28 north of Route 12/28 (R2)** - north of Park – no retreatment of phrag req., 2023 monitoring + treatment as necessary.
- Reporting and coordination with APIPP for invasive treatment – phragmites and purple loosestrife – various locations.

Facilities

Treated and monitored facilities with highway maintenance responsibility in the Park:

- **Alder Creek (R2, State Dam Rd)** – monitored, no phrag. regrowth since 2019, salt barn treated 2021, monitored in 2022.
- **Riceville (R2)**- facility screening detected phrag. within fence and ditchline- treatment planned for 2023.
- **Indian Lake, Wells & Piseco Shops (R2)**- screened, no priority terrestrial species or Spotted Lanternfly detected 2022.
- **Long Lake Sub-Res (R2)**- Purple loostrife identified, handpulled 2022, 2023 will monitor and treat.

Training/
Outreach

- **Boat wash partnership** - with Adirondack Watershed Institute at Paul Smith's College – ongoing.
- **Tailgate Trainings (R2)** – topics included ditching & mowing BMPs, Invasive species etc. – spring 2022.
- **Herbicide Training- (R1, R2)**- Training for herbicide applications & techs.; refresher course – spring 2022.
- **Master TCUMP Trainings** – Overview for APIPP (3/22) & Implementation for NYSDOT Staff w/ DEC & APA (7/22).

Capital
Projects

- **Use of pay items:** Equipment washing & proper disposal of contaminated soils.
- Screening, Tracking and Monitoring of proposed and completed projects for invasives.

Statewide
Initiatives

- **Vegetation Management Guidelines & Monarch CCAA** – Ongoing monitoring of pilot areas.
- **Guidance for Seeding & Soil Management in the Adirondack Park** – near completion.
- **Spotted Lanternfly (SLF)** – Ongoing multi-agency coordination effort – including traps, reporting, specifications & control. Distribution of flyers, ID cards, and Trainings for Bridge Inspectors & Association of General Contractors. Facilities screened.
- **FGEIS/Master Travel Corridor Unit Management Plan (TCUMP)** – issued and posted [HERE](#):
 - 2020-21 Annual Report- [HERE](#) soon.



Byways Interpretive Sign Update:

- C031805; SB10.07.321
- Installation of a total of 6 new or replacement interpretive panels installed along the Central Adirondack Scenic Byway at existing pull-off locations at Lake Durant, Lake Abanakee and North River.
- Highlight regional history and ecology



Lake Abanakee



Lake Durant

Central Adirondack Trail Scenic Byway

Adirondack Fire Towers Protected the Forest Preserve

Built for a purpose
When the Forest Preserve was created in 1885 there were immediate concerns over how to protect its water resources – in fact, this was much the reason for creating the Adirondack Park in 1892. In the early 1900s, forest fires ravaged large areas of the Adirondacks. These fires quickly altered the forested landscape around you and were a direct threat to the quality of drinking water for populations downstream. As a main reason a network of fire towers was established across New York State.

Keeping an Eye on the Landscape
The purpose of fire towers was to provide observers high over the treetops and keep a watchful eye on the forest below. Observers would alert fire agencies at the first sign of smoke.

Present Day Teaching about History
The need for fire towers to assist with early fire detection is gone today. They serve as outdoor museums and bring visitors into an important part of Adirondack history.

Steel towers
Early towers were made of wood. The Adirondack State Park Service replaced the wooden structures starting in 1916. Many of the steel towers have been around for over 100 years.

Popular today
Fire towers are not only popular today, especially in the Adirondack Mountains. Clubs, groups, and individuals often visit to see these structures.

Extremely popular today
Fire towers are not only popular today, especially in the Adirondack Mountains. Clubs, groups, and individuals often visit to see these structures.

A BRIEF HISTORY OF ADIRONDACK FIRE TOWERS

1885 - 1885	1892	1900	1910	1916	1970-75	1990
Creation of the Forest Preserve The Forest Preserve was created in the name of the Adirondack Park in 1892. The Forest Preserve was established in 1885. The Forest Preserve was established in 1885. The Forest Preserve was established in 1885.	Establishment of the Adirondack Park The Adirondack Park was established in 1892. The Adirondack Park was established in 1892. The Adirondack Park was established in 1892.	1900 The Adirondack Park was established in 1892. The Adirondack Park was established in 1892. The Adirondack Park was established in 1892.	1910 The Adirondack Park was established in 1892. The Adirondack Park was established in 1892. The Adirondack Park was established in 1892.	1916 The Adirondack Park was established in 1892. The Adirondack Park was established in 1892. The Adirondack Park was established in 1892.	1970-75 The Adirondack Park was established in 1892. The Adirondack Park was established in 1892. The Adirondack Park was established in 1892.	1990 The Adirondack Park was established in 1892. The Adirondack Park was established in 1892. The Adirondack Park was established in 1892.

Protection of Natural Resources
While fire towers are nearly invisible in nature when compared to the natural Adirondack landscape, in the day they served as a tool to protect natural resources from under the forest canopy. Without them, water quality would have been affected. Without them, water quality would have been affected. Without them, water quality would have been affected.



Lake Abanakee

Wetland Mitigation Guidelines

Considering benefits of:

- A watershed-based approach
- Creation of mitigation credit ledger
- Pre-impact mitigation credit
- New ways to earn mitigation credit
- Alignment with Master TCUMP

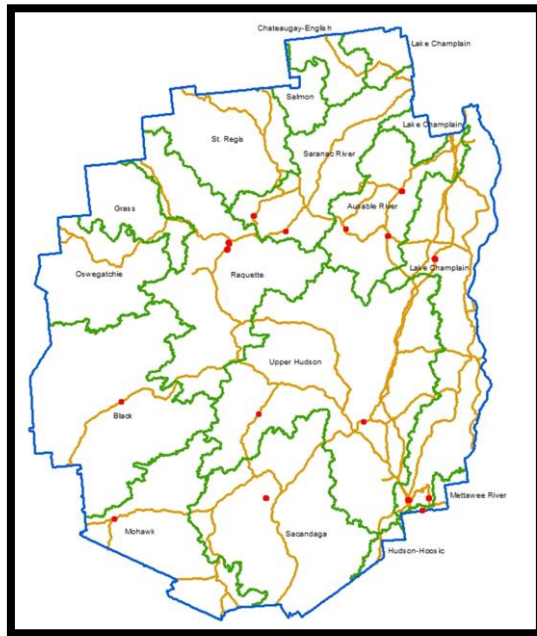
2022:

- Continued coordination between APA & NYSDOT regarding updates to 1995 guidelines.
- 2022 coordination included the production of a draft mitigation prospectus, discussions of wetland functions and value-based mitigation credit generation process.

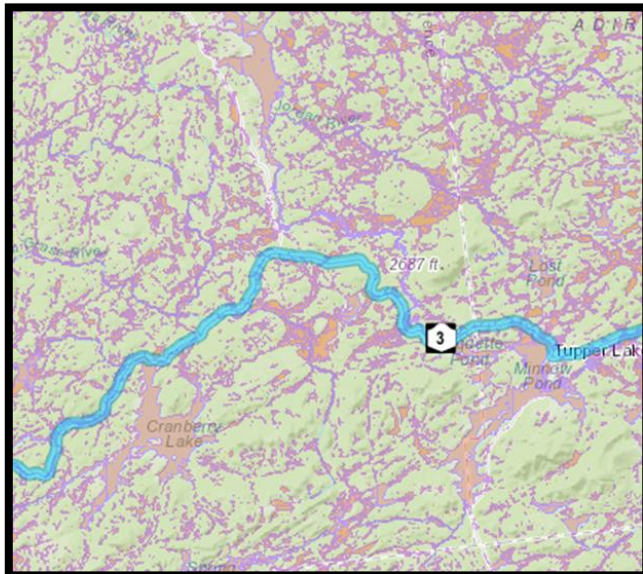
Looking Forward:

Continuing coordination:

- Federal consistency
- Potential sites inventory
- Watershed-based climate resilience benefits
- NYSDOT Regional collaboration
- Development of a draft workbook and field studies



Map of Adirondack Park Watersheds. NYSDOT is leading revision to the Wetland Mitigation Guidelines in the Adirondacks Park.



NYSDOT has been responsible for 17 mitigation sites, on 12,423 acres since 1992.

Entering Adirondack Park Signs



The iconic signs feature a large sign face in the shape of the Adirondack Park boundary/ Blue Line. Most include an upright portion consisting of three posts of varying heights and several cross pieces. A variety of paint and stain in brown and yellows have been used.

Inventory

NYSDOT staff from the three Adirondack Regions and Main Office are collaborating to complete a Park-wide inventory of the iconic 'Entering Adirondack Park' signs.

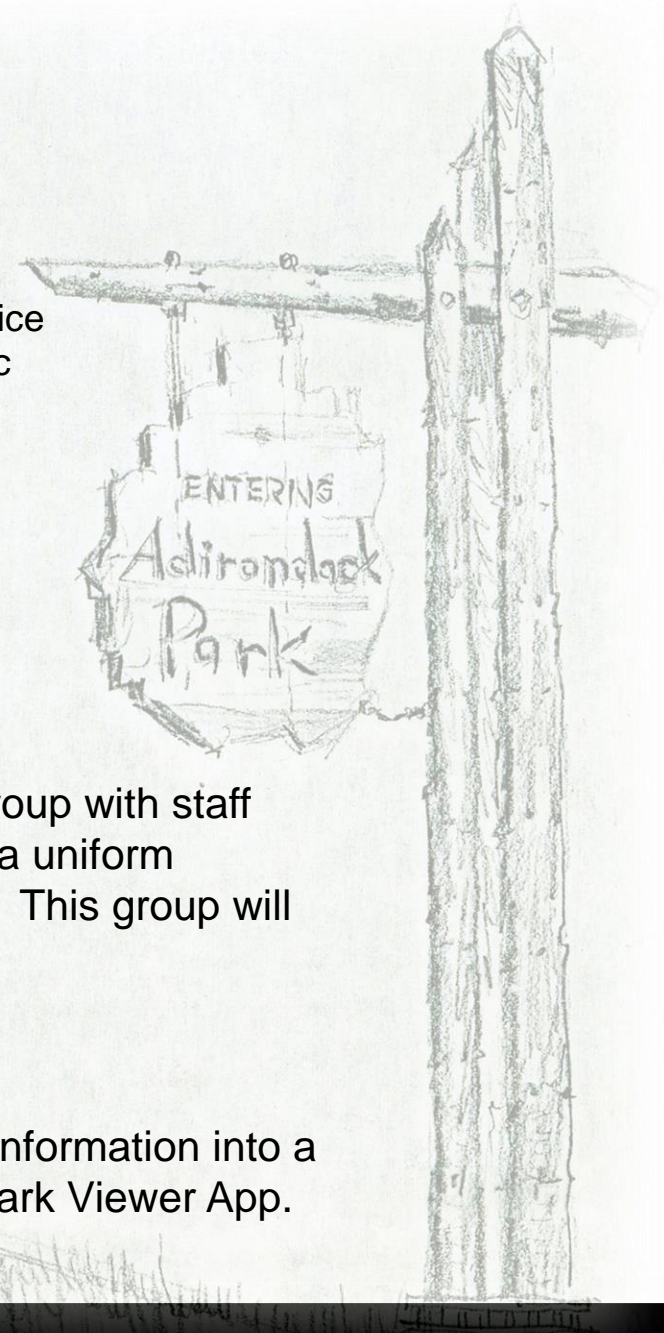
- Update of 2015 inventory completed by DEC
- Will provide baseline information and help prioritize replacement and new signs.

Agency Coordination & Uniform Approach

NYSDOT is leading a multi-agency technical working group with staff from DEC and APA. The group focused on developing a uniform template and approach for replacement and new signs. This group will also be looking at the Catskill entry signs.

Looking Forward

NYSDOT will complete the inventory and organize the information into a database and upload information into the Adirondack Park Viewer App. We will continue collaboration with our sister agencies





1



2



3

Entering Adirondack Park Signs - Replacements



4



5



6

- Staff at DEC sign shops fabricated several new hand crafted signs in 2022.
- Several different species of wood were used in an effort to test durability, performance and longevity.

- 1) Oak sign stained with an oil base stain, lettering done with oil based enamel.
- 2) Two newly fabricated cedar signs.
- 3) Temporary replacement sign installed in August at Brainardsville, Route 3. Plan to replace with new rustic lettering style sign in 2023.
- 4) Pine sign stained with a water base stain.
- 5) Two oak signs, unfinished, after gluing and doweling.
- 6) Hopkinton, Route 72 temporary replacement sign. Replaced with new rustic lettering style sign in late fall 2022.

Cascade Lakes Roadside Barrier Replacement & Highway Improvements

Overview

- Route 73 in Keene and North Elba, Essex County, completed in 2022.
- Replaced 3.30 miles of deteriorated roadside barriers along three road segments.
- Project replaced aged concrete jersey barriers and rustic rail with galvanized four-rail bridge railing.
- Provided a minimum four-foot shoulder by widening Route 73 along the Cascade Lakes with the use of moment slabs and installation of Geocell-faced Geosynthetic Reinforced Support System (GRSS).
- Improved aesthetics of the corridor by removing the concrete jersey barriers; seeding the GRSS retaining wall systems with native species, and installation of cobble-lined drainage and SWPP structures with a park-like appearance.



Cascade Lakes Roadside Barrier Replacement and Highway Improvements *(continued)*



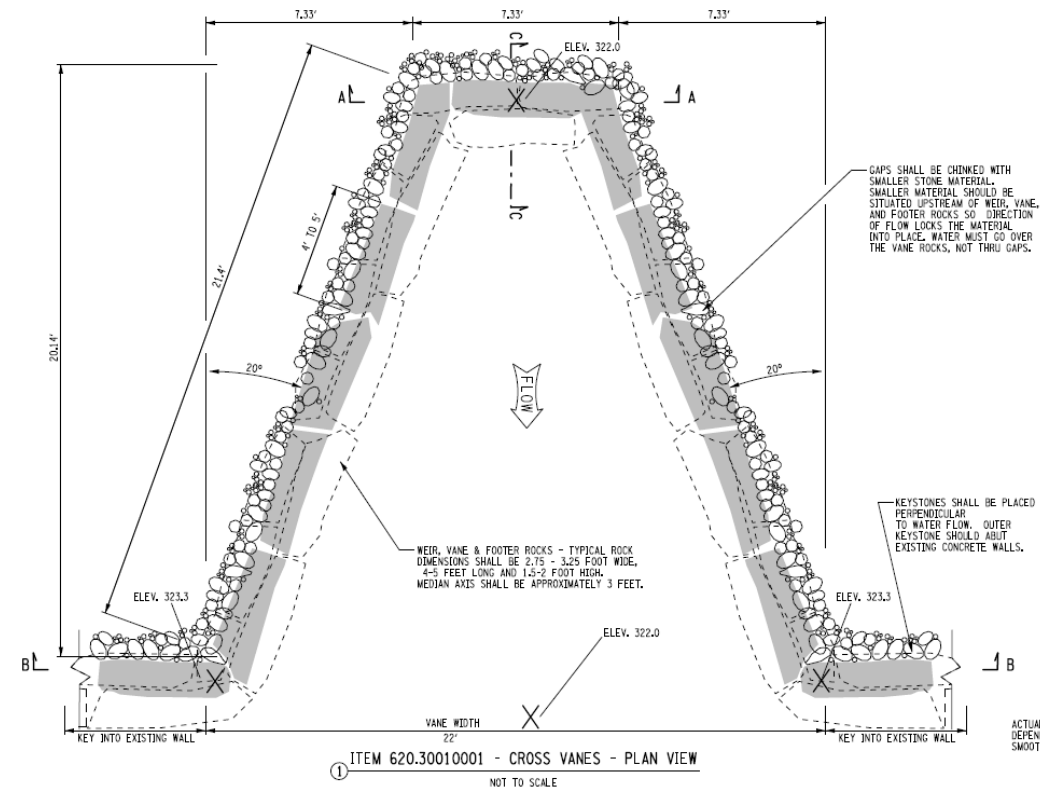
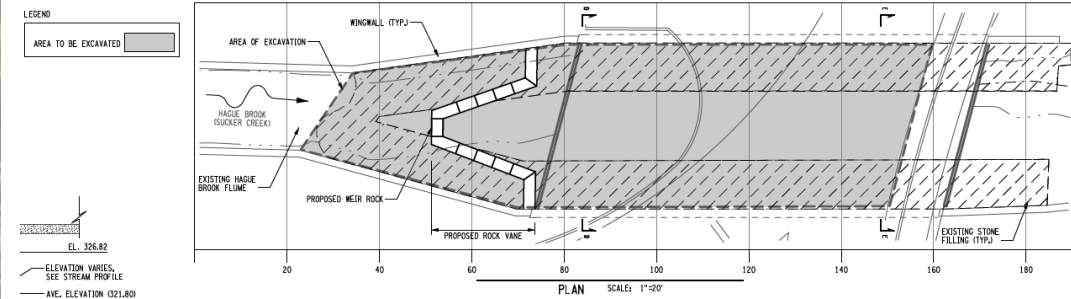
Hague Brook, BIN 1006820

Overview:

- The bridge over Hague Brook, Town of Hauge, BIN 1006820 has been identified as high-flood risk and NYSDOT is exploring options for treatment.
- Region 1 (R1) Landscape/Environmental unit coordinated with Main Office (MO), Office of Environment (OOE) to perform an environmental analysis to develop recommendations to minimize impacts to stream habitat and wetlands for a proposed dredging project.
- Undertook a fluvial geomorphic assessment (FGA) and report.
- Hague Brook is among the most productive rainbow smelt spawning tributaries of Lake George. Region 1 Environmental is coordinating with Regional and MO Engineers to confirm a path forward. Exploring alternatives.

Looking Forward:

- Ongoing coordination between R1 Landscape/Environmental, MO OOE and MO and R1 Engineers to evaluate permissible options.



Rock vane section and detail (draft).

Raquette Lake Bridge Replacement & Shared-Use Path

Overview:

Design work and coordination for this bridge replacement and shared-use trail in partnership with DEC is ongoing and includes:

- Wetland Mitigation at Lake Durant (page 23) and a geo-cell faced geosynthetic reinforced support system (GRSS wall) to limit wetland impacts.
- Aesthetic rail
- Interpretive signage
- Native vegetation including two native seed mixes
- Recreational enhancements



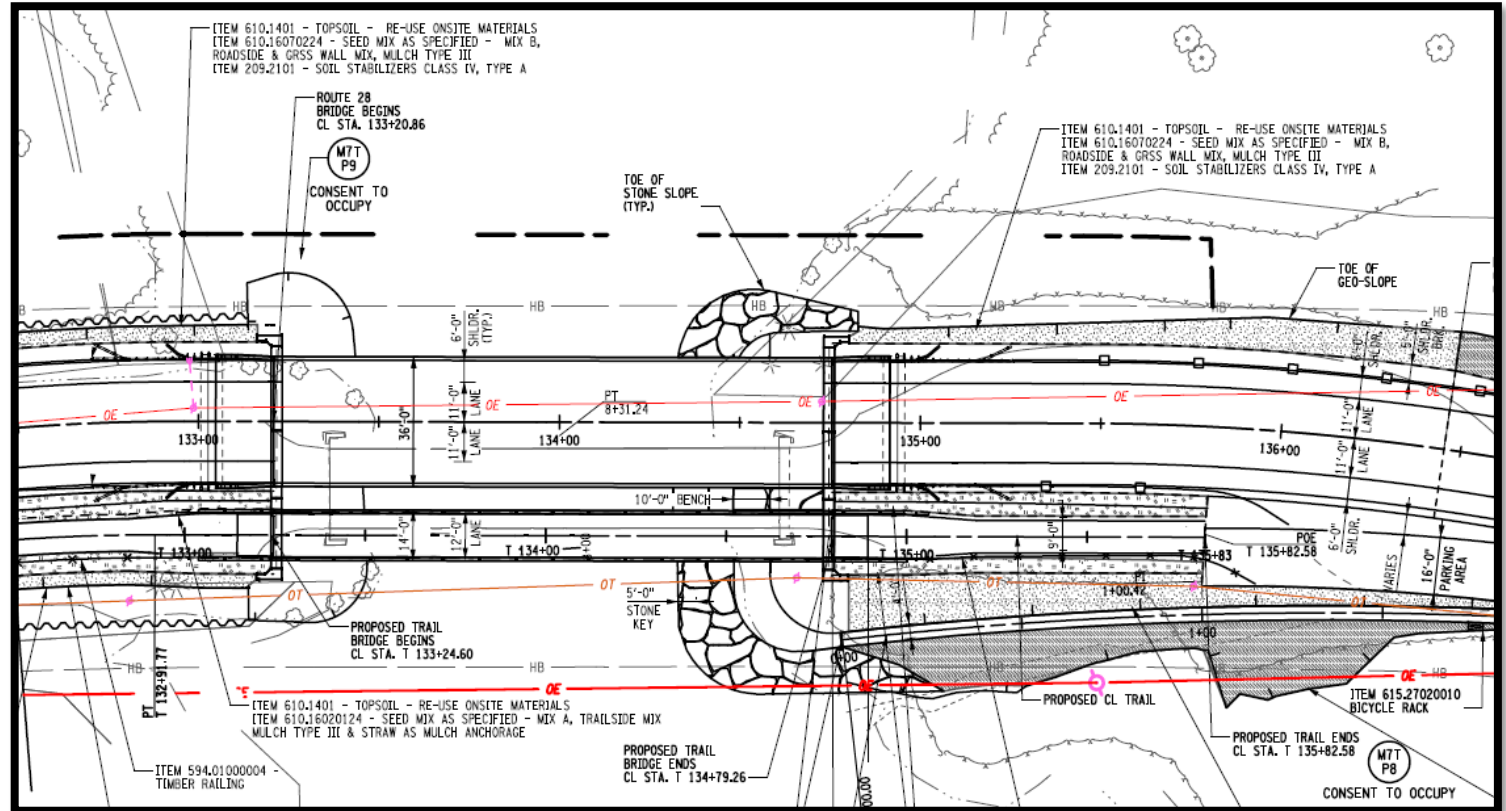
Raquette Lake (continued)

ITEM 610.16020124 (SY) - SEED MIX AS SPECIFIED MIX A, TRAILSIDE MIX		
COMMON NAME	BOTANICAL NAME	% OF MIX
LITTLE BLUESTEM	<i>Schizachyrium scoparium</i>	49.5-59.5
PURPLE LOVEGRASS	<i>Eragrostis spectabilis</i>	0.5
BITTER PANICGRASS	<i>Panicum amarum</i>	10-12.5
RIVERBANK WILD RYE	<i>Elymus riparius</i>	10-12.5
SWITCHGRASS	<i>Panicum virgatum</i>	10-12.5
POVERTY OATGRASS	<i>Danthonia spicata</i>	10-12.5
* RECOMMENDED SEEDING RATE IS 20 LBS. PER ACRE		
TOTAL		100

*COVER CROP SHALL BE PLANTED IN ADDITION TO SPECIFIED SEED MIX. SEE COVER CROP TABLE, THIS PAGE.

ITEM 610.16070224 (SY) - SEED MIX AS SPECIFIED MIX B, ROADSIDE & GRSS WALL MIX		
COMMON NAME	BOTANICAL NAME	% OF MIX
LITTLE BLUESTEM	<i>Schizachyrium scoparium</i>	20
PURPLE LOVEGRASS	<i>Eragrostis spectabilis</i>	0.5
DEER TONGUE	<i>Dichanthelium clandestinum</i>	0.5
CANADA WILD RYE	<i>Elymus canadensis</i>	20
EASTERN BOTTLEBRUSH	<i>Elymus hystrix</i>	6
RIVERBANK WILD RYE	<i>Elymus riparius</i>	12
HAIRY WILD RYE	<i>Elymus villosus</i>	10
VIRGINIA WILD RYE	<i>Elymus virginicus</i>	22
FOWL BLUEGRASS	<i>Poa palustris</i>	0.75
CANADA RUSH	<i>Juncus canadensis</i>	0.25
POVERTY OATGRASS	<i>Danthonia spicata</i>	3
BIG BLUESTEM	<i>Andropogon gerardii</i>	5
* RECOMMENDED SEEDING RATE IS 20 LBS. PER ACRE		
TOTAL		100

* COVER CROP SHALL BE PLANTED IN ADDITION TO SPECIFIED SEED MIX. SEE COVER CROP TABLE, THIS PAGE.



Materials:

Barrier 1
Wood posts & rails
galv. steel hardware

Lake Durant Wetland Mitigation Site for Raquette Lake Capital Project, D264867



Existing

- Wetland mitigation site at Lake Durant, included in the Raquette Lake Capital Project (D264867) (Page 21)
- Wetland mitigation design by Main Office Design Bureau in coordination with Region 2.
- Plans were finalized for the Raquette Lake project, including this mitigation site, in late 2022
- Letting is scheduled for March 2023 construction expected to start in May 2023.

Lake Durant *(continued)*

Includes:

- Wetland and roadside seed mixes, wetland plantings
- Turtle fencing/ barrier including a nesting bench
- Incorporation of downed trees as habitat enhancement.
- Close proximity to Lake Durant parking area/ boat wash with new interpretive signs (page 14).

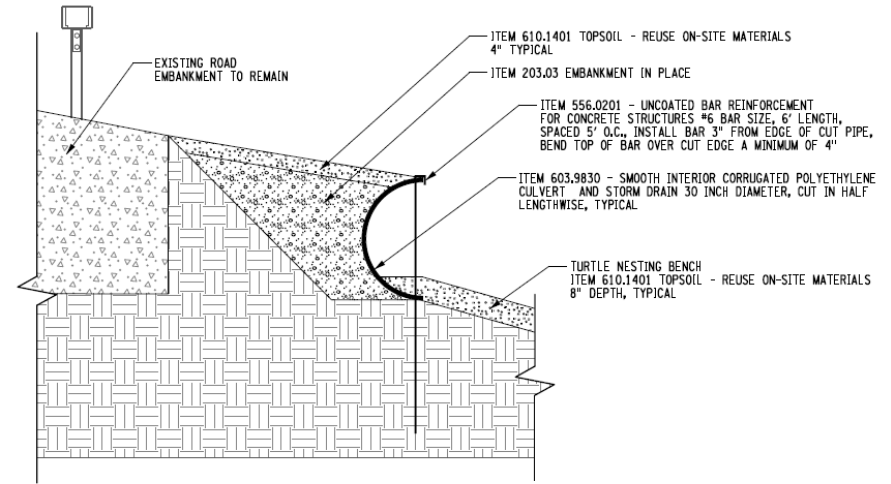
WETLAND MITIGATION PLANTING KEY			
SYMBOL	LATIN NAME	COMMON NAME	QTY
ITEM 611.0452 PLANTING DECIDUOUS SHRUBS - 3 FOOT HEIGHT/SPREAD CONTAINER OR BOX GROWN			
ST	SPIRAEA TOMENTOSA	STEEPLEBUSH	95
ITEM 611.0462 PLANTING DECIDUOUS SHRUBS - 4 FOOT HEIGHT/SPREAD CONTAINER OR BOX GROWN			
AI	ALNUS INCANA	SPECKLED ALDER	71
AM	ARONIA MELANOCARPA	BLACK CHOKEBERRY	113
VN	VIBURNUM NUDUM	POSSUMHAW/VIBURNUM	131
ITEM 611.0542 PLANTING EVERGREEN SHRUBS - 2 FOOT HEIGHT/SPREAD CONTAINER OR BOX GROWN			
CC	CHAMAEDAPHNE CALYCVLATA	LEATHER LEAF	94
CO	CEPHALANTHUS OCCIDENTALIS	BUTTON BUSH	114
ITEM 611.0132 PLANTING - MAJOR DECIDUOUS TREES - 1 1/2 INCH CALIPER BALL & BURLAP, FIELD POTTED OR FIELD BOXED			
BL	BETULA LENTA	BLACK BIRCH	34



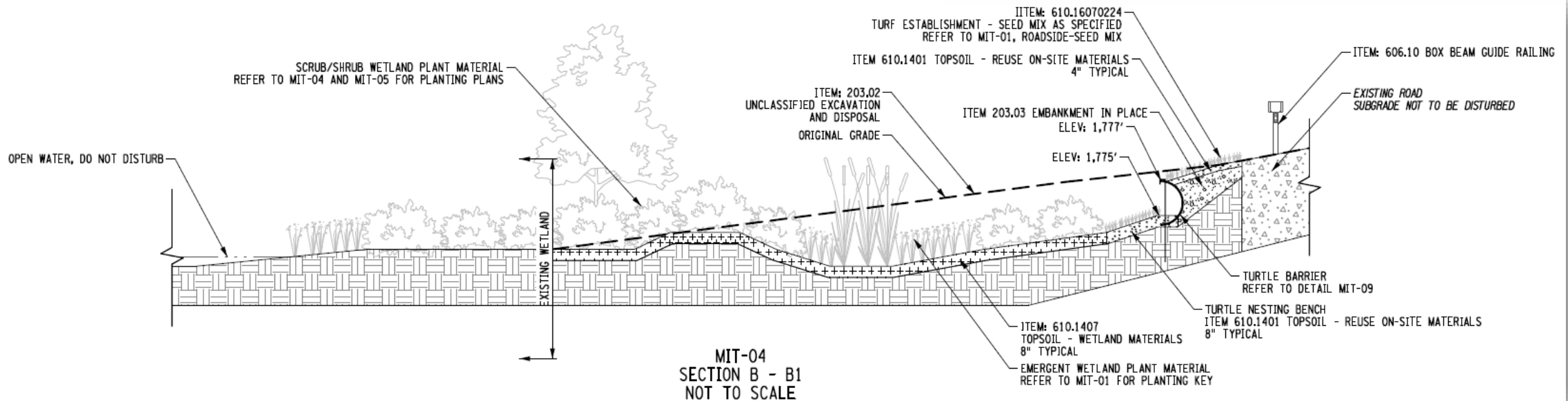
Lake Durant *(continued)*



BASE PORTION OF DOWNED TREES TO BE PLACED AS HABITAT ENHANCEMENT IN THE APPROXIMATE LOCATIONS SHOWN. EACH SECTION SHALL BE 8-15 FEET IN LENGTH, WITH OR WITHOUT ROOT BALL, TO BE PLACED PERPENDICULAR TO CONTOURS. APPROXIMATELY HALF OF THE BASAL TREE TRUNKS SHALL INCLUDE THE ROOT BALL. IN INSTANCES WHERE THE ROOT IS INCLUDED LOWER PORTION SHALL BE BURIED TO A DEPTH WHERE BOTTOM OF THE LOG IS LEVEL WITH THE GROUND SURFACE.



DETAIL A
TURTLE BARRIER SECTION ELEVATION



MIT-04
SECTION B - B1
NOT TO SCALE

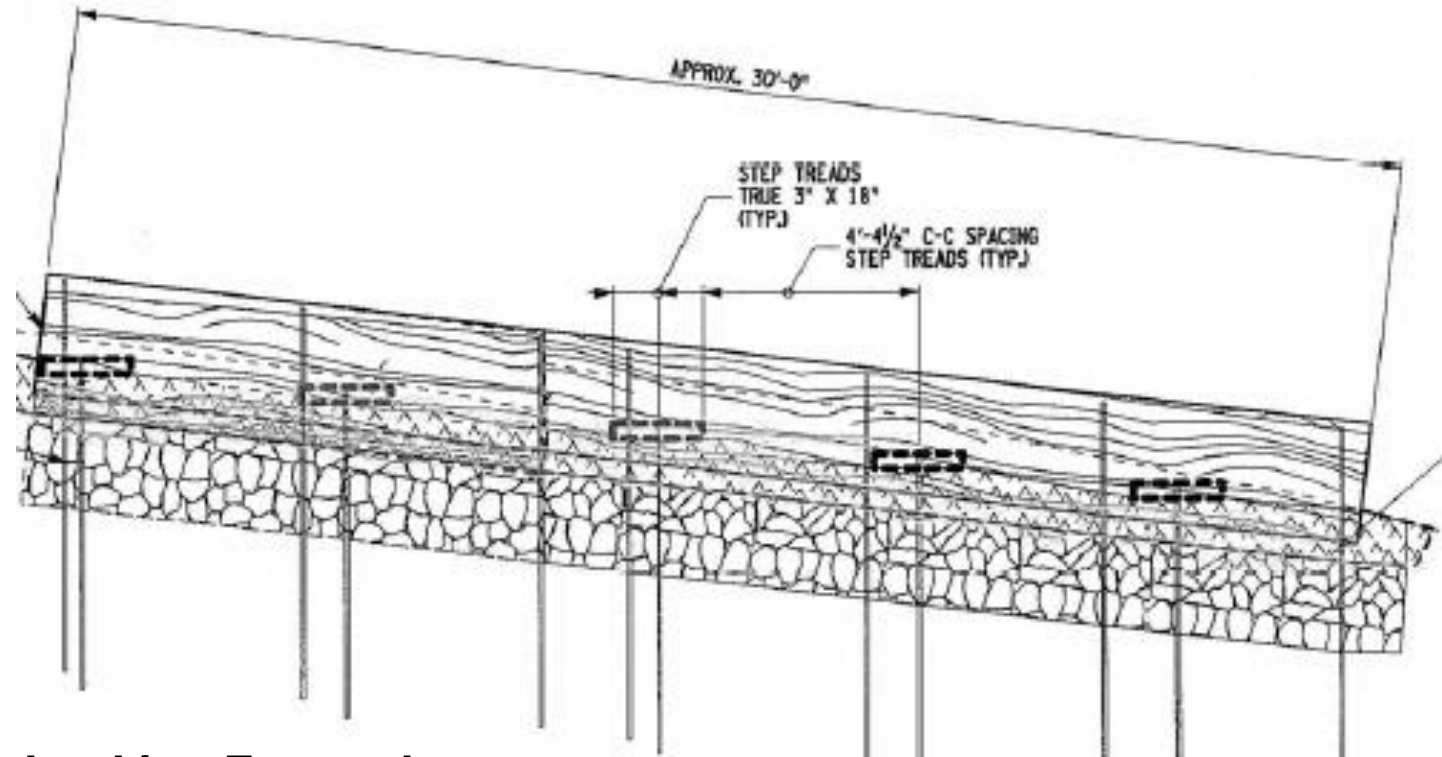
Moose River Cartop Boat Launch Repair

Overview:

- Cartop boat launch, Route 28, constructed in 2014 as mitigation and enhancement for the Route 28 bridge repair project over the Moose River in McKeever.
- A number of highwater events have caused erosion to the bottom step of the launch.
- In Spring 2022, a crew from the Alder Creek Sub-Residency retrofitted and repaired the step so that it will withstand future events. This repair enables recreationalists to continue to utilize this asset.



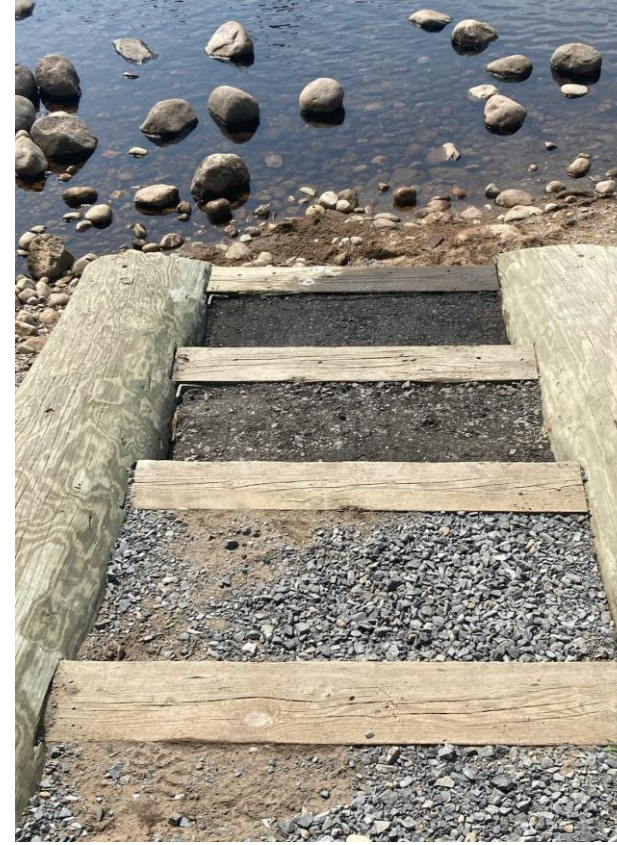
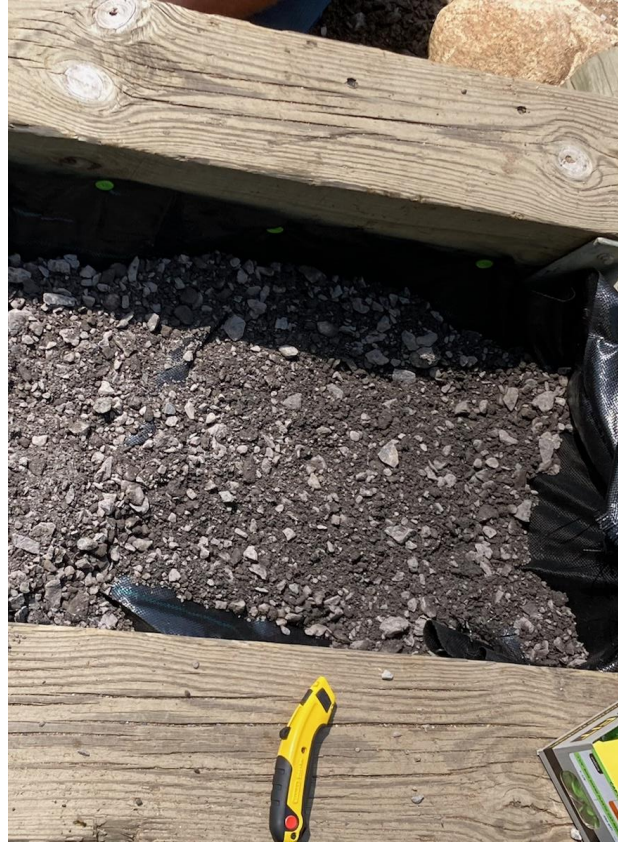
Picture from 2021 showing erosion of bottom step from high water events along the Moose River.



Looking Forward:

A cartop boat launch installation is proposed for the future capital project: Route 28/South Inlet, Raquette Lake. Using what was learned from this site, a better detail and design will be incorporated into this and future projects. Additional locations will be identified for repairs to existing infrastructure that no longer functions as intended and will plan to repair accordingly.

Moose River Cartop Boat Launch Repair *(cont'd)*



Photos from Spring 2022 showing repair process and finished repair to the boat launch steps connecting the parking area to the Moose River.

Mayfield Slope Stabilization

Project Summary

Slopes along the outlet of a culvert carrying Mayfield Creek under Rt. 30 (100' outside of the Park) needed to be stabilized and repaired after a 2018 slope failure. DOT repaired the slope with silty/sandy fill and stone while minimizing disturbance to adjacent areas, and seeded with annual rye. Since the seed did not take well and natives were not filling the area, DOT coordinated with soil experts from Profile and tested the existing soil to determine how to establish turf without bringing in topsoil.



PARTIALLY SHADED ROADSIDE AREA MIX		
COMMON NAME	BOTANICAL NAME	% OF MIX
LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	49.7
VIRGINIA WILDRYE	ELYMUS VIRGINICUS	16.8
PURPLE CONEFLOWER	ECHINACEA PURPUREA	9
BOTTLEBRUSH GRASS	ELYMUS HYSTRIX	6.5
PARTRIDGE PEA	CHAMAECRISTA FASCICULATA	3.5
BLACKEYED SUSAN	RUBBECKIA HIRTA	3
OXEYE SUNFLOWER	HELIOPSIS HELIANTHOIDES	2
GOLDEN ALEXANDERS	ZIZIA AUREA	1.3
NARROWLEAF MOUNTAINMINT	PYCNANTHEMUM TENUIFOLIUM	1.2
TALL WHITE BEARDTONGUE	PENSTEMON DIGITALIS	1
OHIO SPIDERWORT	TRADESCANTIA OHIENSIS	0.9
MARSH BLAZING STAR	LIATRIS SPICATA	0.6
BLUE FALSE INDIGO	BAPTISTA AUSTRALIS	0.5
WHITE AVENS	GEUM CANADENSE	0.5
BUTTERFLY MILKWEED	ASCLEPIAS TUBEROSA	0.4
CALICO ASTER	ASTER LATIFLORUS	0.4
BIGLEAF ASTER	ASTER MICROPHYLLUS	0.4
WILD BERGAMOT	MONARDA FISTULOSA	0.4
COMMON MILKWEED	ASCLIPAS SYRIACA	0.3
SUNDRUPS	OENOTHERA FRUTICOSA VAR. FRUTICOSA	0.3
EASTERN COLUMBINE	AQUILEGIA CANADENSIS	0.2
ZIGZAG ASTER	ASTER PRENANTHOIDES	0.2
APPALACHIAN BEARDTONGUE	PENSTEMON LAEVIGATUS	0.2
WHITE GOLDENROD	SOLIDAGO BICOLOR	0.2
HEATH ASTER	ASTER PILOSUS	0.1
HAIRY BEARDTONGUE	PENSTEMON HIRSUTUS	0.1
EARLY GOLDENROD	SOLIDAGO JUNCEA	0.1
GRAY GOLDENROD	SOLIDAGO NEMORALIS	0.1
LICORICE SCENTED GOLDENROD	SOLIDAGO ODORA	0.1
TOTAL		100

Seed mix to reestablish site



Fall 2018 slope failure



Image of reconstructed slope before turf establishment

Looking Forward

In April 2023, DOT will partner with Profile to revegetate the site. Profile will supply their topsoil-alternative product, Proganics, to amend the soil. DOT will provide a shade tolerant pollinator friendly seed mix, fertilizer, labor and equipment. The area will be tilled and hydroseeded with a mixture of seeds, Proganics other soil amendments and mulch. DOT and Profile will monitor this site for success and evaluate the potential of this alternative restoration approach for wider use.

Proganics Monitoring, West Canada Creek

2022

Site monitoring occurred on 6/16/22. Grasses seemed much more robust than in 2021, but still about 20% bare soil and 35% grass cover with the rest being desirable and undesirable roadside species. Species noted in 2022: poverty oat grass, indian grass, switchgrass, little bluestem, goldenrods, mullein, deer tongue, clover, wild parsnip, bladder campion, birdsfoot trefoil, daisies, thistle, Queen Anne's lace, giant hyssop and possibly potato vine & bedstraw. Wild parsnips species that were starting to bloom were cut in the entire area, however roots were not removed due to time and equipment.



Poverty Grass



No positive ID



Deer Tongue



Prairie Cordgrass



Looking south at ProGanics site in Summer 2021. Site has only about 50% ground cover.

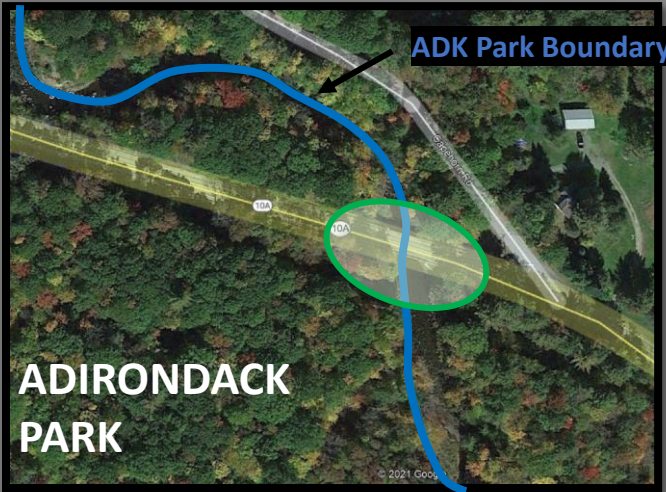


Looking north at ProGanics site in June 2022. Site has only about 80% ground cover. Target species are present, however, slow to establish.

Looking Forward

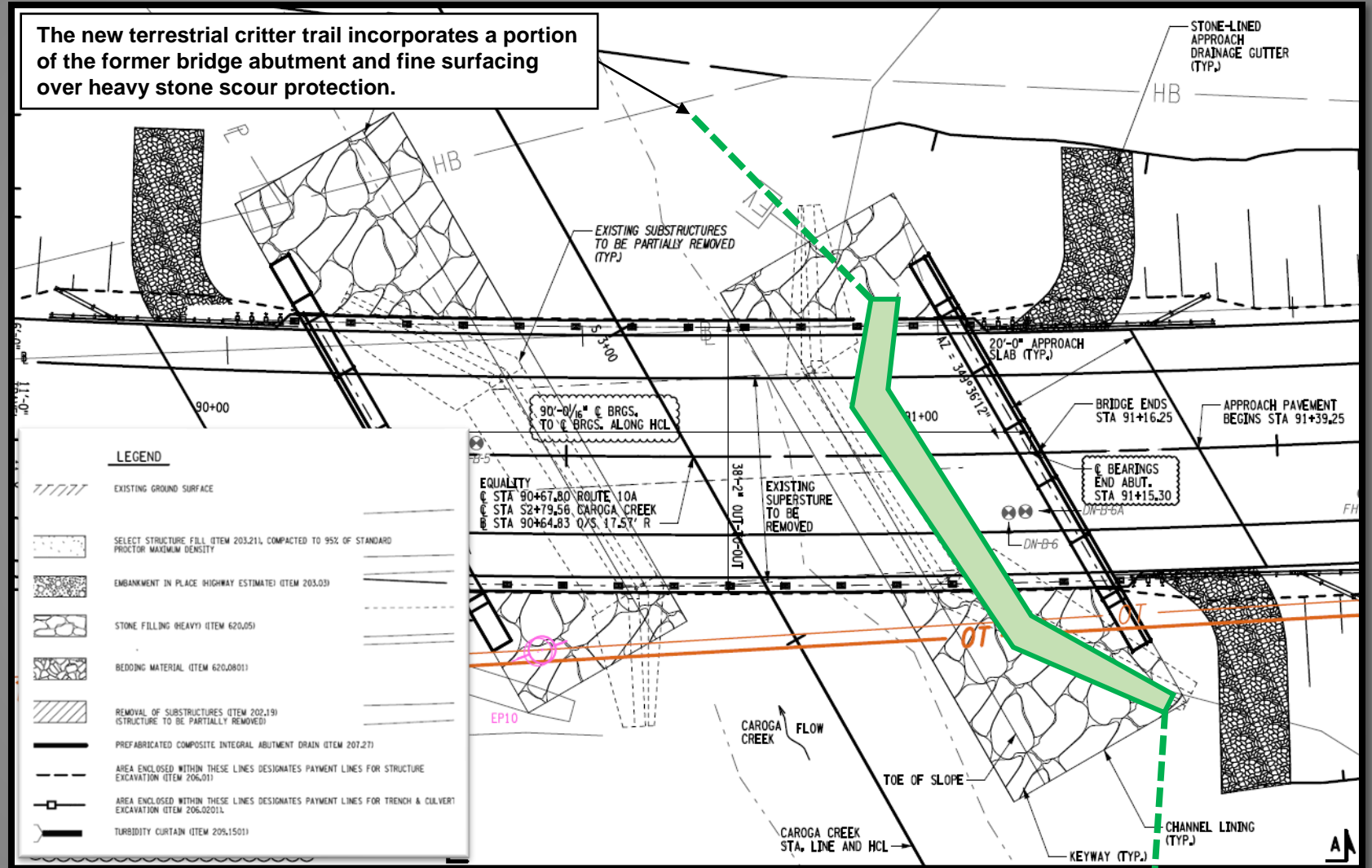
The target species that were seeded in this location are indian grass, prairie cordgrass, little bluestem, big bluestem, and switchgrass. Monitoring the site for species and percent groundcover will continue. Physical removal of invasive species may be key to helping slow establishing native grass species to thrive. Once they thrive, the Region hopes to use this location to harvest seed for future projects in the Park. The location will be inventoried as a “no mow” area to promote native grass species.

Terrestrial Critter Trail at Rte. 10A/Caroga Creek



This bridge replacement (2020-21) over Caroga Creek and surrounding project location is split, half in the Adirondack Park and half outside.

A terrestrial wildlife crossing was not proposed for this project location prior to start of the construction phase. The wildlife crossing was incorporated without having to extend the length of the bridge structure.



Terrestrial Critter Trail at Rte. 10A/Caroga Creek (cont'd)



View Across Caroga Creek Toward the New Terrestrial Critter Trail



South end of the constructed critter trail adjacent to the Caroga Creek bank.



The portion of terrestrial trail under the bridge incorporated the partially demolished former concrete bridge abutment.



East End Abutment- topography too steep and unsuitable to install a terrestrial crossing

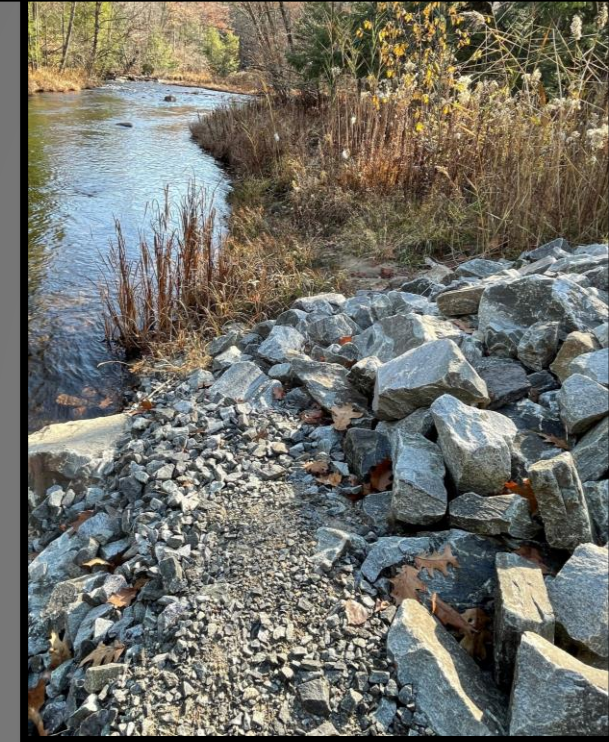


View north along the constructed terrestrial critter trail under Rte 10A.



North end of the completed terrestrial critter trail on native soils.

Terrestrial Critter Trail at Rte. 10A/Caroga Creek (cont'd)



- 2022 update: Bridge project is complete. No changes to wildlife crossing.
- Site visits and monitoring occurred to document durability of new critter crossing & to observe indications of wildlife use.

- Animal tracks and trail observed, may also be used by fishermen.
- Project was featured in the Wildland Network's ArcGIS StoryMap, *Wonderful World of Wildlife*.
 - <https://storymaps.arcgis.com/stories/fff7446bf2254305ae16ef0b585bf891>

Culvert Rehab/ Replacement Project

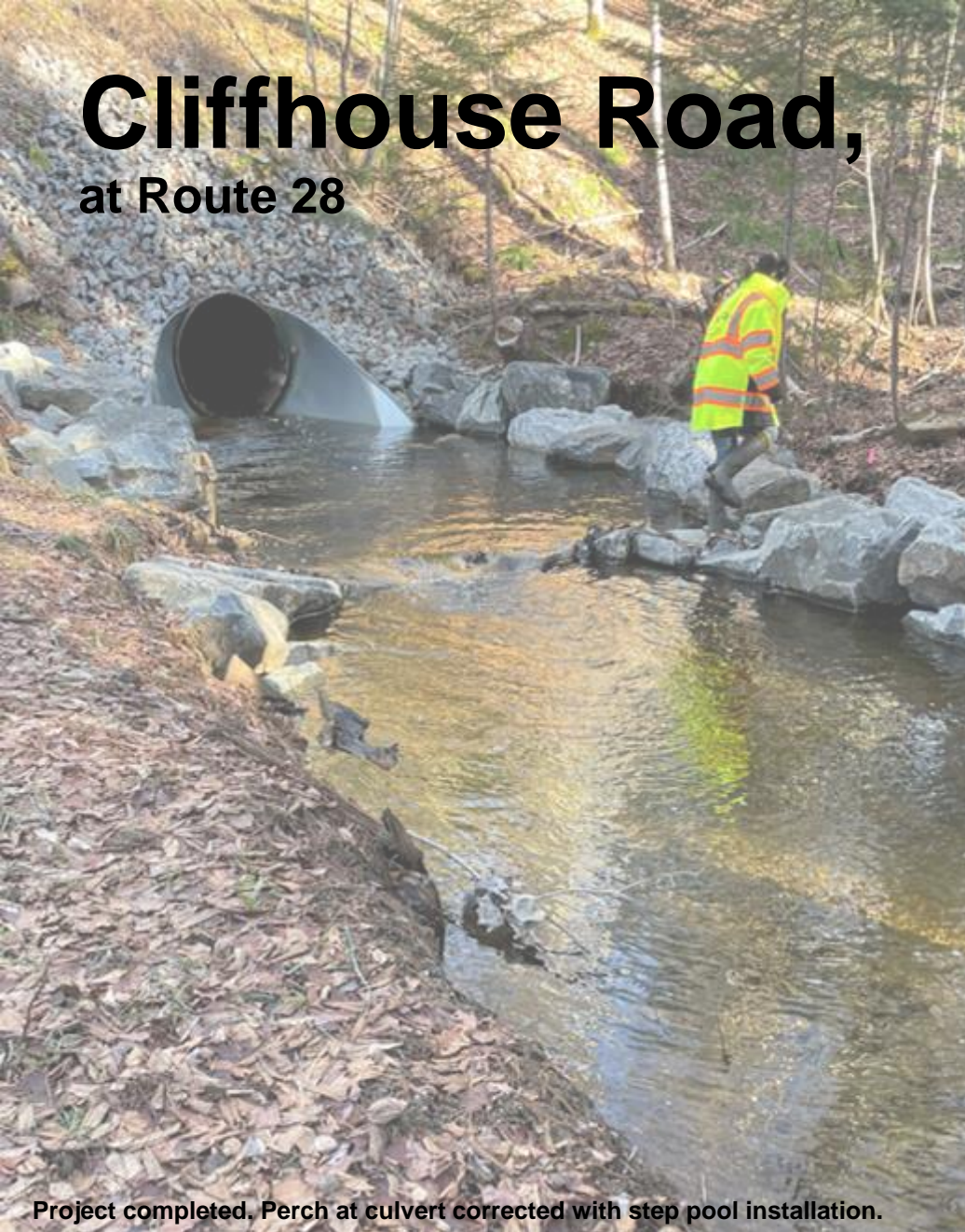
Invert at Site 1 Rt 28N, Long Lake



Overview

- PIN 2806.30.321
- Culvert C220059 under Rte 28N required invert pavement to repair integrity. Installed in 2022.
- Culvert baffles were incorporated to mitigate impacts and facilitate wildlife passage.

Cliffhouse Road, at Route 28



Project completed. Perch at culvert corrected with step pool installation.

2022

- A culvert location previously identified in Hamilton County where improvements for aquatic connectivity were proposed came to fruition in the spring of 2022. A crew from the Indian Lake Residency worked within APA and DEC permit conditions to remove the existing perch created by the end section and address erosion downstream of the Route 28 culvert.
- Two step pools were constructed to improve aquatic habitat connectivity in this Class C(T) stream, allowing all organisms to access high quality habitat upstream where the culvert end section had previously created a barrier.
- In addition to providing habitat connectivity, the step pools also created a low flow channel that keeps the water in the middle of the channel and away from the eroding banks.
- Annual seed was used in hopes that the seed bank will reestablish itself.

Looking Forward

Monitoring will continue in 2023 to determine if additional work is necessary to improve the site including additional plantings and native seed. Other sites with barriers to aquatic organisms will be identified and inventoried for future work.



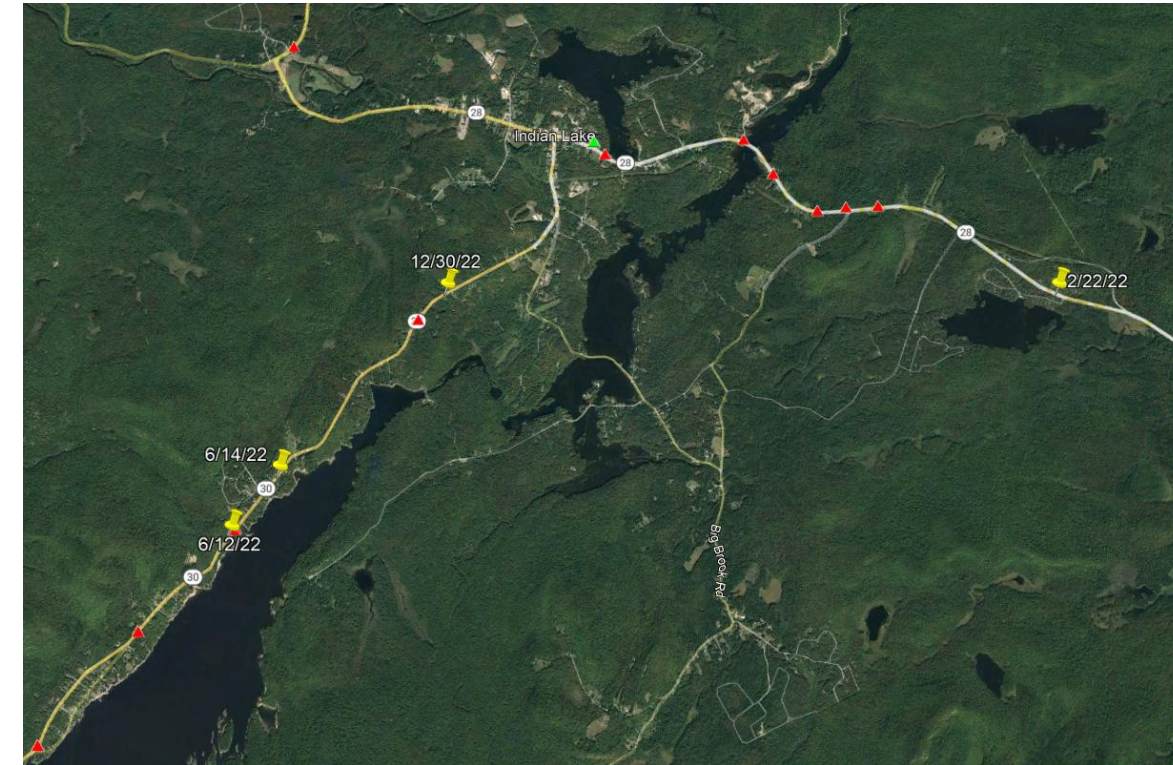
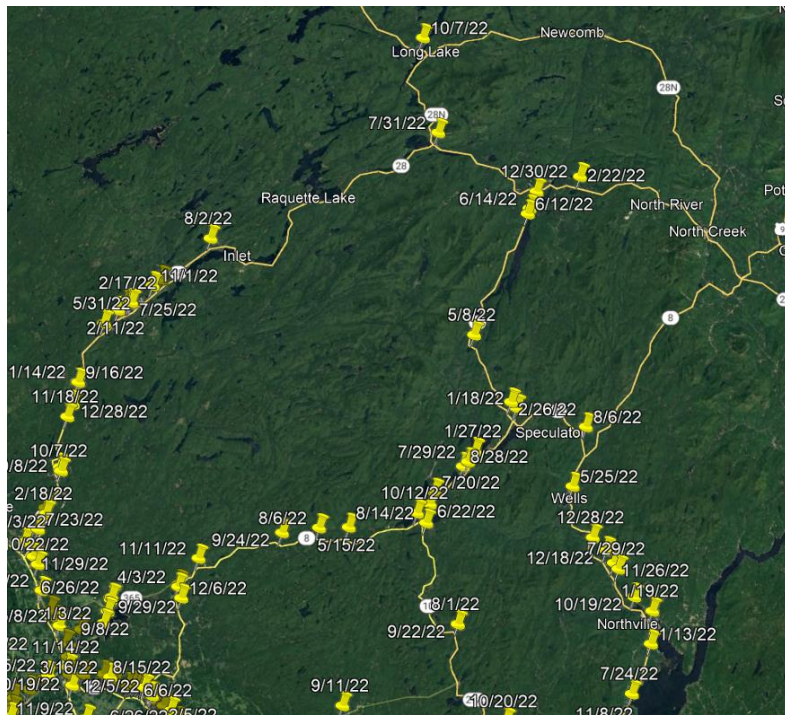
L: Route 28 over Unnamed Creek at Cliffhouse Road - showing perch and eroding bank.

R: Stream reach from Cliffhouse Road culvert inlet to Route 28 culvert outlet.

Inventory of Large Mammal Conflicts

Update

Additional efforts by the Mohawk Valley Transportation Management Center (MVTMC) were initiated in 2022 to document deer/vehicle accidents that include highway corridors in the Adirondack Park. Deer hits called into the 24/7 call service by the traveling public and law enforcement are recorded by the MVTMC with the date and sent as a work order to the respective NYSDOT maintenance residency for action. The MVTMC tracks this information and has shared it with NYSDOT environmental staff.



Map showing 2022 data and data previously mapped from 2017-2021.

Looking Forward

- Overlaying the 2022 data with information previously collected using MAMIS, future years may show conflict hot spots that may inform wildlife infrastructure considerations in future projects.
- For example, bridge replacement projects may include shelves to encourage wildlife passage under the highway, or beneficial plantings and/or fencing could be used to discourage wildlife crossing at a certain “hot spot” location.

Route 10 - Streambank Stabilization

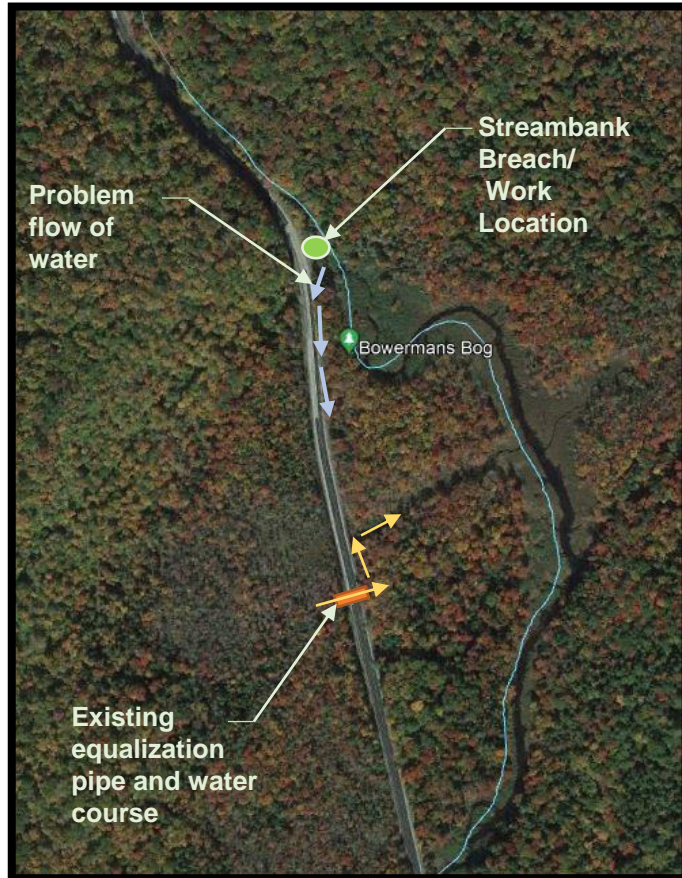
Caroga Lake, Fulton County

Update

- Within the Adirondack Forest Preserve & adjacent to APA wetlands, the outside curve of a Class C(T) stream eroded such that water from the stream was partially traveling down an old ditch line. The ponding water along the roadside kept the road subbase material saturated and affected existing flow from a nearby culvert.
- Maintenance forces reestablished the stream bank in 2021, and in 2022, planted alder stakes to stabilize the bank and create habitat for aquatic species. Alder stakes were chosen because the vegetation immediately adjacent to the area was predominantly alder, a species native to the Adirondack Park.

Looking Forward:

2023 - site will be monitored to track the success of the alder stakes. Plant additional as necessary.



Areal view of the path of the road, path of the water and the work location.



Existing streambank breach location in relation to road. Note abundant alder shrubs.



Saturated ditchline with standing water against highway embankment.

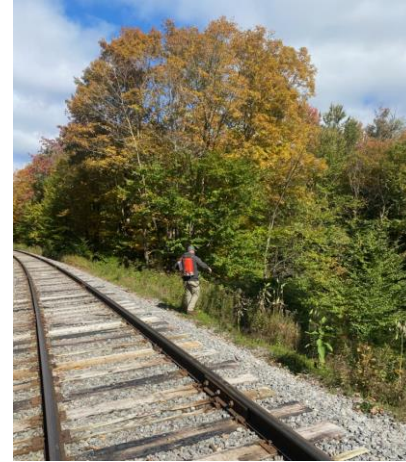


Alder stakes planted in Spring of 2022 to soften stone in plug and add habitat.

Invasive Species Treatment & Monitoring

2022

Invasive species screenings continued at Maintenance Residencies in Hamilton, Herkimer and Fulton Counties. Manual handpulling of a small patch of purple loosestrife at the Long Lake shop took place to control seed heads and prevent further spread. Multiple locations along Routes 8, 10 and 30 in Hamilton County were treated with herbicide to control purple loosestrife. Additional locations on and off the ROW were documented by crews and sent to APIPP. Follow-up treatment occurred to a stand of Japanese knotweed that crews have been monitoring for a number of years in Nelson Lake along the R-LPTC was completed in fall of 2022. Galerucella beetles, used as a biocontrol for purple loosestrife, were observed on a small stand that is being monitored by crews on the corridor near Big Moose. Seed heads were also removed.



Chemical treatment of Japanese knotweed along R-LPTC.



Looking Forward

Monitoring, early detection and treatment will continue. A list of construction projects along these corridors will be maintained and sites monitored for introduced species. Tailgate trainings with mowing and ditching crews will continue in 2023.

Date	Route/RM	Township	Zip
8/4/2022	10/1145 N	Arietta	12139
8/4/2022	30/1332 N	Lake Pleasant	12108
8/4/2022	30/1340-41 N	Lake Pleasant	12108
8/4/2022	30/1364 S	Lake Pleasant	12108
8/4/2022	30/1344 S	Lake Pleasant	12108
8/4/2022	30/1291 S	Lake Pleasant	12108
8/4/2022	30/1274 S	Lake Pleasant	12108
8/1/2022	8/1220	Lake Pleasant	12108
8/1/2022	8/1224	Lake Pleasant	12108
8/1/2022	8/1264	Lake Pleasant	12108
8/1/2022	8/1300-02	Lake Pleasant	12108



Galerucella beetles found along R-LPTC.



Long Lake Facility, Hamilton County – Purple Loosestrife hand pulling and monitoring.

Nobleboro Scenic Overlook

2022

- Continued ongoing improvement efforts.
- NYSDEC and NYSDOT are coordinating to replace a missing panel and update others at the scenic overlook kiosk. Information on the panels is outdated, such as the species currently being stocked in the West Canada.
- Staff are also looking at areas within the overlook pull-off that can accommodate wildflower plantings and other shrubs native to the Adirondacks to reduce the need for continued vegetation management.

Looking Forward:

- To enable discontinued stocking operations by DEC to resume, NYSDOT will improve access from the parking area to the West Canada Creek to accommodate the fisheries truck.
- Other improvements will include reconstructing the foot paths to the scenic overlook to reduce erosion and replacement of the bollards to prevent unauthorized vehicles from accessing the creek.



Kiosk on site with missing interpretive panel.



Missing sign panel to be edited and replaced.



Fall 2021 showing erosion of walkway and deteriorated bollards to be repaired and replaced in 2023.

Route 3 Alder Brook

2020-21

- Culvert replacement – restored habitat connectivity.
- Timber access mats were used to protect the ground during construction. This minimized site disturbance and the retention of some existing vegetation.
- A temporary bridge was used instead of building an access road to get to the other side of the stream.
- This reduced resource impacts including wetlands impacts.

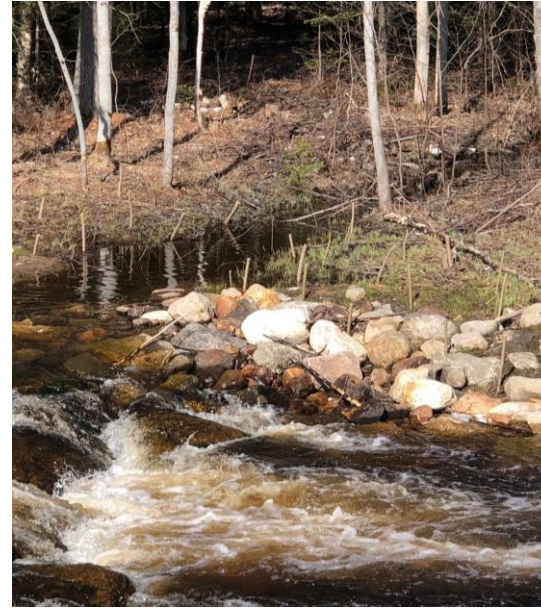
2022

- Plantings occurred, (*see next page*).



Route 3 Alder Brook: Plantings

(continued)





Bridge Rehabilitation, Carpenter's Flats Bridge over Ausable River

US Rte. 9

Overview:

- FEMA driven and funded bridge rehabilitation. Includes reconstruction of the approach and will increase the elevation of the bridge approximately 3.5' higher over the Ausable River to reduce flooding and ice jams.
- State Scenic & Wild Recreational River.
- A portion of the project is outside of the Park.
- Project limits have been reduced to have no permanent impact to APA wetland.
- Recreation associated with the nearby campground will be accommodated during construction.

Culvert Replacement & Storm Event, Tributary to St. Regis River

NYS Route 458

Overview

- Culvert replacement, C750190: contract let in fall 2022, some initial work completed including coordination.
- Included a temporary fix to stabilize the area, June storm caused part of the embankment to fail.
- Foundation of a house discovered during design. Foundation and surrounding area will be evaluated for cultural resource concerns.
- Intent is to replace culvert with a 4 sided box culvert. Design will include a slanted bottom to enable wildlife passage during low flow and a low-flow aquatic channel. Native stream bed material will be used on bottom.
- APA wetlands in vicinity.

Culvert and shoulder in partial collapse with embankment washout.





Catskills

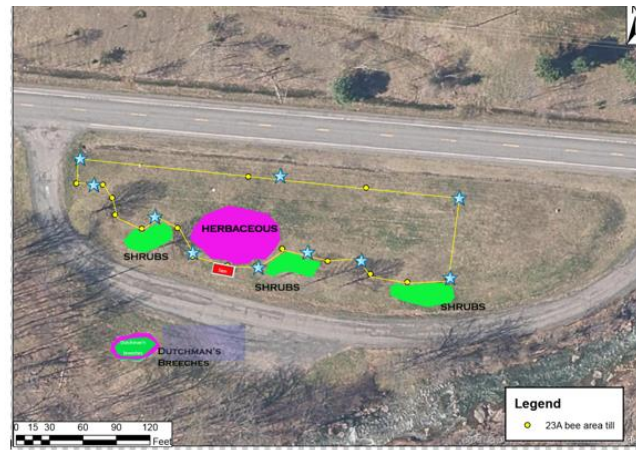
R1	44
R8	47
R9	49



Parking Area Pollinator Garden, Route 23A

Overview

- Town of Jewett, Green County; partnership with Greene County SWCD & DEC
- Habitat promotion for pollinators, namely the American bumble bee – initially observed in the area by an off-duty NYS employee with a passion for bees.
- Tilled and seeded with ADK Upland Wildflower mix
- Mowing: Every two years in late fall
- Plantings include: ninebark, bayberry, silky dogwood, purple coneflower, bluebells, lupine, bergamot, butterfly weed, buttonbush, penstemon, milkweed, mountain mint, Dutchman’s breeches.
- Bumble bee conservation sign installed



Looking Forward

- Monitoring of plant and pollinator success
- Potential to expand effort with additional pollinator gardens in the vicinity

Route 23A Parking Area Pollinator Garden (continued)



Horseshoe Bend Sightline Tree Clearing

Kaaterskill Clove



Location map showing aerial view of Horseshoe Bend (Google Maps).

Non-hazardous trees removed to improve sight distance on Horseshoe Bend.

Esopus Creek Bridge Realignment & Replacement

2020-2021:

This new 800' wide bridge replaced a 336' bridge built in 1966. The replacement bridge was realigned slightly to the south with a five-foot-higher clearance. The expanded width and realignment reduces the potential for flooding and minimizes the risk of bridge scour. The larger bridge opening allows for wildlife movement under the bridge and along the creek corridor, reducing wildlife-vehicle collisions and protecting wildlife populations. With wider shoulders, the new roadway enhances the experience for bicyclists utilizing this bike route through the Catskill mountains.

The project included the realignment of the State Route 212 and State Route 28 intersection, approximately 250' to the west. Embankment materials below the old bridge approaches were recycled and used to raise portions of Route 212 above flood elevation. Additionally, a new culvert now carries a small stream under the relocated roadway.

To keep with the rural aesthetics of the community, NYSDOT developed a plan for landscaping and general aesthetics, which included approximately 124 tree plantings, wildflower seeding and 300 live cuttings throughout the stream corridor.

2022:

Near complete- in 2022 turf establishment and post-planting care.

Looking Forward

Near complete- in 2023, final inspection for turf establishment and post-planting care.



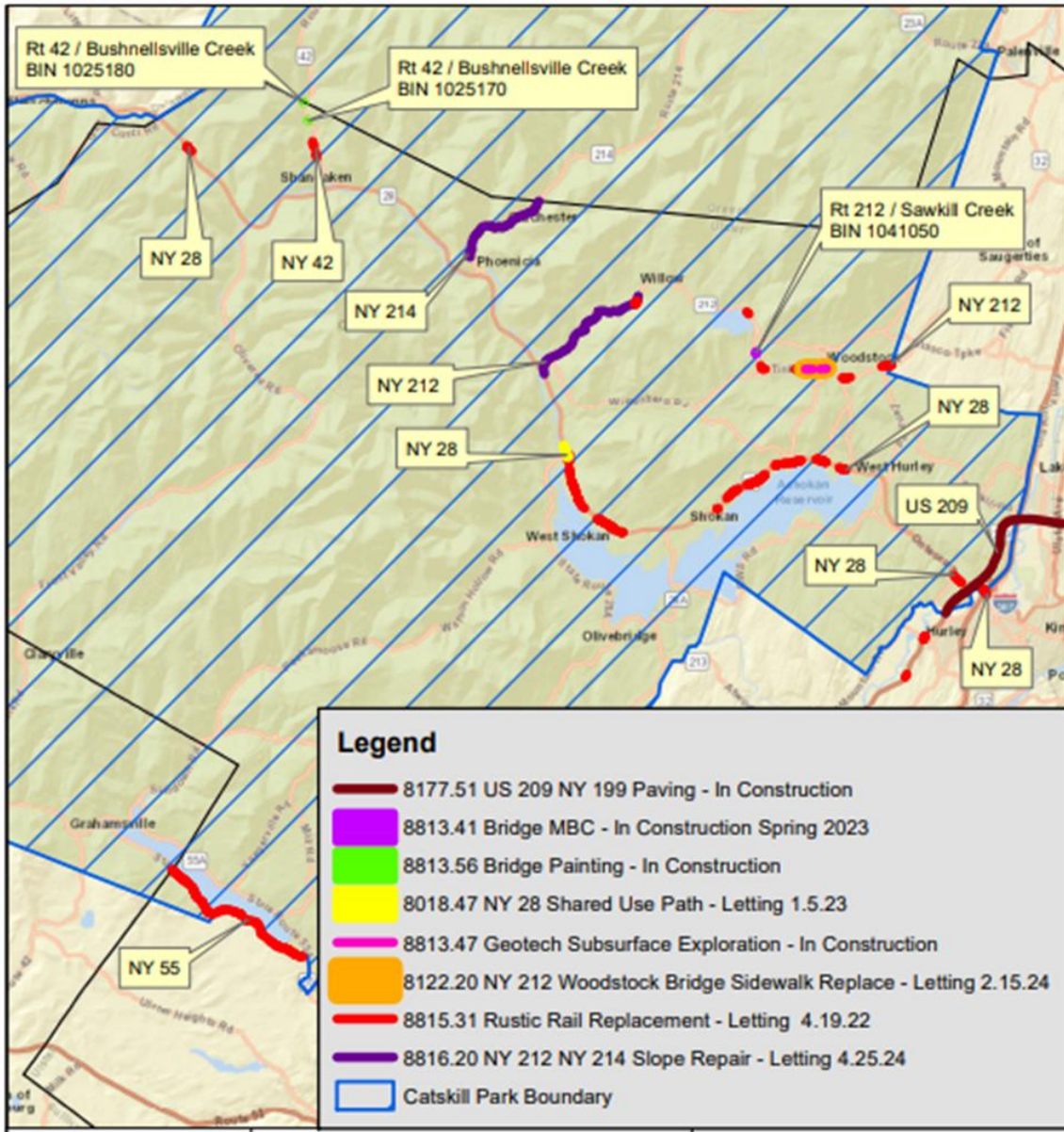
Drone view of new bridge over the Esopus Creek. Note the wide span which allows for wildlife movement and reduces the potential for flooding.



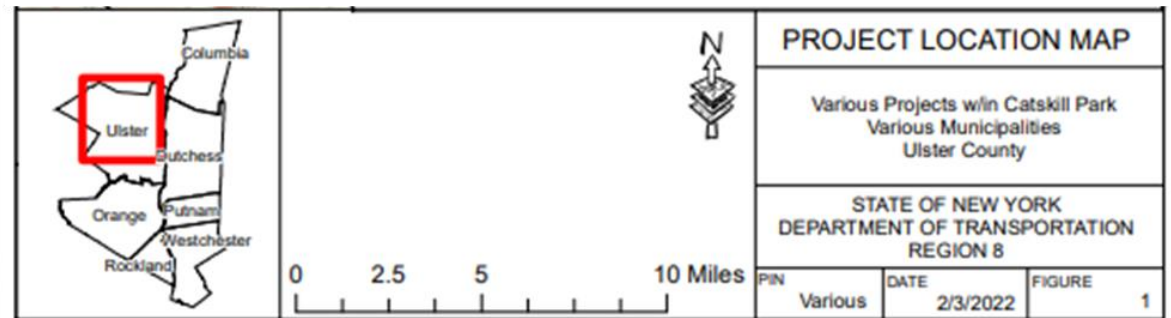
View of newly planted landscaping at the Esopus Creek Bridge Realignment & Replacement.

Projects & Activities in the Catskill Park,

NYSDOT Region 8



Location map showing 2022 projects and activities in the Catskill Park.



Rt 17 over Willowemoc & Debruce, 906780



- Construction started in late summer 2022.
- Invasive species treatment done under construction contract.
- Scour protection included a roughened bottom design (grouted riprap) to retain natural streambed material. Plunge pool on the downstream side for fish habitat. Existing terrestrial passage maintained. Completed per plan.
- Aged Catskill Park Gateway sign within project limits, on Rt 17. The sign has fallen, posts are still standing. DOT coordinated with DEC to install a new sign (provided by DEC) on the existing post assembly during the project.
- Contractor is using parking lot during construction. Kiosk protected with temporary plastic fencing.



Looking forward:
Planting and seeding;
tree planting on west
side along Debruce
Road and wildflower
seeding on both sides
planned for 2023.

Comprehensive Reporting/ Workplan Spreadsheet

The comprehensive spreadsheet contains all of these projects – and more.

Note the tabs along the bottom for Adirondack 2022; Catskills 2022.

Master TCUMP Category	Secondary Category	Reg	Travel Corridor #	Contact	Project/Activity	PIN	Year	Summary - 2022
5.3.3 Other Organizations and Stakeholder Groups	5.22.5 Invasive Species	MO	PARKWIDE	Peter Dunleavy	APIPP strategic planning		2022	Participated in APIPP Strategic Planning Effort. Final meeting May 19th with a presentation to all APIPP partners for final adoption.
2.4.1 Generic/Master Travel Corridor Document		MO	PARKWIDE	Peter Dunleavy	Master TCUMP - issuance		2022	Issued EB to officially announce the availability of the Master TCUMP as a section of The Environmental Manual (TEM), 6/30/2022, posted to NYSDOT's publicly facing website. Shared with DEC, APA and stakeholders.
3.4.6 Training	2.4.1 Generic/Master Travel Corridor Document	MO	PARKWIDE	Alexandra von Bieberstein, Peter Dunleavy	Training: Master TCUMP for APIPP		2022	Provided overview of Master TCUMP to APIPP staff.
3.4.6 Training	5.22 General Ecology and Wildlife Resources	MO	PARKWIDE	Alexandra von Bieberstein	Web Development & Training Availability		2022	Developed new IntraDOT pages for Adirondack and Catskill Parks including links to relevant trainings- including Ed Frantz's Retrospective ELATS.
3.4.6 Training	2.4.1 Generic/Master Travel Corridor Document	MO	PARKWIDE	Alexandra von Bieberstein	ELATS Training- TCUMP Implementation		2022	Planned, completed and presented at NYSDOT July ELATS. TCUMP Implementation.NYSDOT-Implementing the Adirondack TCUMP: A case study in corridor planning and inter-agency coordination - Peter Dunleavy and Alexandra von Bieberstein (LAB), Kevin Prickett (APA), Josh Clague (NYSDEC's Adirondack Park Preserve Coordinator)