

# AMERICAN RECOVERY AND REINVESTMENT CLEAN WATER ACT, SECTION 604 (b) GRANT





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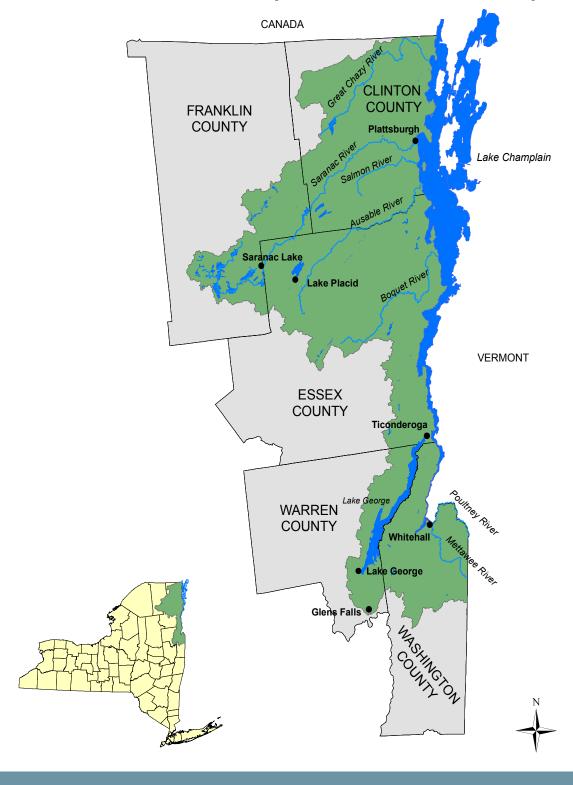
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# LAKE CHAMPLAIN WATERSHED

# STATE AND COUNTY MAPS

## **New York State Lake Champlain Basin Watershed Map**



# **EXECUTIVE SUMMARY**

# ROADSIDE EROSION ASSESSMENT AND INVENTORY

The Lake Champlain Watershed Water Quality Management Planning project was one of eleven projects in New York State that was funded through the Federal Government's American Recovery and Reinvestment Act initiative. Awarded to the Lake Champlain - Lake George Regional Planning Board (LCLGRPB), this \$130,625 grant contributed to 15 jobs throughout the five counties of the Champlain Basin; Clinton, Essex, Franklin, Warren and Washington; and created five additional summer intern positions at the county Soil and Water Conservation District (SWCD) offices. Overall, over 3000 hours were spent on this project through a strong partnership between the LCLGRPB, the Champlain Watershed Improvement Coalition of New York (CWICNY), and the five County SWCD's. Most importantly, critical planning for the future was completed.

The goal of this project was to identify critically eroding roadside banks that contribute significant sediment loads to the high quality streams throughout the Champlain Watershed. Project oversight and fiscal management was performed by staff at the LCLGRPB, while Project Management was performed by the CWICNY Coordinator. Data reconnaissance and field work was completed by the five county SWCD's using newly purchased Trimble Juno SB GPS units with a comprehensive erosion site data dictionary produced by the partnering agencies. Data points, coordinating metadata and photos were post-processed using TerrraSync and ARC GIS software, and maps identifying erosion sites were produced for each county and township. For each specific site, a prioritization ranking matrix was used to determine the criticalness of erosion; High, Moderate or Low. Areas with critical erosion are delineated on the maps with red dots, yellow is moderate and green is low. Also determined at the site visits and in post-processing were methods for remediation of the sites and the associated cost estimates. Overall, 319 roadside erosion sites; 117 high priority, 77 moderate priority & 125 low priority; were identified throughout the watershed on state, county and town roads with a total remediation cost of \$1.7 million. Methods for remediation are vast, and include hydroseeding with tackifier and bonded fiber matrixes; stabilizing ditches with rock and gravel; installing erosion control blankets; constructing check dams and sediment traps; stabilizing bank toes and re-grading slopes and roads.

Another part of this initiative was the planning and executing of several educational trainings, including CWICNY's annual North Country Stormwater Tradeshow and Conference. From 2009 to 2011, over 300 local engineers and municipal staff were educated on topics such as flood plain management, cold climate best management practices and performance, low impact development, advanced mechanisms and designs for phosphorus treatment, green roofs and pervious asphalt. Also throughout this project, individual County SWCD's performed Erosion and Sediment Control trainings for local contractors. In all, over 1000 local code enforcement officers, contractors, and professionals have been educated on important water quality issues that the Champlain region has been facing.

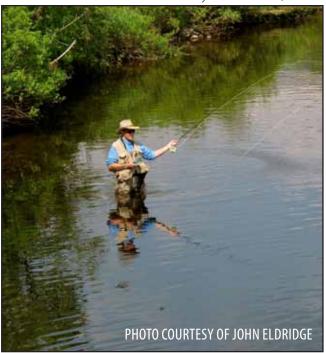
The successful future of Lake Champlain's water quality is dependant on several factors, including the proper maintenance and control of the highly erodible soils that make up so much of the watershed. This planning initiative has identified several areas that are in dire need of erosion and sediment control maintenance by the state, county and local governments. It is imperative for the health and wellbeing of our natural resources that they are addressed in the future through the same strong partnerships formed to produce this plan.

Photograph: Point AuRoche, Clinton County.
Photograph courtesy of Carl Heilman II.

# PROJECT INTRODUCTION

# ROADSIDE EROSION ASSESSMENT AND INVENTORY

Lake Champlain is a 120 mile long lake that flows north from Whitehall, NY and outlets in the Richelieu River in Canada. Its watershed is 8,234 square miles and encompasses land in two states, New York and Vermont, as well as land in the Canadian Province of Quebec. In New York State, the watershed spans just over 3,000 square miles from the high peaks of the Adirondack Mountains to the lowlands on the western shores of Lake Champlain. The basin includes the majority of Clinton and Essex Counties and portions of Franklin, Warren and Washington Counties. There are a variety of land uses throughout the New York side of the watershed, the most abundant being agricultural, but the majority of the land is mixed forest owned by the State of New York and designated Forever Wild. There are only two major population centers; the City of Plattsburgh in Clinton County at the lakes northern end and the City of Glens Falls and Town of Queensbury in Warren County, at the watershed's southern end. However, there are a number of smaller communities and hamlets located throughout the watershed. The main economy is tourism, most



notably aquatic recreation and angling. More than one third of the residents in the Lake Champlain Basin are employed in service occupations accommodating tourists generating nearly \$4 billion annually. To remain attractive to tourists, the water quality of this region, including aquatic habitats, must be maintained and preserved.

Because the Champlain Region has a sparse population spread over a vast amount of land, an active network of state, county, and local roads has been established throughout the watershed to connect the small hamlets, residents, and tourists to the many natural resources this area has to offer. Along with these road networks span thousands of miles of roadside ditches, which are an important part of road networks as they safely convey water off of road surfaces, in turn keeping them safe for public travel. To keep the ditches functioning properly, road crews must maintain them by regularly cleaning out the built up sediment and vegetation. However, the act of removing the sediment and debris also removes the vegetative mats that stabilize the remaining soil. The exposed, bare soil then becomes highly prone to erosion. The less than ideal growing conditions in the Adirondacks, coupled with fragile soils and steep angular land features, have caused a substantial amount of erosion and sediment deposition from these ditches into local streams, rivers and lakes, as well as directly into Lake Champlain. In recent years, increasing rainfall rates combined with human-induced land disturbances have exacerbated the erosion and sedimentation process throughout the watershed. Noted researcher Dr. Rebecca Schneider of Cornell University has determined that roadside ditching activities are a huge component in the transport of sediment into New York State's waterbodies. Her research has indicated that significant quantities of sand and silt are transported via scraped and

exposed ditches, which is the reason that proper vegetative and structural sediment and erosion control techniques are necessary for these areas.

Sedimentation refers to the deposition of sand and silt into a receiving waterbody. Excess sediment can have an array of effects on aquatic ecosystems and can negatively impact water quality and clarity. The NYS Department of Environmental Conservation (DEC) has found that in the Lake Champlain Watershed sedimentation has affected local lakes and rivers by limiting macroinvertebrate production (food sources for fish species); filling in gravel spawning beds, which limits trout reproduction; and restricting fish migration, which decreases spawning success. The DEC also notes that excess sedimentation in Lake George has caused deltas to form at the mouths of several tributaries which have impeded recreation, boat navigation and produced suitable habitat for invasive species establishment. Sediment also acts as a vehicle for phosphorus transport into Lake Champlain. High velocity water coming off of the steep Adirondack slopes erodes the bare sediment and attached phosphorus particles, and

deposits them into the receiving waterbodies. This is a huge problem in Lake Champlain, as elevated phosphorus concentrations have increased algal growth, including the toxic blue-green algae, and has impeded recreation and aesthetics.

It is because of these factors that the Lake Champlain - Lake George Regional Planning Board partnered with the Champlain Watershed Improvement Coalition of New York (CWICNY) and the Soil and Water Conservation Districts (SWCDs) from Clinton, Essex, Franklin, Warren and Washington Counties to assess roadside erosion throughout the Champlain Watershed and to recommend means to address each identified erosion site. Over 3000 hours were spent on this planning initiative by 15 county and non-profit employees and 5 summer interns. This document outlines the erosion sites identified, the means to address them, and the estimated costs associated with the remediation techniques. The contents of this plan are intended to provide state, county and local highway supervisors and road crews with the knowledge to remediate these sites, while also providing a vehicle to leverage future funding for implementation.



# DATA COLLECTION

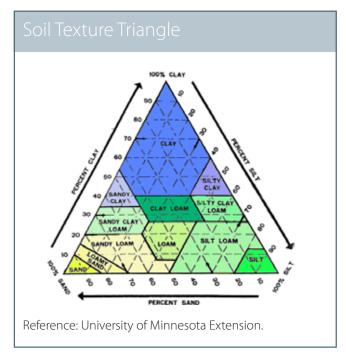
# ROADSIDE EROSION ASSESSMENT AND INVENTORY

The procedures for this project consisted of data collection, mapping and assessments. For the data reconnaissance and collection, CWICNY members established a uniform protocol and data set that was translated into a GPS data dictionary (Table 1). Parameters were chosen based on their correlation to erosive processes. Soil types were determined using the accepted Soil Texture Triangle.

Once the parameters were determined a data dictionary was created with individual drop-down menus to decrease the subjectivity between multiple data collectors. The data dictionary was downloaded onto four new Trimble Juno SB GPS units equipped with built in digital cameras that linked pictures with the geographic coordinates of each site. Data was collected at each site over two field seasons, 2010 and again in 2011 after further damage was caused by tropical storms Irene, Lee and several severe storms. The data was also analyzed for potential remediation recommendations and resolvability. An array of remediation recommendations were used, including; hydroseeding, plantings for deeper root depth, rock stabilization, erosion blankets and toe stabilization. Each management recommendation



Seasonal interns collecting roadside erosion data.



was then given a remediation cost estimates, which ranged between \$100 and \$500,000 each.

Once field work was completed, the data were downloaded using the TerraSync GPS Program and differentially corrected. The files were projected to NAD 1983, State Plane coordinate system and exported into shapefiles to be used in the Geographic Information Systems (GIS) ArcMap program. After creating map overlays of these points, the attribute tables were exported into a Microsoft Excel spreadsheet to be distributed and analyzed side by side with the photographs. Areas were prioritized in a matrix with soil types, recommendations, and best management practice solutions, as well as associated costs for stabilization.

Table 1. Data dictionary parameters used to identify roadside erosion sites.				
PARAMETER		MENU SELECTIONS		
Road Type		Divided Highway; Multi-lane Highway; Two-lane Paved; Other Paved; Gravel; Trail; Railroad		
Road Slope		Steep Grade; Flat; Moderate Grade		
Jurisdiction of Road		State - DOT; State - DEC; County - Warren; County - Washington; County - Essex; County - Clinton; County - Franklin; Town; Village; Private		
Man Made Structur	e	Bridge; Culvert		
Structure Condition	1	Good - only minor; Fair - deteriorating; Poor - failing		
Outlet of Structure		Into River; Into Ditch; Into a Wetland; Into a Lake; N/A		
Structure Undermir	nd	No; Yes - Headwall; Yes - Culvert; Yes - Pier; Yes - Corrosion		
Vegetation Present		Grasses; Invasive Plants; Woody Shrubs; Mature Trees; None; Other		
Percent of Vegetation	on	0 - 100%		
Site Eroding		Ditch, Road Bank; Stream Bank; Hillside; Culvert Outlet		
Jurisdiction of Erosi	on	Private; State Right of Way; County; Town; Unknown		
Erosion Evident		Past Erosion; Continuous Erosior		
Cause of Erosion		Excess Velocity; Channelization; Natural Causes; Surface Runoff; Other		
Erosion Active	Y			
Stability of Area		Extremely Unstable; Needs Future Assistance; Stabilizing Naturally		
Size of Area		0.1 - 0.25 acres; 0.25 - 0.50 acres; 0.5 - 0.75 acres; 0.75 - 1.0 acres; 1.0 acres+		
Soil Type		Use soil texture triangle		
Soil Test Done		Yes; No		
Management Requ	ired	Hydroseeding; Rock Armour; Soil Remediation; Bio-Engineering; None; Other		
Resolvability		Simple; Moderate; Difficult		
,		ude watershed, name of waterbody, date, time, town, USGS Quad, field crew, tion, road name and distance to waterbody, measured in feet.		
Criteria for slope	e and level o	of erodibility were recorded in the field according to the following criteria:		
Slope	Steep	>2:1 or undercut		
Modera		e 2:1		
	Low	3:1		
Level of Erodibility	High	Bare loose soil / actively slumping / steep or undercut		
	Moderate	Semi-vegetated / some slumping evident / moderate slope		
	Low	High percentage of vegetation / soil is not actively slumping / low slope		

# SITE PRIORITIZATION

# ROADSIDE EROSION ASSESSMENT AND INVENTORY

A scored ranking system was created in order to analyze the data collected and place proper emphasis on the critical areas. This system ranks the order of the sites from high (critical) to low (non-critical) based on a numerical score calculated from selected criteria in Table 1. To keep the matrix usable, five parameters were chosen based on the direct connection to erosive processes;

- 1. Direct Connection or Proximity to Stream This criteria was chosen for the direct loading of sediment into a waterbody.
- 2. Percent Vegetation The fewer plant roots holding soil in place the more erosion occurs.
- 3. Level of Erodibility Indicative of whether slumping is actively occurring at the site.
- 4. Bank Slope Slope steepness increases the amount of soil lost during erosion.
- 5. Width x Length The more surface area exposed the more soil is lost.

The rankings of High, Moderate and Low were given a scoring range based on the Total Score calculated in Table 2, which has a maximum of 60 points. Each individual site was then ranked.

Ranking	Score
High	40 - 60
Moderate	31 - 39
Low	0 - 30

A general description of each ranking was then produced based on the attributes calculated in Table 2.

High	bare soil, steep bank, highly erodible material, possibly a direct connection to water body, large square footage; needs immediate maintenance either vegetative or structural.
Moderate	semi-vegetated bank, moderate slope, moderately erodible, no direct connection to water body, medium square footage; site can likely be remediated with vegetation.
Low	mostly vegetated, low slope, not highly erodible, small amount of square footage; may recover without maintenance, vegetation would help recovery.

Table 2. Prioritization Criteria for Ranking Eroding Road Banks

CRITERIA	POINTS		
Direct Connection or Proximity to Stream	10		
Percent Vegetation			
0 - 25%	15		
26 - 50%	10		
51 - 75%	5		
76 - 100%	1		
Level of Erodibility			
High	10		
Moderate	5		
Low	1		
Bank Slope			
Steep	10		
Moderate	5		
Gradual	1		
Width x Length			
> 2000	15		
1501 - 1999	10		
<1500	5		
Total Score			
Ranking	0 - 60		

# REMEDIATION PRACTICES

# **RESTORATION COSTS**

Several remediation practices can be used to help reduce or stop erosion from roadside banks. These practices are broken into two main categories, vegetative and structural techniques. Vegetative techniques consist of establishing grass and plants on eroded banks to hold soil in place. Structural techniques, which include stone stabilization and erosion control products, are used when vegetation alone will not stop the erosion.

Each site described in this plan has its own unique characteristics and therefore has its own management recommendation. Below, each technique is described along with the associated cost of implementing the management recommendations.

## **VEGETATIVE EROSION AND SEDIMENT CONTROL TECHNIQUES**

The traditional method of controlling sediment loss is to hand seed an area with grass seed and mulch to establish a root system that will help hold soil in place. Hand seeding can be labor intensive and is generally only recommended for small, flat areas that are easy to maintain. Although hand seeding is a proper method for establishing vegetation on some of the smaller sites described in this plan, a more efficient and cost effective way to establish vegetative cover is through hydroseeding.

**Hydroseeding** – Hydroseeding is the application of a slurry consisting of grass and vegetative seed, mulch, fertilizer and water, to large, bare soil areas. The traditional erosion control hydroseeding mix for the Champlain Watershed consists of annual and perennial rye, fescue and Kentucky bluegrass seed. Annual rye is used to establish quick vegetative cover and root systems while the



Photo courtesy of Essex County SWCD.

slower growing perennial grasses establish their root system. These are warm season grasses that should be applied in the early spring. There are also an array of seed mixtures used for different soils, site types and slopes, which include conservation mixes, reclamation mixes and dense seed mixes.

Mulch is added to the seed mix to ensure a uniform application of the seed and provide a medium to retain moisture. The standard mulch product is recycled paper, however higher-end mulches consist of engineered wood fiber and cotton products, which increase the soil adhesiveness of the mulch. All mulch products biodegrade over time once the grass has been established. Tackifiers and polyacrylamide soil binders can also be added to the mulch to augment the longevity of the mix, increase water absorption and reduce sediment loss. More complex hydroseeding measures, such as bonded fiber matrixes (BFM) or flexible growth media (FGM) consist of wood fibers and engineered tackifiers that hold the hydroseed slurry on steep slopes. Applying a bonded fiber matrix is much like applying a liquid erosion control blanket.

Crown vetch and clover seed can also be added to traditional grass seed mixes when there is a need for a more dense vegetative cover. These plants develop a deep root system that hold sediment and grow to produce a thicker vegetative cover over the eroded area. Clover also increases nitrogen fixation which causes a denser vegetative cover to form.

The general cost to hydroseed ranges from \$0.20 to \$0.30 per square foot, with deviations depending on the specific site needs, location and site size. All five county SWCDs within the Champlain Basin own and operate hydroseeders, and can provide this service to local and county DPWs through grant opportunities at little to no cost.

**Woody Plant Installation** - Woody plants (shrubs) establish deep, supporting root systems that hold soil in place more effectively than grass. Woody plants are used in erosion and sediment control as a supplement to traditional hydroseeding and when there is a need for a higher aesthetic value. Shrubs are generally chosen for their appropriateness to the site conditions, their root network characteristics, and cost.

The general cost of adding woody plants is between \$5 - \$50 per plant, depending on the species and size of plants used.

# STRUCTURAL EROSION AND SEDIMENT CONTROL TECHNIQUES

**Stone Lining Ditches** – Lining a ditch with stone slows water velocity, catches debris and provides erosion protection. This practice is generally recommended when vegetative measures are not adequate for the water velocity in the ditch, or the ditch is too wet to establish vegetation. Angular (blasted quarry) rock is the preferred material, due to its ability to lock in together more tightly and remain in place under higher flow conditions as compared to rounder cobbles. The ditch should be underlain with a non-woven filter fabric (felt-like material), to minimize "piping" of sediment up through the stone causing further erosion. Although stone lining is



Highway department lining roadside ditch with stone, Essex County. Photo courtesy of Essex County SWCD.

an easy practice to install with heavy equipment, it requires regular maintenance to remove built up sediment and debris to ensure it is properly functioning.

Currently, the cost of stone is around \$10.00 per ton, plus delivery fee and installation costs.

Erosion Control Blankets – Erosion control blankets, or "rolled erosion control products," can provide an instant level of protection for eroding roadbanks and ditches. Traditionally, they are seven feet wide and 30 - 50 feet long and are manufactured from an array of materials including straw, coconut fiber and polypropylene. They can be used alone to reduce sediment loss or placed over seed that has been spread on bare soil to protect the seed during germination and growth. The erosion control blankets also provide a structural component to keep mulch and seed in place.

The cost for erosion control blankets range from \$1 to \$4 per square yard (depending upon the level of protection needed), and are easy to install.

**Toe Stabilization** – This method refers to stabilizing the bottom of a bank, which is key in the protection of the stability of an entire slope. This is done by excavating the base of the slope (the toe), then installing angular rock at the base to stop the eroding hill from mass-erosion events such as slumping and

rotational slips. Costs to stabilize the toe of a bank are incurred with the cost of the necessary amount of stone as well as labor and equipment costs.

**Check Dams** – Check dams can be constructed temporarily or permanently from stone and are used to remove course to medium sized sediment. This is done by slowing down the water velocity and allowing large sediment particles to settle out of suspension. There are many factors that go into constructing a check dam out of stone, but one important factor is to use well graded stone in a variety of sizes. Rip rap can be used as a temporary structure or river rock can be left in place permanently.

Triangular silt dikes TM, or other manufactured check dams, can be used temporally when they are placed across a ditch or conveyance system. They can be used in place of stone check dams and follow the same standards and specifications as described in the NYS Standards and Specifications for Erosion and Sediment Control. They are easy to install and can be done with one person, whereas stone check dams require trucking and heavy equipment.

With all check dams, the upstream end needs to be cleaned out regularly to avoid the build up and overflow of sediment. For the purposes of this report, check dams should be used as a secondary measure to keep sediment from flowing down the conveyance system, while still using traditional erosion and sediment control techniques to keep sediment on the eroding slope.

Generally, the cost of constructing a stone check dam is the cost of stone and labor. Triangular silt dikes TM cost around \$150.00 a piece, and are removable and re-usable.

**Sediment Traps** – Sediment traps are small detention ponds that stop water movement and allow all sizes of sediment to settle out of suspension. They are usually installed at a point of discharge to reduce sediment travel from an eroding site. Just as check dams, they need to be cleaned out regularly and should be used as a secondary measure to traditional erosion and sediment control techniques.

The most critical element of building a sediment trap is its size. If the trap is too small, as is often the case, a large storm event can wash the sediments out of the trap, rendering it useless. In general, the larger the trap, the better, as long as traditional highway department equipment can reach all parts of the trap for cleanout. The traps need to be accessible for regular cleanout activities, and constructed in such a way that the highway department does not need special easements, agreements, or equipment to maintain the traps long-term.

Building sediment traps usually does not require the purchase of outside materials, only a backhoe to dig the trap. Some may want to line the trap with stone, but there is a high likelihood that the stone will be removed during maintenance activities.



# OVERALL FINDINGS

# ROADSIDE EROSION ASSESSMENT AND INVENTORY

Throughout the five counties that make up the New York State Champlain Watershed a total of 319 roadside erosion sites were identified with a total remediation cost of \$1.7 million. Of these, 117 were identified as high priority, 77 as moderate priority and 125 as low priority sites.

The land area of Essex County is the largest in the NY Champlain Watershed and, as such, contains the greatest number of roadside erosion sites (Table 3). With roadways traversing steep topography, harsh growing conditions, and poor soils, Essex County boasts the highest remediation costs of the five counties at \$1.4 million. Several sites within the county require major structural corrective actions in addition to traditional remediation techniques such as hydroseeding and installation of sediment control practices. Many of Essex County's 'high-ticket' items can be attributed to the severe damage produced by the 2011 tropical storms Irene and Lee. Widespread roadside erosion from the storms will require a multitude of expensive repairs and stabilization practices throughout the county.

Surprisingly, Franklin County has the second highest number of roadside erosion sites despite the comparatively small land mass within the watershed. Similar to Essex County, the soils in Franklin County consist of highly erodible, poorly vegetated sands and gravels. It is important to note, however, that the majority of Franklin County's sites score as low priority, and can most likely be remediated through expanding the county SWCD's hydroseeding program.

The majority of roadside erosion sites assessed in Clinton County were found in the higher elevation areas in the western and southern portions of the county. Expectedly, the predominant soil types in these locations are the un-vegetated, unstable sands and gravels. The same trend explains the low number of sites assessed in Washington County, where the majority of the roadside erosion locations were discovered in the higher elevation sandy soil areas, not in the clay and silt-laden lowlands.

Unlike the clay and sand soil mixtures of Clinton, Essex and Washington Counties, Warren County is dominated exclusively by sandy soils. In comparison, there are the same amount of erosion sites throughout the large land mass of Clinton County's watershed as the smaller acreage of Warren County's watershed. The area within Warren County's Lake

Table 3. Number of high, moderate and low priority erosion sites per county.						
	Number of Sites per Priority			Percentage of sites in	Total	
County	High	Moderate	Low	Champlain Watershed	Restoration Costs per County	
Clinton	22	6	6	11%	\$91,150	
Essex	50	39	42	40%	\$1,443,650	
Franklin	14	13	62	28%	\$72,700	
Warren	19	8	7	11%	\$35,350	
Washington	12	11	8	10%	\$65,750	

TOWNSHIP	COUNTY	SUBWATERSHED	TOTAL # OF EROSION SITES IDENTIFIED	TOTAL RESTORATION COST
Altona	Clinton	Chazy River	1	\$5000
Ausable	Clinton	Ausable River	3	\$8500
Beeckmantown	Clinton	Saranac River	1	\$2000
Black Brook	Clinton	Saranac River/Ausable River	13	\$33,750
Bolton	Warren	Lake George	15	\$15,100
Brighton	Franklin	Saranac River	3	\$1300
Chesterfield	Essex	Lake Champlain/Ausable River	8	\$4600
Crown Point	Essex	Lake Champlain	9	\$9700
Dannemora	Clinton	Saranac River	2	\$2500
Dresden	Washington	South Lake Champlain	1	\$600
Elizabethtown	Essex	Boquet River	10	\$14,300
Essex	Essex	Boquet River/Lake Champlain	6	\$152,500
Fort Ann	Washington	South Lake Champlain/Lake George/Halfway Brook	7	\$13,000
Franklin	Franklin	Saranac River	56	\$54,200
Granville	Washington	Mettawee River	2	\$10,000
Hague	Warren	Lake George	2	\$1000
Hampton	Washington	Poultney River	2	\$15,650
Harrietstown	Franklin	Saranac River	26	\$15,200
Hartford	Washington	South Lake Champlain	5	\$5700
Jay	Essex	Ausable River	12	\$17,600
Keene	Essex	Ausable River	13	\$25,600
Kingsbury	Washington	Halfway Brook / Champlain Canal	2	\$4750
Lake George	Warren	Lake George	4	\$5750
Lewis	Essex	Boquet River	3	\$2300
Moriah	Essex	Lake Champlain	11	\$211,700
North Elba	Essex	Ausable River	13	\$41,800
Peru	Clinton	Ausable River	2	\$2500
Putnam	Washington	South Lake Champlain/Lake George	4	\$5000
Queensbury	Warren	Halfway Brook	13	\$13,500
Santa Clara	Franklin	Saranac River	4	\$2000
Saranac	Clinton	Saranac River	10	\$36,900
St. Armand	Essex	Saranac River	7	\$4950
Ticonderoga	Essex	Lake Champlain	4	\$2000
Westport	Essex	Boquet River/Lake Champlain	24	\$901,200
Whitehall	Washington	South Lake Champlain/Mettawee River	8	\$11,050
Willsboro	Essex	Boquet River	2	\$20,500
Wilmington	Essex	Ausable River	9	\$34,900
		TOTAL	319	\$1,708,600

the potential for erosion.

remediation do not fall solely on the township.

Total roadside erosion sites identified per major sub- Keeseville. watershed can be found in Table 5. The greatest number of erosion sites per major subwatershed is There is also a substantial number of high priority erosion erosion rate than the clay soils found closer to Lake sediment deposition primarily impacts the lake. Champlain, accounting for the highest number

Champlain Basin is also considerably more developed of high priority sites. However, the majority of the than other areas of the watershed, equating to more sites have been ranked as low priority and can most extensive, heavily traveled road corridors, increasing likely be remediated through increasing the county hydroseeding efforts.

Table 4 presents each township within the watershed, The Ausable River watershed has the second greatest the major sub-watershed it is within, the total number of high priority roadside erosion sites of all of erosion sites and the total restoration costs for the river basins. This can be attributed to the Ausable roads within the town boundaries. It is important to River's massive drainage area including the Main, note that the total number of erosion sites in Table East, and West Branches of the river that extend into 4 includes sites found on state, county, town and the High Peaks region of the Adirondack Mountains. private roads, and therefore the costs reported for It is the dominant river basin within Essex County and also drains land in Clinton County, where the river empties into Lake Champlain in the Town of

within the Saranac River sub-basin, encompassing sites located in close proximity to draining directly into acreage in Franklin, Essex and Clinton Counties. The Lake Champlain. The majority of these sites are located soils within the Saranac River basin are primarily in Essex County with a small number in Washington upland sands and gravels, and have a higher County. These areas should be key focus locations as

Table 5. Number of high, moderate and low priority erosion sites per major subwatershed.

Major	Numb	Percentage of sites in		
Subwatershed	High	Moderate	Low	Champlain Watershed
Ausable River	25	17	20	20%
Boquet River	9	7	9	8%
Champlain Canal	1	0	0	0%
Chazy River	2	0	0	1%
Halfway Brook	5	5	4	4%
Lake Champlain	27	18	16	19%
Lake George	16	6	5	8%
Mettawee River	3	4	2	3%
Poultney River	1	0	1	1%
Saranac River	28	20	68	36%

<sup>\*</sup>The data for the Ausable River includes all branches and data presented for Lake Champlain includes north, main and south basins.

The remaining subwatersheds all have comparative numbers of sites, with the Lake George basin having the greatest number of high priority sites. This again can be attributed to the sandy soils in Warren County and the more extensive roads networks.

The highest percentage of roadside erosion sites fall under the jurisdiction of the towns, followed by county and then state jurisdiction (Table 6). This result can be attributed to the larger number of miles of town roads within the watershed than county or state roads. Three high priority sites were identified on private roads, where remediation responsibilities and costs are the individual landowners. The Unknown Jurisdiction site identified is located in Franklin County and straddles both private and town jurisdictions. This site remediation is complicated and would likely require certain actions and compromises involving both owners.

Overall, this roadside erosion inventory and assessment project has produced valuable data on the restoration and stabilization of roadside erosion sites within the Champlain Watershed. Secondly, the project has pin-pointed areas to monitor for further sediment loading into Lake Champlain and its tributaries.

The remainder of this document provides specific information for each individual site broken up by county and alphabetized by town. The high priority sites are documented first, followed by the moderate and low priority sites. Town and county wide maps have also been created. The information contained herein is intended to provide state, county and town highway supervisors and crews with general site information for future remediation efforts and help foster stronger partnerships with the LCLGRPB, CWICNY and their county SWCD's.

Table 6. Number of high, moderate and low priority erosion sites per road jurisdiction.

	Road Jurisdiction		Number of Sites per Priority			
			Moderate	Low	of sites in Champlain Watershed	
State		5	5	12	7%	
County		33	18	27	24%	
Town		76	53	86	68%	
Private		3	0	0	1%	
Unknown		0	1	0	0%	



LCLGRPB \ 2012



Clinton County is geographically situated in the northeastern most corner of New York State. The County shares its entire northern border with Quebec, Canada, flanked on the east by Lake Champlain and the Adirondack Mountains to the west and south. Topographically, the County slopes gradually from the Adirondacks highlands to the eastern agricultural lowlands and shores of Lake Champlain. Clinton County is comprised predominantly of rural farmland and woodland with one main urbanized area, the City of Plattsburgh. All 14 towns and four villages in the county lie partially or wholly within the Champlain Watershed. Hundreds of miles of roadways connect municipalities and residents throughout the county and are comprised of gravel or asphalt surfaces that receive varying degrees of maintenance.

Clays and loams are the predominant soils throughout the agricultural lands in the county while easily-erodible fine sands and gravely soils are consistent throughout the higher elevation woodlands. There are three main river basins within the county; the Ausable River, Chazy River (includes both the Great Chazy River and the Little Chazy River) and Saranac River. Both

Chazy Rivers originate in the western part of Clinton County and flow east through the most intensive agricultural areas in New York State and discharge into northern Lake Champlain. Saranac River originates near Upper Saranac Lake in Franklin County and flows east through Clinton County into the City of Plattsburgh, where it ultimately discharges into northern Lake Champlain. The Saranac River is known for its diverse fisheries, most notably landlocked salmon.

In all, 34 roadside erosion sites were identified on state, county and town roads throughout eight municipalities. Of these, 22 are High Priority, 6 are Moderate Priority and 6 are Low Priority. Primarily, the locations in Clinton County are experiencing erosion due to steep slopes and long-term inability to stabilize and re-vegetate due to low soil nutrient levels. The primary recommendations for remediating the identified sites are vegetating through hydroseeding and placement/installation of erosion and sediment control structures on steep slopes and roadside ditches. The remediation cost for the sites range from \$350 to \$12,000. The cumulative remediation costs for the 34 sites in Clinton County totals \$91,150.

# **CLINTON COUNTY SITES**

# TOWN | MAJOR SUBWATERSHEDS | ROADS

T	Num	Percentage		
Town	High	Moderate	Low	of sites in County
Altona	1	0	0	3%
Ausable	3	0	0	9%
Beekmantown	1	0	0	3%
Black Brook	7	2	4	38%
Dannemora	1	0	1	6%
Peru	2	0	0	6%
Saranac	7	4	1	35%

Major	Number of Sites per Priority			Percentage
Subwatershed	High	Moderate	Low	of sites in County
Ausable River	9	1	0	29%
Chazy River	2	0	0	6%
Saranac River	11	5	6	65%

Road	Number of Sites per Priority			Percentage
Jurisdiction	High	Moderate	Low	of sites in County
State Roads	0	1	1	6%
County Roads	7	1	2	29%
Town Roads	14	4	3	62%
Private Roads	1	0	0	3%

# TOWNS OF ALTONA & ALISABLE

22		TOWNS OF ALI	IONA & AUSABLE
IDENTIFICATION #1		IDENTIFICATION #30	
Town Altona		Town Ausable	
Road Name Irona Road  Jurisdiction County  Watershed Chazy River		Road Name Dry Bridge Road  Jurisdiction County  Watershed Ausable River	
Direct connection to water	Yes - Culvert	Direct connection to water	Yes - Wetland
% of Vegetation	0	% of Vegetation	0
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	100	Length of Erosion (ft)	75
Width of Erosion (ft)	50	Width of Erosion (ft)	75
Total Area of Erosion (ft²)	5000	Total Area of Erosion (ft²)	5625
Soil Type	Sandy loam	Soil Type	Coarse sand & gravel
Management Recommendations	Hydroseed with clover and rye	Management Recommendations	Hydroseed with reclamation mix
Cost	\$4000 - \$5000	Cost	\$1500 - \$2500
Total Points	50	Total Points	60
Rank	High	Rank	High
IDENTIFICATION #31		IDENTIFICATION #32	
Town Ausable	The state of the s	Town Ausable	
Road Name Clintonville Road		Road Name Clintonville Road	
Jurisdiction County	1	Jurisdiction County	No. of the last of
Watershed Ausable River	A PROPERTY OF THE PARTY OF THE	Watershed Ausable River	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	15	% of Vegetation	15
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	75	Length of Erosion (ft)	75
Width of Erosion (ft)	30	Width of Erosion (ft)	30
Total Area of Erosion (ft <sup>2</sup> )	2250	Total Area of Erosion (ft <sup>2</sup> )	2250
Soil Type	Fine Sand	Soil Type	Fine sand
Management Recommendations	Hydroseed with reclamation mix	Management Recommendations	Install sediment trap and hydroseed with reclamation mix
Cost	\$2500 - \$3500	Cost	\$1500 - \$2500
Total Points	50	Total Points	50
Rank	High	Rank	High

# TOWNS OF BEEKMANTOWN & BLACK BROOK

#### **IDENTIFICATION #2 IDENTIFICATION #18** Town Town Beekmantown Black Brook Bear Town Road Road Name Soucy Road Road Name Jurisdiction Jurisdiction Town Town Watershed Saranac River Watershed Saranac River Direct connection to water Direct connection to water No 30 30 % of Vegetation % of Vegetation Bank Slope Bank Slope Steep Steep Level of Erosion Level of Erosion Moderate Hiah Length of Erosion (ft) Length of Erosion (ft) 125 150 Width of Erosion (ft) 20 Width of Erosion (ft) 75 Total Area of Erosion (ft<sup>2</sup>) 2500 Total Area of Erosion (ft<sup>2</sup>) 11,250 Sandy gravel Soil Type Sandy Soil Type Management Hydroseed with conserva-Management Re-grade slope, install Recommendations tion mix and tackifier Recommendations woody plants and hydroseed \$1500 - \$2000 \$4500 - \$6000 Cost Cost **Total Points** 40 **Total Points** 45 Rank High Rank High **IDENTIFICATION #24 IDENTIFICATION #19** Town Town Black Brook Black Brook Road Name Silver Lake Road Road Name Cass Road Jurisdiction Town Jurisdiction County Watershed Saranac River Watershed Saranac River Direct connection to water Direct connection to water No Yes - Lake % of Vegetation 0 40 % of Vegetation Bank Slope Bank Slope Steep Steep Level of Erosion High Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) 250 75 4 10 Width of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 1000 Total Area of Erosion (ft<sup>2</sup>) 750 Soil Type Sand Soil Type Sandy loam and gravel Management Management Re-grade slope and hydroseed Hydroseed Recommendations Recommendations with conservation mix Cost \$350 - \$550 Cost \$500 - \$650 **Total Points Total Points** 40 40 Rank High Rank High

## **IDENTIFICATION #25**

## Town Black Brook

Road Name Forestdale Road Jurisdiction Town Watershed Ausabla Pivo



# IDENTIFICATION #27

## Town Black Brook

Road Name Guide Board Road Jurisdiction County Watershed Ausahle Piv



vvatersned Ausable River	A PARTY OF THE PAR	watersned Ausable River	AND THE RESERVE OF THE PARTY OF
Direct connection to water	Yes - Wetland	Direct connection to water	Yes - Stream
% of Vegetation	50	% of Vegetation	30
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	75	Length of Erosion (ft)	2500
Width of Erosion (ft)	10	Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	750	Total Area of Erosion (ft²)	12,500
Soil Type	Sandy gravel	Soil Type	Sandy
Management	Re-grade slope and hydroseed	Management	Hydroseed with
Recommendations	with conservation mix	Recommendations	conservation mix
Cost	\$500 - \$650	Cost	\$4000 - \$5000
Total Points	40	Total Points	45
Rank	High	Rank	High

# IDENTIFICATION #28

## Town Black Brook

Jurisdiction Private

Road Name Narrows Road

Watershed Ausahle Rive



# **IDENTIFICATION #29**

Town

Black Brook

Road Name Golf Course Road Jurisdiction Town

Watershed Ausahle Rive



vvatersned Ausable River	The second second	Watershed Ausable River	The state of the s
Direct connection to water	Yes - Lake	Direct connection to water	No
% of Vegetation	50	% of Vegetation	5
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	300	Length of Erosion (ft)	150
Width of Erosion (ft)	50	Width of Erosion (ft)	40
Total Area of Erosion (ft <sup>2</sup> )	15,000	Total Area of Erosion (ft²)	6000
Soil Type	Sandy gravel	Soil Type	Fine sand
Management Recommendations	Install check dam and sediment catch basin, hydroseed	Management Recommendations	Re-grade slope and hydroseed with conservation mix
Cost	\$5500 - \$6500	Cost	\$2000 - \$3000
Total Points	50	Total Points	50
Rank	High	Rank	High

# TOWN OF BLACK BROOK

#### **IDENTIFICATION #23 IDENTIFICATION #26** Town Town Black Brook Black Brook Union Falls/ Road Name Silver Lake Road Road Name Goodrich Mills Road Jurisdiction Town Jurisdiction County Watershed Ausable River Watershed Saranac River Direct connection to water No Direct connection to water Yes - Wetland 45 75 % of Vegetation % of Vegetation Bank Slope Moderate Bank Slope Steep Level of Erosion Level of Erosion Moderate Moderate Length of Erosion (ft) 250 Length of Erosion (ft) 150 15 10 Width of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) Total Area of Erosion (ft<sup>2</sup>) 3750 1500 Soil Type Fine sand Soil Type Coarse sand Install check dam and sediment Re-grade slope and hydroseed Management Management Recommendations catch basin, hydroseed Recommendations with conservation mix \$600 - \$750 Cost \$1500 - \$2500 Cost **Total Points** 35 **Total Points** 35 Rank Moderate Rank Moderate **IDENTIFICATION #20 IDENTIFICATION #17** Town Town Black Brook Black Brook Road Name Silver Lake Road Road Name Cass Road Jurisdiction County Jurisdiction Town Watershed Saranac River Watershed Saranac River Direct connection to water No Direct connection to water No % of Vegetation 40 % of Vegetation 80 Bank Slope Moderate Bank Slope low Level of Erosion Level of Erosion Moderate Low Length of Erosion (ft) 300 Length of Erosion (ft) 300 5 Width of Erosion (ft) 3 Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) Total Area of Erosion (ft<sup>2</sup>) 900 1500 Soil Type Sandy loam Soil Type Sandy Hydroseed with Management Install 2 check dams Management Recommendations and hydroseed Recommendations conservation mix Cost \$600 - \$800 Cost \$300 - \$400 Total Points **Total Points** 21 11 Rank Low Rank Low

# TOWNS OF BLACK BROOK & DANNEMORA

## **IDENTIFICATION #21**

# Town

Black Brook

Jurisdiction Town

Road Name Casey Road

Watershed Saranac River



## **IDENTIFICATION #22**

## Town Black Brook

Road Name Union Falls Road Jurisdiction County Watershed Saranac River



Watershed Saranac River	と	Watershed Sarahac River	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	80	% of Vegetation	60
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	125	Length of Erosion (ft)	5000
Width of Erosion (ft)	10	Width of Erosion (ft)	4
Total Area of Erosion (ft <sup>2</sup> )	1250	Total Area of Erosion (ft <sup>2</sup> )	20,000
Soil Type	Sandy	Soil Type	Course Sand
Management	Hydroseed with	Management	Hydroseed with
Recommendations	conservation mix	Recommendations	conservation mix
Cost	\$350 - \$450	Cost	\$5000 - \$6500
Total Points	8	Total Points	22
Rank	Low	Rank	Low
IDENTIFICATION #5		IDENTIFICATION #4	

# **IDENTIFICATION #5**

## Town Dannemora

Road Name Wilfred Kind Road Jurisdiction Town

Watershed Chazy Rive



## Town Dannemora

Road Name State Route 374 Jurisdiction State

Watershed Saranac Rive



watersned Chazy River		watershed Sarahac River	<b>建筑建设工作,</b>
Direct connection to water	Yes - Lake	Direct connection to water	No
% of Vegetation	0	% of Vegetation	60
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	High	Level of Erosion	Moderate
Length of Erosion (ft)	150	Length of Erosion (ft)	250
Width of Erosion (ft)	15	Width of Erosion (ft)	4
Total Area of Erosion (ft²)	2250	Total Area of Erosion (ft²)	1000
Soil Type	Gravel	Soil Type	Sandy
Management Recommendations	Install 2 sediment traps and hydroseed	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$1500 - \$2000	Cost	\$300 - \$500
Total Points	60	Total Points	20
Rank	High	Rank	Low

# TOWNS OF PERU & SARANAC

IDENTIFICATION #33		IDENTIFICATION #34	
Town Peru		Town Peru	
Road Name Fuller Street		Road Name Fuller Street	THE RESERVE THE PARTY OF THE PA
Jurisdiction Town		Jurisdiction Town	
Watershed Ausable River		Watershed Ausable River	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	5	% of Vegetation	25
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	65	Length of Erosion (ft)	250
Width of Erosion (ft)	30	Width of Erosion (ft)	20
Total Area of Erosion (ft <sup>2</sup> )	1950	Total Area of Erosion (ft²)	5000
Soil Type	Sandy Loam	Soil Type	Sandy gravel
Management Recommendations	Hydroseed with conservation mix	Management Recommendations	Install 2 check dams and hydroseed with conservation mix
Cost	\$400 - \$500	Cost	\$1500 - \$2000
Total Points	40	Total Points	50
Rank	High	Rank	High
IDENTIFICATION #3		IDENTIFICATION #6	
Town Saranac		Town Saranac	
Road Name Town Line Road		Road Name Soper Street	10. 1 Table 1
Jurisdiction Town		Jurisdiction Town	人分子學學
Watershed Saranac River		Watershed Saranac River	<b>加盟計畫是一次的工作</b>
Direct connection to water	No	Direct connection to water	No
% of Vegetation	50	% of Vegetation	10
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	3000	Length of Erosion (ft)	75
Width of Erosion (ft)	10	Width of Erosion (ft)	75
Total Area of Erosion (ft <sup>2</sup> )	30,000	Total Area of Erosion (ft²)	5625
Soil Type	Sandy gravel	Soil Type	Sand
Management	Install check dams every	Management	Install erosion blankets and
Recommendations	100' and hydroseed	Recommendations	sediment traps, hydroseed
Cost	\$6000 - \$8000	Cost	\$2500 - \$3000
Total Points		I = . 16 + .	
TOTALL OILLS	45	Total Points Rank	50

IDENTIFICATION #8		IDENTIFICATION #12	
Town Saranac		Town Saranac	
Road Name Priest Road		Road Name True Brook Road	
Jurisdiction Town		Jurisdiction Town	
Watershed Saranac River		Watershed Saranac River	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	25	% of Vegetation	15
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	125	Length of Erosion (ft)	200
Width of Erosion (ft)	30	Width of Erosion (ft)	15
Total Area of Erosion (ft²)	3750	Total Area of Erosion (ft²)	2000
Soil Type	Sandy gravel	Soil Type	Sand and gravel
Management	Install erosion blankets and	Management	Hydroseed with
Recommendations	sediment traps & hydroseed	Recommendations	conservation mix
Cost	\$2500 - \$3500	Cost	\$600 - \$1000
Total Points	50	Total Points	50
Rank	High	Rank	High
IDENTIFICATION #14		IDENTIFICATION #15	
Town Saranac		Town Saranac	
Road Name True Brook Road		Road Name Cold Brook Road	
Jurisdiction Town	The state of the s	Jurisdiction Town	
Watershed Saranac River		Watershed Saranac River	是是一种人们的特殊
Direct connection to water	No	Direct connection to water	No
% of Vegetation	20	% of Vegetation	25
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	High	Level of Erosion	Moderate
Length of Erosion (ft)	250	Length of Erosion (ft)	250
Width of Erosion (ft)	30	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	7500	Total Area of Erosion (ft²)	2500
Soil Type	Sand	Soil Type	Sand
Management Recommendations	Hydroseed with conservation mix	Management Recommendations	Hydroseed with conservation mix
Cost	\$1000 - \$1500	Cost	\$600 - \$800
Total Points	50	Total Points	40
Rank	High	Rank	High

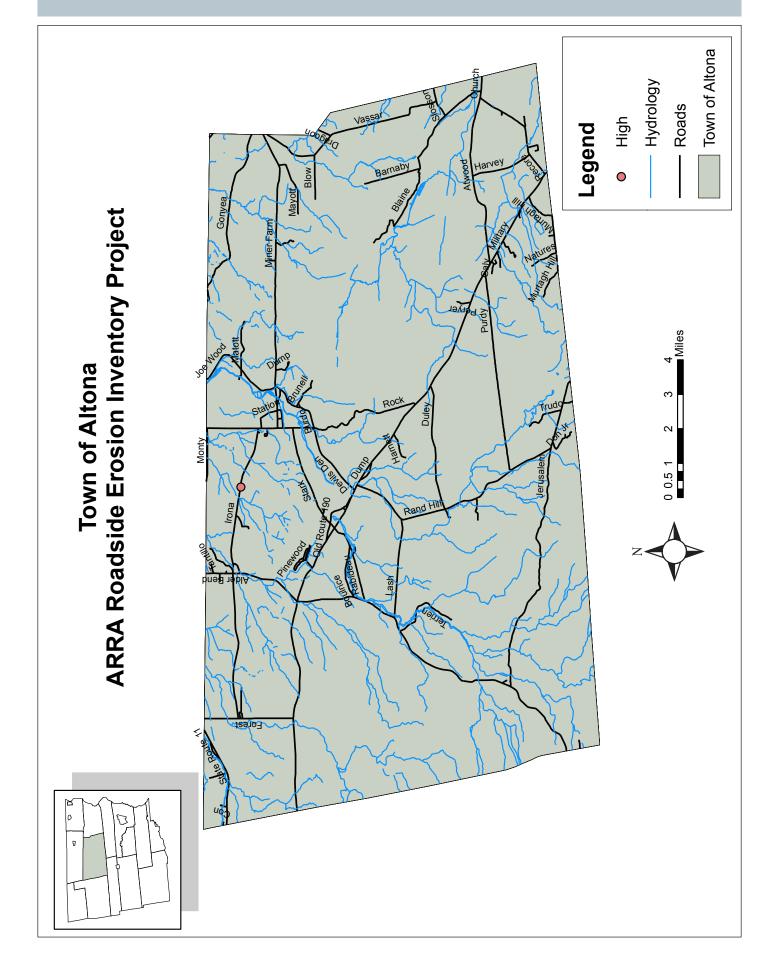
# TOWN OF SARANAC

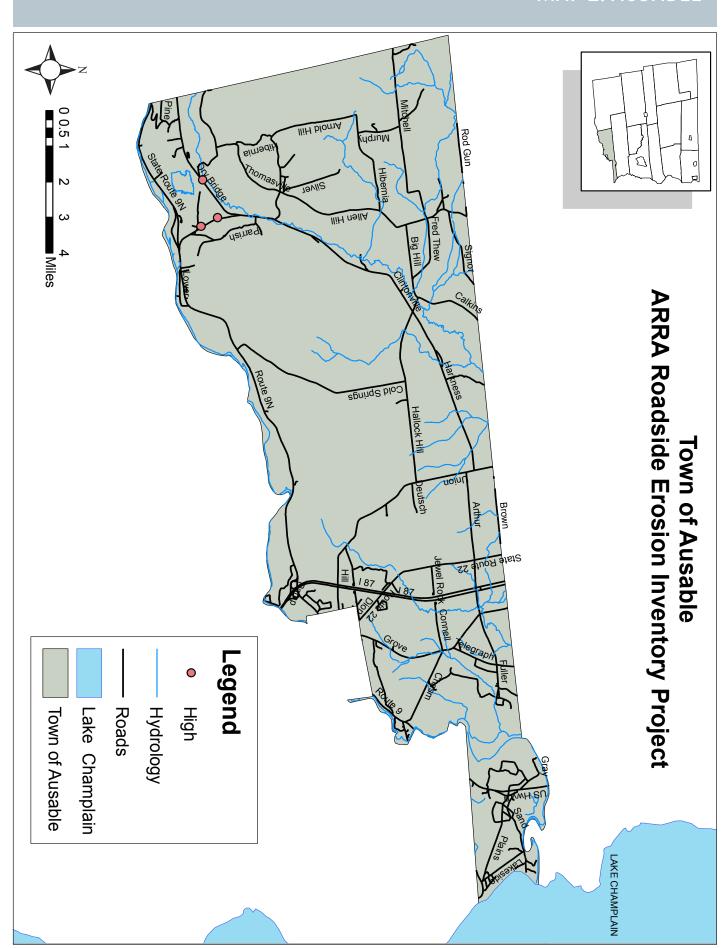
#### **IDENTIFICATION #16 IDENTIFICATION #7** Town Town Saranac Saranac Road Name Standish Road Road Name State Route 3 Jurisdiction State Jurisdiction County Watershed Saranac River Watershed Saranac River Direct connection to water Yes - Brook Direct connection to water No 10 % of Vegetation 30 % of Vegetation Bank Slope Bank Slope Steep Low Level of Erosion High Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) 500 400 Width of Erosion (ft) 7 Width of Erosion (ft) 30 Total Area of Erosion (ft<sup>2</sup>) 15,000 Total Area of Erosion (ft<sup>2</sup>) 2800 Soil Type Sand and gravel Soil Type Sandy loam Management Install sediment traps, erosion blan-Management Hydroseed with kets, woody plants and hydroseed Recommendations **Recommendations** crown vetch mix \$400 - \$500 Cost \$10,000 - \$12,000 Cost Total Points 60 **Total Points** 36 Rank Rank Moderate High **IDENTIFICATION #10 IDENTIFICATION #11** Town Town Saranac Saranac Road Name Clark Hill Road Road Name Plumadore Road Jurisdiction Town Jurisdiction Town Watershed Saranac River Watershed Saranac River Direct connection to water No Direct connection to water No % of Vegetation 45 50 % of Vegetation Moderate Bank Slope Bank Slope Steep Level of Erosion Level of Erosion Moderate High Length of Erosion (ft) Length of Erosion (ft) 750 125 10 Width of Erosion (ft) Width of Erosion (ft) 10 Total Area of Erosion (ft<sup>2</sup>) Total Area of Erosion (ft<sup>2</sup>) 7500 1250 Soil Type Sand Soil Type Sandy loam Management Install sediment traps and hy-Management Hydroseed with Recommendations droseed with conservation mix Recommendations conservation mix \$2500 - \$3000 Cost Cost \$850 - \$1000 **Total Points Total Points** 35 35 Rank Moderate Rank Moderate

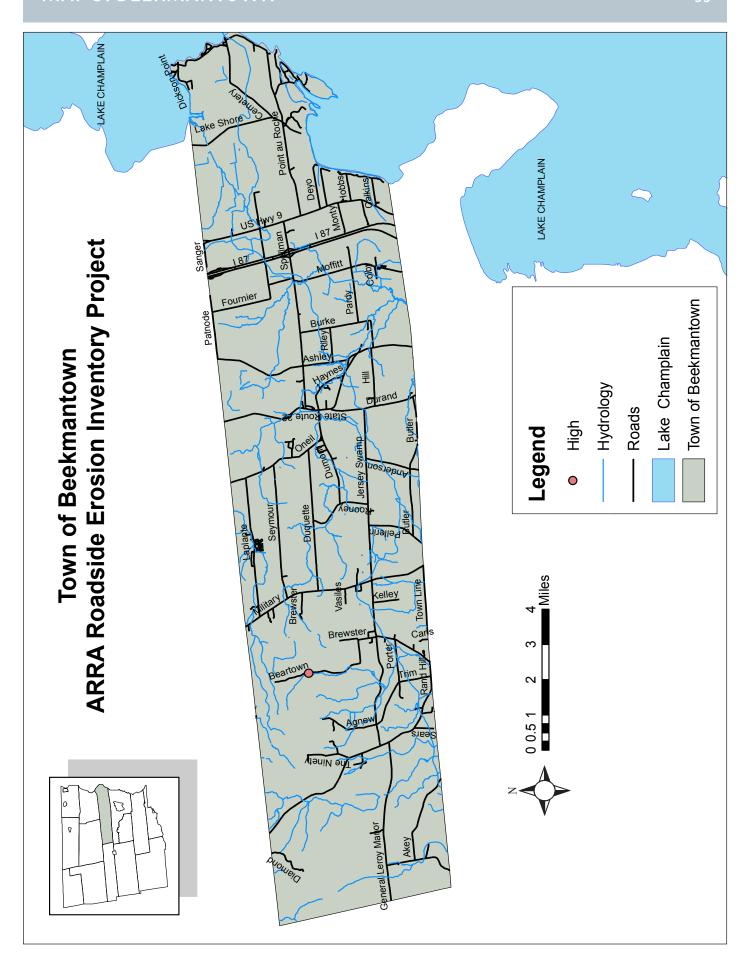
# TOWN OF SARANAC

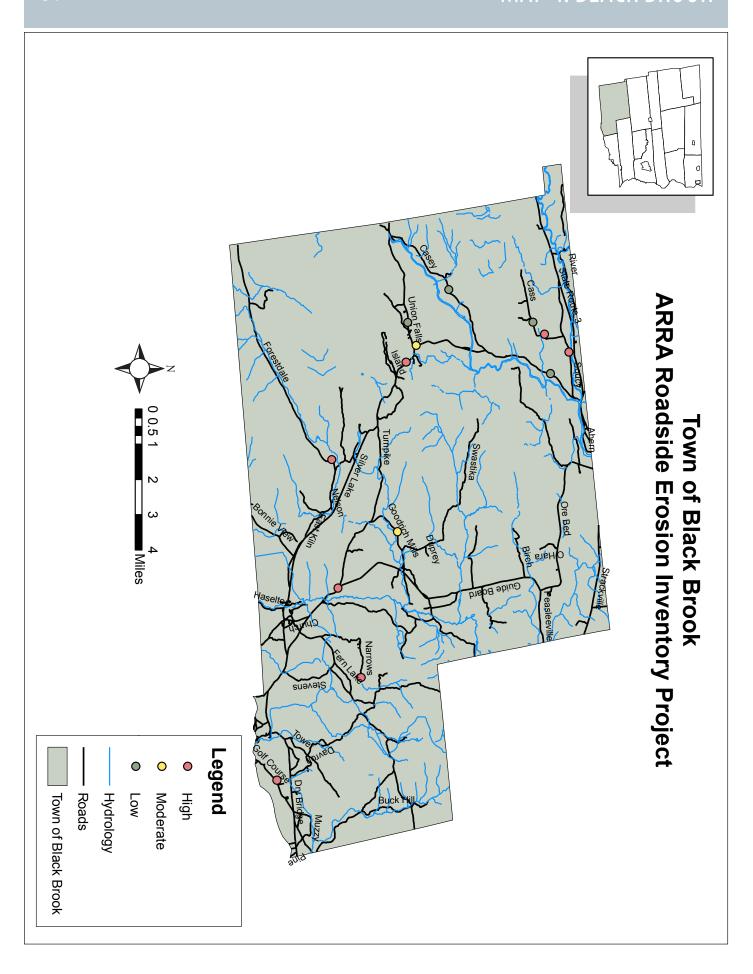
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IDENTIFICATION #13		IDENTIFICATION #9	
Town Saranac		Town Saranac	
Road Name True Brook Road		Road Name Clark Hill Road	
Jurisdiction Town	MATCHE STATE OF THE PARTY OF TH	Jurisdiction Town	
Watershed Saranac River	and the same of the same of	Watershed Saranac River	Part of the
Direct connection to water	No	Direct connection to water	No
% of Vegetation	20	% of Vegetation	75
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	150	Length of Erosion (ft)	1500
Width of Erosion (ft)	10	Width of Erosion (ft)	5
Total Area of Erosion (ft²)	1500	Total Area of Erosion (ft²)	7500
Soil Type	Sandy	Soil Type	Sandy loam
Management Recommendations	Hydroseed with conservation mix	Management Recommendations	Hydroseed with conserva- tion mix and crown vetch
Cost	\$400 - \$600	Cost	\$1500 - \$2000
Total Points	35	Total Points	30
Rank	Moderate	Rank	Low

MAP 1. ALTONA

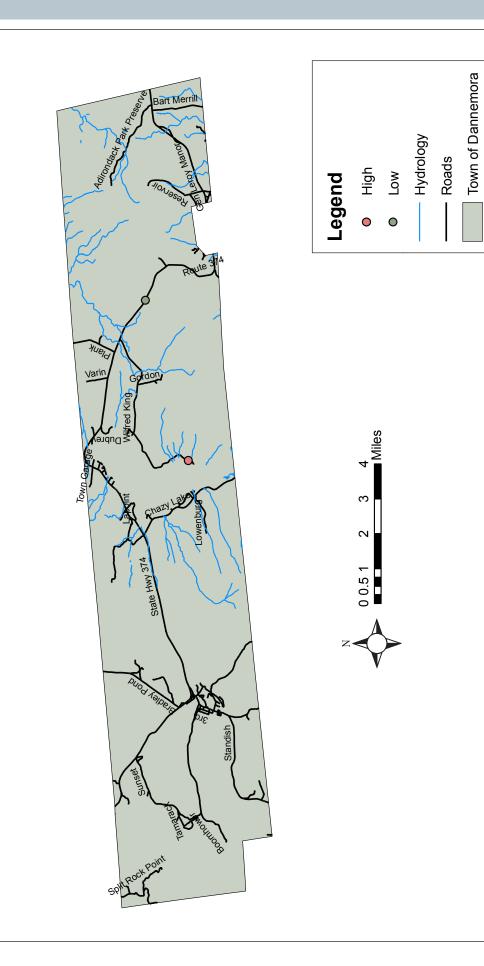


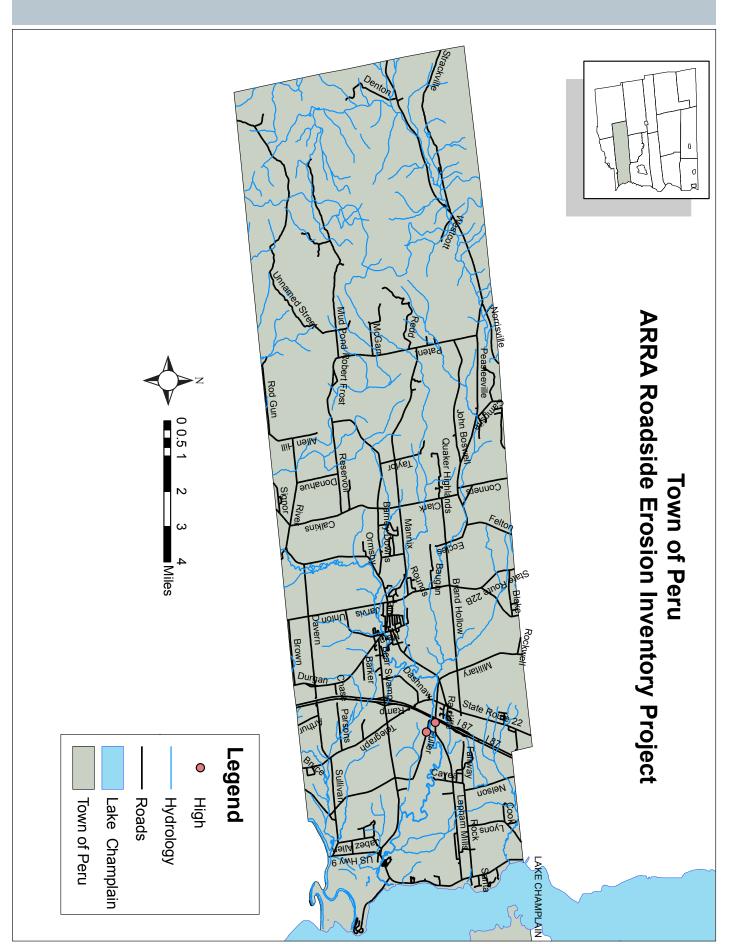


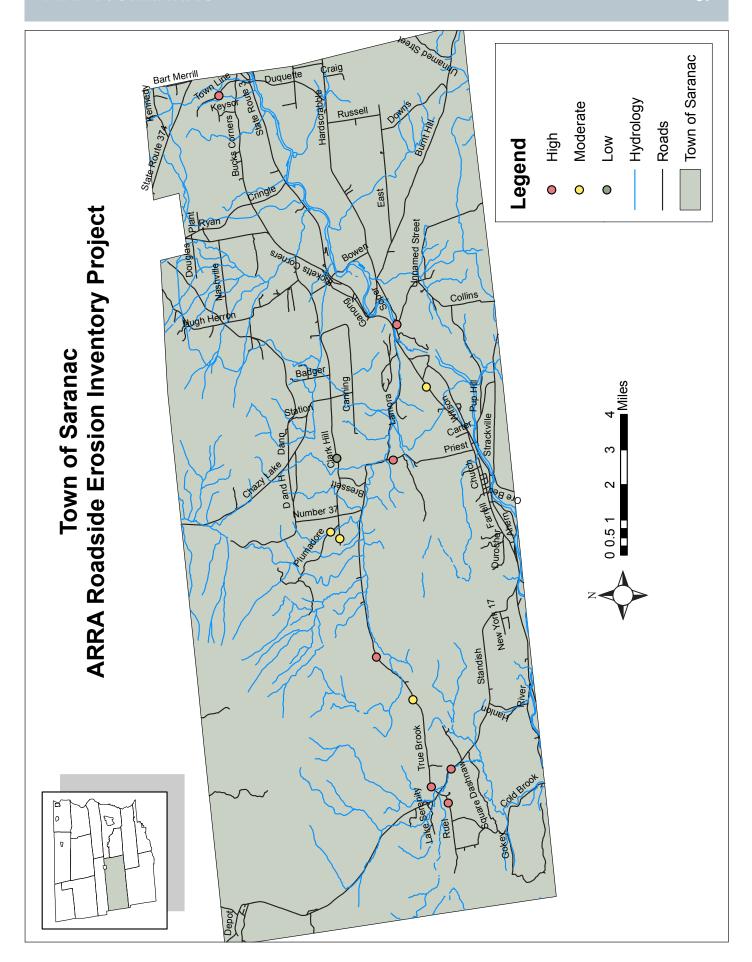


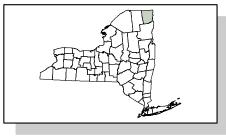


# Town of Dannemora ARRA Roadside Erosion Inventory Project

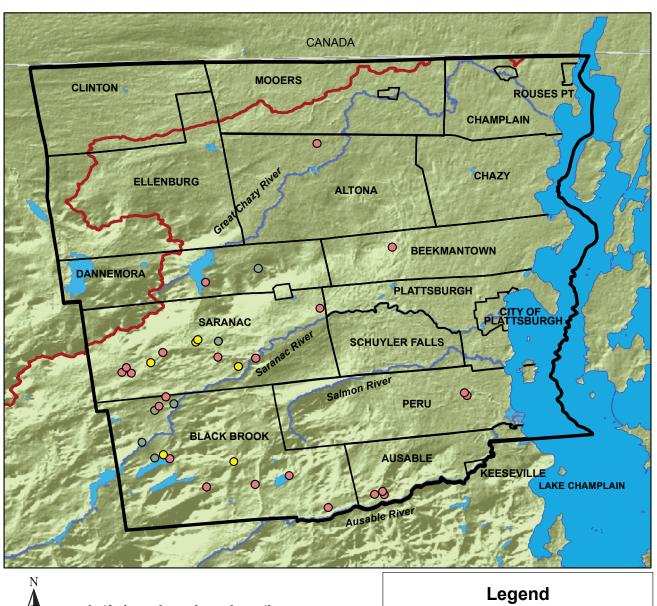


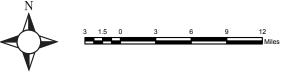






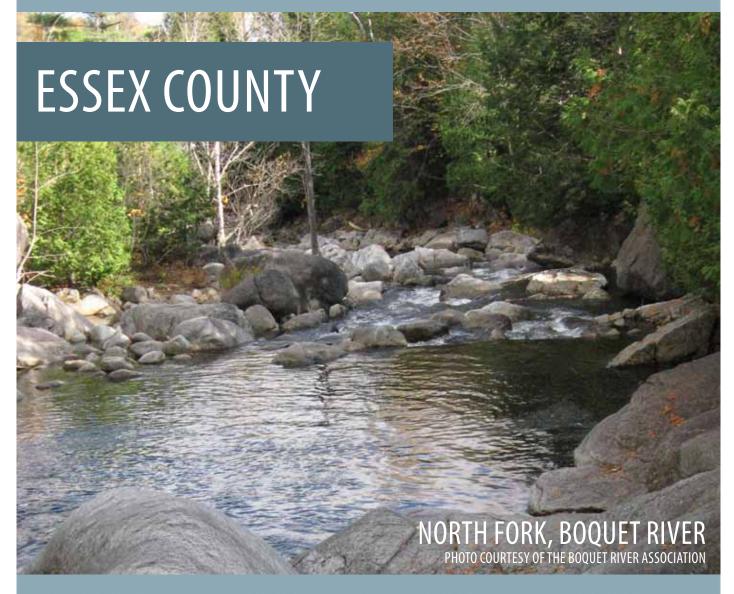
# American Recovery and Reinvestment Act Roadside Erosion Inventory Project Clinton County, New York







LCLGRPB \ 2012 39



Essex County contains the largest amount of land within the Champlain Watershed of all the counties. Over 70% of the county is within the watershed, encompassing 14 of the 18 towns and all four villages. By definition there are no large metropolitan areas within Essex County, but the Village of Lake Placid, within the Town of North Elba, is a successful tourist area with fluxes of visitors in both the summer and winter. The county has an extensive network of rural roads and county routes that connect the towns, which are heavily traveled by tourists in all seasons.

The soils in Essex County consist mainly of variations of loam and clay, typical sediments found around Lake Champlain and throughout the watershed. However, there are also areas where the soils are highly erodible sands. There are three major river basins; Ausable River (frequently referred to in three sections, Main Branch, East Branch and West Branch), Boquet River and Saranac River, all of which drain directly into Lake Champlain. The Ausable and Boquet River basins encompass the majority of the county, and both have extremely steep slopes descending from their headwaters in the High Peaks of the Adirondacks. The West Branch of the Ausable River has some of the most important fisheries in the state, making these areas critical for roadside protection. There are also a considerable amount of streams on the eastern border of the county that drain directly to

Lake Champlain, and those identified in this report include; Bartlett Brook, Grove Brook, Hoisington Brook, Knob Creek, Little Trout Brook, McKenzie Brook, Mill Brook, Putnam Creek, Sherman Lake and Stacy Brook

In total, 131 roadside erosion sites (50 High Priority, 39 Moderate Priority and 42 Low Priority) were identified on state, county and town roads by staff of the Essex County SWCD throughout two field seasons. Many of the original findings from the 2010 field season were re-assessed in the summer and fall of 2011, after the destruction that tropical storms Irene and Lee caused throughout the Champlain Watershed. This was done to produce the most up-to-date findings of roadside erosion throughout the county and project more accurate cost estimates for remediation. The most common recommendations for remediation in Essex County include hydroseeding, installing new drainage systems, stabilizing roads with stone and installing sediment traps and basins. Many of the sites can be remediated using the Essex County SWCD Hydroseeding Program at little or no cost to the Towns. Several sites within the Towns of Moriah and Westport are in need of culvert replacements and road restructuring, damage caused by the recent storms, which carry price tags of \$60,000 to \$500,000 each. In all, the projected cost to remediate the 131 sites in Essex County is \$1.443.650.

# **ESSEX COUNTY SITES**

# TOWN | MAJOR SUBWATERSHEDS | ROADS

	Number of Sites per Priority			Percentage
Town	High	Moderate	Low	of sites in County
Chesterfield	3	3	2	6%
Crown Point	1	4	4	7%
Elizabethtown	2	4	4	8%
Essex	4	2	0	5%
Jay	3	1	8	9%
Keene	3	6	4	10%
Lewis	1	0	2	2%
Moriah	8	2	1	8%
North Elba	6	3	4	10%
St. Armand	3	4	0	5%
Ticonderoga	0	1	3	3%
Westport	12	7	5	18%
Willsboro	1	0	1	2%
Wilmington	3	2	4	7%
Major	Number of Sites per Priority			Percentage
Subwatershed	High	Moderate	Low	of sites in County
Ausable River (All Branches)	16	16	20	40%
Boquet River	9	7	9	19%
Lake Champlain	22	14	13	37%
Saranac River	3	2	0	4%
Road	Num	ber of Sites per Pr	iority	Percentage of sites
Jurisdiction	High	Moderate	Low	in County
State Roads	2	1	1	3%
County Roads	13	12	11	27%
Town Roads	35	26	30	70%
Private Roads	0	0	0	0%

# TOWN OF CHESTERFIELD

IDENTIFICATION #400			
IDENTIFICATION #100		IDENTIFICATION #103	
Town Chesterfield		Town Chesterfield Road Name Trout Pond Road	
Road Name Highlands Road		Jurisdiction Town	
Jurisdiction County Watershed Little Trout Brook		Watershed Boquet River: North Branch	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	5
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	50	Length of Erosion (ft)	10
Width of Erosion (ft)	6	Width of Erosion (ft)	5
Total Area of Erosion (ft²)	300	Total Area of Erosion (ft²)	50
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Hydroseed	Management Recommendations	Hydroseed
Cost	\$300 - \$400	Cost	\$500
Total Points	40	Total Points	45
Rank	High	Rank	High
IDENTIFICATION #104		IDENTIFICATION #98	
Town Chesterfield		Town Chesterfield	
Road Name Doghill Road		Road Name Augar Lake Road	the late of the la
Jurisdiction Town		Jurisdiction County	
Watershed Ausable River		Watershed Ausable River	
Direct connection to water	No	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	25
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Low
Length of Erosion (ft)	500	Length of Erosion (ft)	50
Width of Erosion (ft)	5	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	2500	Total Area of Erosion (ft²)	150
Soil Type	Fine sandy loam	Soil Type	Fine sandy loam
Management Recommendations	Hydroseed on bank and ditch	Management Recommendations	Hydroseed
Cost	\$500	Cost	\$500
Total Points	40	Total Points	36
Rank	High	Rank	Moderate

# TOWN OF CHESTERFIELD

IDENTIFICATION #99		IDENTIFICATION #105	
Town Chesterfield		Town Chesterfield	
Road Name Giddings Road		Road Name	Dugway Road
Jurisdiction Town		Jurisdiction	Town
Watershed Lake Champlain		Watershed	Ausable River
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	5	% of Vegetation	100
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Low	Level of Erosion	High
Length of Erosion (ft)	20	Length of Erosion (ft)	600
Width of Erosion (ft)	3	Width of Erosion (ft)	20
Total Area of Erosion (ft²)	60	Total Area of Erosion (ft <sup>2</sup> )	12,000
Soil Type	Fluvial deposits	Soil Type	Fine sandy loam
Management Recommendations	Hydroseed	Management Recommendations	New drainage system
Cost	\$500	Cost	\$2000
Total Points	36	Total Points	31
Rank	Moderate	Rank	Moderate
IDENTIFICATION #101		IDENTIFICATION #102	
Town Chesterfield		Town Chesterfield	
Road Name Highlands Road		Road Name Shunpike Road	
Jurisdiction County	14	Jurisdiction Town	
Watershed Little Trout Brook	ATT THE	Watershed Lake Champlain	
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	75	% of Vegetation	10
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	30	Length of Erosion (ft)	40
Width of Erosion (ft)	3	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	90	Total Area of Erosion (ft²)	120
Soil Type	Pittsfield Loam	Soil Type	Pittsfield Loam
Management	Hydroseed and possible	Management	Hydroseed and possibly
Recommendations	gravel required	Recommendations	plant vegetation
Cost	\$100	Cost	\$100
Total Points	22	Total Points	22
Rank	Low	Rank	Low

### TOWN OF CROWN POINT

### **IDENTIFICATION #69**

#### Town **Crown Point**

Road Name Treadway Road Jurisdiction Town





#### **IDENTIFICATION #67**

#### Town **Crown Point**

Road Name Whitehead Road Jurisdiction Town Watershed Lake Champlain



	Alternatives and the second second second second		
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	40	% of Vegetation	30
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	100	Length of Erosion (ft)	100
Width of Erosion (ft)	20	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	2000	Total Area of Erosion (ft <sup>2</sup> )	1000
Soil Type	Loam	Soil Type	Fine sandy loam
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Stabilize with gravel/stone and hydroseed
Cost	\$1000	Cost	\$1000 - \$2000
Total Points	46	Total Points	35
Rank	High	Rank	Moderate

### **IDENTIFICATION #70**

#### Town **Crown Point**

Jurisdiction Town

Road Name Sand Hill Road



### **IDENTIFICATION #71**

Town Crown Point

Road Name Sand Hill Road Jurisdiction Town



Watershed Grove Brook		Watershed Grove Brook	
Direct connection to wate	r Yes	Direct connection to water	Yes
% of Vegetation	30	% of Vegetation	25
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	25	Length of Erosion (ft)	15
Width of Erosion (ft)	5	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	125	Total Area of Erosion (ft²)	45
Soil Type	Gravelly loamy sand	Soil Type	Loam
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Stabilize with gravel/stone and/or hydroseed
Cost	\$500 - \$700	Cost	\$500
Total Points	35	Total Points	36
Rank	Moderate	Rank	Moderate

# TOWN OF CROWN POINT

IDENTIFICATION #73		IDENTIFICATION #65	IDENTIFICATION #65	
Town Crown Point  Road Name White Church Road Jurisdiction County  Watershed Putnam Creek		Town Crown Point  Road Name Croake Road Jurisdiction Town  Watershed Putnam Creek		
Direct connection to water	Yes	Direct connection to water	No	
% of Vegetation	30	% of Vegetation	40	
Bank Slope	Moderate	Bank Slope	Moderate	
Level of Erosion	Moderate	Level of Erosion	Low	
Length of Erosion (ft)	50	Length of Erosion (ft)	30	
Width of Erosion (ft)	5	Width of Erosion (ft)	5	
Total Area of Erosion (ft <sup>2</sup> )	250	Total Area of Erosion (ft <sup>2</sup> )	150	
Soil Type	Loam	Soil Type	Loam	
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Stabilize with stone and hydroseed	
Cost	\$500 - \$1000	Cost	\$500	
Total Points	35	Total Points	21	
Rank	Moderate	Rank	Low	
IDENTIFICATION #66		IDENTIFICATION #68		
Town Crown Point		Town Crown Point		
Road Name Sherman Lake Road		Road Name	Old Furnace Road	
Jurisdiction Town		Jurisdiction	Town	
Watershed Sherman Lake		Watershed	Knob Creek	
Direct connection to water	No	Direct connection to water	No	
% of Vegetation	40	% of Vegetation	0	
Bank Slope	Moderate	Bank Slope	Low	
Level of Erosion	Low	Level of Erosion	Moderate	
Length of Erosion (ft)	30	Length of Erosion (ft)	30	
Width of Erosion (ft)	5	Width of Erosion (ft)	20	
Total Area of Erosion (ft²)	150	Total Area of Erosion (ft²)	600	
Soil Type	Loamy sand	Soil Type	Loamy sand	
Management Recommendations	Stabilize washed out areas with stone	Management Recommendations	Hydroseed	
Cost	\$500	Cost	\$500	
Total Points	21	Total Points	26	
Rank	Low	Rank	Low	

### TOWNS OF CROWN POINT & ELIZABETHTOWN

#### **IDENTIFICATION #72**

#### Town **Crown Point**

Road Name Creek Road Jurisdiction County



#### **IDENTIFICATION #44**

#### Town Elizabethtown

Road Name Lincoln Pond Road Jurisdiction Town





Watershed Putnam Creek		Watershed Lincoln Pond	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	50	% of Vegetation	25
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	600
Width of Erosion (ft)	5	Width of Erosion (ft)	15
Total Area of Erosion (ft²)	100	Total Area of Erosion (ft²)	9000
Soil Type	Loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Install sediment/water deflector and hydroseed	Management Recommendations	Stabilize with stone and hydroseed
Cost	\$2000 - \$3000	Cost	\$3000 - \$5000
Total Points	26	Total Points	50
Rank	Low	Rank	High
IDENTIFICATION #45		IDENTIFICATION #40	

#### **IDENTIFICATION #45**

#### Town Elizabethtown

Road Name Scriver Lane Jurisdiction Town





#### Town Elizabethtown

Road Name Lobdell Lane Jurisdiction Town





Watershed Boquet River		Watershed Boquet River	
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	20	% of Vegetation	50
Bank Slope	Steep	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	100	Length of Erosion (ft)	75
Width of Erosion (ft)	5	Width of Erosion (ft)	60
Total Area of Erosion (ft <sup>2</sup> )	500	Total Area of Erosion (ft²)	4500
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Stabilize with gravel/stone and hydroseed	Management Recommendations	Remove sediment and hydroseed
Cost	\$1000 - \$2000	Cost	\$500 - \$1000
Total Points	45	Total Points	31
Rank	High	Rank	Moderate

### TOWN OF ELIZABETHTOWN

#### **IDENTIFICATION #41**

#### Town Elizabethtown

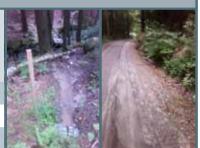
Road Name Lobdell Lane Jurisdiction Town Watershed Boquet River



#### **IDENTIFICATION #46**

#### Town Elizabethtown

Road Name Scriver Lane Jurisdiction Town Watershed Boquet River



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Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	50	% of Vegetation	20
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Low
Length of Erosion (ft)	50	Length of Erosion (ft)	100
Width of Erosion (ft)	20	Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	1000	Total Area of Erosion (ft <sup>2</sup> )	500
Soil Type	Fluvial deposits	Soil Type	Gravelly loamy sand
Management Recommendations	Hydroseed	Management Recommendations	Remove excess sediment and hydroseed
Cost	\$500	Cost	\$200 - \$300
Total Points	35	Total Points	36
Rank	Moderate	Rank	Moderate
IDENTIFICATION #48		IDENTIFICATION #42	

#### **IDENTIFICATION #48**

#### Town Elizabethtown

Road Name Kingdom Dam Lane



#### Town Elizabethtown

Road Name Meigsville Road



Jurisdiction Town	300	Jurisdiction Town	
Watershed Lincoln Pond		Watershed Black River	THE RESERVE AND THE RESERVE AN
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	15	% of Vegetation	30
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	20	Length of Erosion (ft)	75
Width of Erosion (ft)	10	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	200	Total Area of Erosion (ft²)	750
Soil Type	Gravelly loamy sand	Soil Type	Pittsfield loam
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Remove excess sediment, add gravel and hydroseed
Cost	\$1000 - \$3000	Cost	\$500
Total Points	36	Total Points	17
Rank	Moderate	Rank	Low

### TOWNS OF ELIZABETHTOWN & ESSEX

#### **IDENTIFICATION #43**

#### Town Elizabethtown

Road Name Lord Road

Jurisdiction Town

Boquet River: Watershed The Branch



#### **IDENTIFICATION #47**

#### Town Elizabethtown

Road Name Gilligan Lane Jurisdiction Town

Watershed Roquet River





		watershed boquet niver	州公司市区区域 10 月日 10 月日
Direct connection to water	No	Direct connection to water	Yes
% of Vegetation	30	% of Vegetation	55
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	20	Length of Erosion (ft)	25
Width of Erosion (ft)	10	Width of Erosion (ft)	15
Total Area of Erosion (ft <sup>2</sup> )	200	Total Area of Erosion (ft <sup>2</sup> )	375
Soil Type	Very gravelly, loamy sand	Soil Type	Very gravelly, loamy sand
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Clean sediment build up in ditch and hydroseed
Cost	\$500	Cost	\$500
Total Points	21	Total Points	26
Rank	Low	Rank	Low
IDENTIFICATION #49		IDENTIFICATION #59	

### **IDENTIFICATION #49**

#### Town Elizabethtown

Road Name Kingdom Dam Lane

Jurisdiction Town



#### Town Essex

Road Name Albee Road



Jurisdiction lown		Jurisdiction lown	The state of the s
Watershed Lincoln Pond		Watershed Lake Champlain	
Direct connection to water	No	Direct connection to water	Yes
% of Vegetation	30	% of Vegetation	10
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	100	Length of Erosion (ft)	20
Width of Erosion (ft)	15	Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	1500	Total Area of Erosion (ft²)	100
Soil Type	Gravelly loamy sand	Soil Type	Silty clay loam
Management Recommendations	Hydroseed	Management Recommendations	Stabilize with stone and hydroseed
Cost	\$1000	Cost	\$500
Total Points	26	Total Points	45
Rank	Low	Rank	High

## TOWN OF ESSEX

Jurisdiction County Watershed Lake Champlain  Direct connection to water % of Vegetation 25  Bank Slope Steep Bank Slope Steep Level of Erosion High Level of Erosion (ft) 1000 Width of Erosion (ft) 300 Width of Erosion (ft) 20 Total Area of Erosion (ft') 6000 Soil Type Fine sandy loam  Management Recommendations  Cost \$100,000 Cost \$50,000 Total Points 60 Total Points 55 Rank High Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Soil Vegetation 25 Bank Slope Steep Bank Slope Low Length of Erosion (ft') 30 Length of Erosion (ft') 20 Total Area of Erosion (ft') 20 Total Points 55 Rank High Rank High  IDENTIFICATION #62  Town Essex  Food Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Direct connection to	IDENTIFICATION #60		IDENTIFICATION #61	
Jurisdiction County Watershed Take Champlain  Direct connection to water  Yes  % of Vegetation 25  Bank Slope Steep  Level of Erosion High Level of Erosion (ft) 300  Length of Erosion (ft) 20  Width of Erosion (ft) 20  Total Area of Erosion (ft') 6000  Soil Type Fine sandy loam  Management Recommendations  Cost \$100,000  Cost \$50,000  Total Points 55  Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road  Jurisdiction Town Watershed Boquet River  Direct connection to water  Yes  Moderate  Level of Erosion (ft') 1000  Width of Erosion (ft') 20  Total Area of Erosion (ft') 20,000  Total Points 55  Rank High  Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road  Jurisdiction Town Watershed Boquet River  Direct connection to water  Yes  Of Vegetation 25  Bank Slope Low  Level of Erosion (ft') 20,000  Cost \$50,000  Total Points 55  Road Name Cook Road  Jurisdiction Town Watershed Boquet River  Direct connection to water  Yes  Of Vegetation 25  Bank Slope Low  Level of Erosion (ft') 30  Length of Erosion (ft') 30  Width of Erosion (ft') 30  Width of Erosion (ft') 30  Total Area of Erosion (ft') 30  Total Area of Erosion (ft') 90  T				
Watershed Lake Champlain  Direct connection to water  % of Vegetation  25  Sank Slope  Steep  Bank Slope  Level of Erosion  High  Level of Erosion  Moderate  Length of Erosion (ft)  20  Width of Erosion (ft)  20  Width of Erosion (ft)  20  Total Area of Erosion (ft)  Soil Type  Fine sandy loam  Management  Recommendations  Restabilize road  Recommendations  Cost  Cost  Stoloo  Total Points  60  Total Points  60  Total Points  55  Rank  High  Rank  High  Rank  High  Rank  High  Rank  High  Rank  DIENTIFICATION #63  Town  Essex  Road Name  Cook Road  Jurisdiction Town  Watershed  Watershed Boquet River  Direct connection to water  % of Vegetation  5  Soil Type  Soil Type  Soil Type  Rocks and boulders  Management  Recommendations  Town  Essex  Direct connection to water  % of Vegetation  5  Soil Roguet River  Direct connection to water  % of Vegetation  5  Bank Slope  Level of Frosion (ft)  30  Length of Erosion (ft)  30  Length of Erosion (ft)  20  Town  Essex  Soil Type  Bank Slope  Low  Level of Frosion (ft)  30  Length of Erosion (ft)  30  Midth of Erosion (ft)  30  Clean ditch and hydroseed  Management  Recommendations  Clean ditch and hydroseed	Road Name Lake Shore Road		Road Name Main Road	
Direct connection to water Yes Direct connection to water Yes % of Vegetation 25 % of Vegetation 26 % of Vegetation 26 % of Vegetation 27 % of Vegetation 27 % of Vegetation 27 % of Vegetation 27 % of Vegetation 28 % of Vegetation 27 % of Vegetation 37 % of Vegetation 37 % of Vegetation 37 % of Vegetation 37 % of Vegetation 38 % of Vegetation 39 % of Vegetation 39 % of Vegetation 30 % of Vegetation 30 % of Vegetation 31 % of Vegetation 30 % of Vegetation 31 % of Vegetation 31 % of Vegetation 31 % of Vegetation 32 % of Vegetation 33 % of Vegetation 34 % of Vegetation 35 % of Vegetation 36 % of Vegetation 37 % of Vegetation 37 % of Vegetation 37 % of Vegetation 38 % of Vegetation 39 % of Vegetation 30 % of Veg	Jurisdiction County		Jurisdiction Town	
## of Vegetation 25 ## of Vegetation 26 ## of Vegetation 25 ## of Vegetation 30 ## of Vegetation 31 ## of Vegetation 30 ## of Vegetation 30 ## of Vegetation 30 ## of Vegetation 31 ## of Vegetation 30 ## of Vegetation 31 ## of Vegetation 30 ## of Vegetation 30 ## of Vegetation 31 ## of Vegetation 31 ## of Vegetation 31 ## of Vegetation 31 ## of Vegetation 32 ## of Vegetation 33 ## of Vegetation 35 ## of Vegetation 30 ## of	Watershed Lake Champlain		Watershed Lake Champlain	
Bank Slope Steep Bank Slope Steep Level of Erosion High Level of Erosion Moderate Length of Erosion (ft) 300 Length of Erosion (ft) 1000 Width of Erosion (ft) 20 Width of Erosion (ft) 20 Total Area of Erosion (ft') 6000 Total Area of Erosion (ft') 20,000 Soil Type Fine sandy loam Soil Type Rocks and boulders Management Re-stabilize road Re-stabilize road Recommendations Cost \$100,000 Cost \$50,000 Total Points 60 Total Points 55 Rank High Rank High IDENTIFICATION #62  Town Essex Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Direct connection to water Yes % of Vegetation 5 % of Vegetation 25 Bank Slope Steep Bank Slope Low Level of Erosion (ft) 30 Length of Erosion (ft') 90 Total Area of Erosion (ft') 30 Width of Erosion (ft') 30 Width of Erosion (ft') 30 Width of Erosion (ft') 90 Total Area of Erosion (ft') 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Recommendations Clean culvert Ananagement Recommendations Clean ditch and hydroseed	Direct connection to water	Yes	Direct connection to water	Yes
Level of Erosion High Level of Erosion Moderate Length of Erosion (ft) 300 Length of Erosion (ft) 1000 Width of Erosion (ft) 20 Width of Erosion (ft) 20 Total Area of Erosion (ft') 6000 Total Area of Erosion (ft') 20,000 Soil Type Fine sandy loam Soil Type Rocks and boulders Management Recommendations Re-stabilize road Recommendations Recommendations Rocs \$100,000 Cost \$50,000 Total Points 60 Total Points 55 Rank High Rank High  IDENTIFICATION #62  Town Essex Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Direct connection to water Yes % of Vegetation 5 % of Vegetation 25 Bank Slope Steep Bank Slope Low Level of Erosion (ft) 30 Length of Erosion (ft) 30 Width of Erosion (ft') 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Clean culvert Analogoment Recommendations  High Length of Erosion (ft') 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Clean culvert Analogome Fine sandy loam Management Clean culvert Analogoment Recommendations  High Level of Erosion (ft) Moderate Level of Erosion (ft') 90 Soil Type Fine sandy loam Management Clean culvert Analogoment Recommendations  Length of Erosion (ft) Analogoment Recommendations  Midth of Erosion (ft) Analogoment Recommendations  Management Clean culvert Analogoment Recommendations	% of Vegetation	25	% of Vegetation	25
Length of Erosion (ft) 300 Length of Erosion (ft) 1000 Width of Erosion (ft) 20 Width of Erosion (ft) 20 Total Area of Erosion (ft²) 6000 Total Area of Erosion (ft²) 20,000 Soil Type Fine sandy loam Soil Type Rocks and boulders Management Recommendations Re-stabilize road Recommendations Recommendations Resolutions 60 Total Points 55 Rank High Rank High IDENTIFICATION #62  Town Essex Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Direct connection to water Yes Of Vegetation 5 Moderate Level of Erosion (ft) 30 Width of Erosion (ft) 3 Total Area of Erosion (ft²) 90 Total Area of Erosion (ft²) 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Recommendations  Clean ditch and hydroseed  Midth of Erosion (ft²) 90 Soil Type Fine sandy loam Soil Type Fine sandy loam Midth of Erosion (ft²) 90 Soil Type Fine sandy loam Soil Type Fine sandy loam Management Recommendations  Clean ditch and hydroseed	Bank Slope	Steep	Bank Slope	Steep
Width of Erosion (ft) 20 Width of Erosion (ft) 20 Total Area of Erosion (ft') 6000 Total Area of Erosion (ft') 20,000 Soil Type Fine sandy loam Soil Type Rocks and boulders  Management Recommendations Re-stabilize road Recommendations Install sediment basin Recommendations Cost \$100,000 Cost \$50,000 Total Points 60 Total Points 55 Rank High Rank High  IDENTIFICATION #63  Town Essex Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Direct connection to water Yes % of Vegetation 5 % of Vegetation 25 Bank Slope Steep Bank Slope Low Level of Erosion Moderate Length of Erosion (ft) 30 Length of Erosion (ft) 30 Width of Erosion (ft) 3 Width of Erosion (ft') 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Clean culvert and hydroseed Recommendations  Fine Sand Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes Total Area of Erosion (ft') 30 Width of Erosion (ft') 30 Width of Erosion (ft') 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Clean culvert And Management Recommendations  Width and Provided Soil Type Fine sandy loam Management Recommendations	Level of Erosion	High	Level of Erosion	Moderate
Total Area of Erosion (ft²) 6000  Soil Type Fine sandy loam  Management Recommendations  Cost \$100,000  Total Points 60  Rank High Rank High  IDENTIFICATION #63  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  Wof Vegetation 5  Bank Slope Steep Bank Slope Low Level of Erosion (ft) 30  Width of Erosion (ft) 30  Width of Erosion (ft) 30  Vidth of Erosion (ft) 90  Soil Type Rocks and boulders  Management Recommendations  Total Points 55  Rank High  IDENTIFICATION #63  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  Wof Vegetation 5  Bank Slope Low Level of Erosion Moderate Length of Erosion (ft) 30  Width of Erosion (ft) 3  Total Area of Erosion (ft) 3  Total Area of Erosion (ft) 90  Soil Type Fluvial deposits  Management Recommendations  Total Area of Erosion (ft) and hydroseed  Total Area of Erosion (ft) and hydroseed  Clean ditch and hydroseed	Length of Erosion (ft)	300	Length of Erosion (ft)	1000
Soil Type   Fine sandy loam   Soil Type   Rocks and boulders   Management   Re-stabilize road   Management   Recommendations   Install sediment basin   Recommendations   Install sediment basin   Recommendations   Install sediment basin   Recommendations   Soil Type   Soil Type   Fluvial deposits   Recommendations   Soil Type   Fluvial deposits   Soil Type   Fluvial deposits   Cost Took Soil Type   Fluvial deposits   Soil Type   Clean culvert   Recommendations   Cost Soil Type   Clean culvert   Soil Type   Cost Soil Type   Cost Soil Type   Clean culvert   Soil Type	Width of Erosion (ft)	20	Width of Erosion (ft)	20
Management Recommendations  Re-stabilize road  Management Recommendations  Cost \$100,000  Cost \$50,000  Total Points 60  Total Points 55  Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  % of Vegetation 5  Bank Slope Steep Bank Slope Low Level of Erosion Moderate Length of Erosion (ft) 30  Width of Erosion (ft) 3  Total Area of Erosion (ft') 90  Soil Type Fluvial deposits  Management Recommendations  Install sediment basin Recommendations  Install sediment basin  Management Recommendations  Install sediment basin  Recommendations  Install sediment basin  Recommendations  Install sediment basin  Recommendations  Install sediment Besident Spondor  \$50,000  \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	Total Area of Erosion (ft²)	6000	Total Area of Erosion (ft²)	20,000
Recommendations  Cost \$100,000  Cost \$50,000  Total Points 60  Total Points 55  Rank High Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road  Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  % of Vegetation 5  Bank Slope Steep Bank Slope Low Level of Erosion Moderate Length of Erosion (ft) 30  Width of Erosion (ft) 30  Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits  Management Recommendations  Recommendations  Tost Stopp Stop, Ooo Total Area of Erosion (ft²) Policy Stopp Stoler Stopp S	Soil Type	Fine sandy loam	Soil Type	Rocks and boulders
Total Points 60 Total Points 55  Rank High Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes Direct connection to water % of Vegetation 5 % of Vegetation 5 % of Vegetation 5 % of Vegetation 5 Bank Slope Low  Level of Erosion Moderate Level of Erosion (ft) 30 Length of Erosion (ft) 30 Width of Erosion (ft) 3 Width of Erosion (ft) 3 Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits Management Recommendations  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Ves South Face (Cook Road Jurisdiction Town Watershed Boquet River Ves Soil Type Fine sandy loam Management Recommendations Clean culvert and hydroseed Recommendations  Total Area of Erosion (ft²) 90  Total Area of Erosion (ft²) 90  Clean culvert Recommendations  Clean ditch and hydroseed	Management Recommendations	Re-stabilize road		Install sediment basin
Rank High Rank High  IDENTIFICATION #62  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes Direct connection to water Yes Of Vegetation 5 % of Vegetation 25  Bank Slope Steep Bank Slope Low Level of Erosion Moderate Length of Erosion (ft) 30  Width of Erosion (ft) 30  Width of Erosion (ft) 3  Width of Erosion (ft) 90  Soil Type Fluvial deposits Soil Type Fine sandy loam  Management Recommendations  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  Direct connection to water Yes  Orect connection to water Yes  Direct connection to water Yes  Watershed Boquet River  Ves  Direct connection to water Yes  Direct connection to water Yes  Watershed Boquet River  Yes  Direct connection to water Yes  Watershed Boquet River  Yes  Note Human And Sell Planting Research  Watershed Boquet River  Watershed Boquet River  Yes  Soil Type  Fine sandy loam  Clean ditch and hydroseed	Cost	\$100,000	Cost	\$50,000
Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water Yes % of Vegetation 5 Bank Slope Steep Bank Slope Low Level of Erosion Moderate Length of Erosion (ft) 30 Width of Erosion (ft) 3 Width of Erosion (ft) 3 Width of Erosion (ft) 3 Total Area of Erosion (ft²) 90 Soil Type Fluvial deposits Management Recommendations  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Watershed Boquet River Direct connection to water Yes % of Vegetation 25 Bank Slope Low Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 30 Width of Erosion (ft) 30 Width of Erosion (ft) 30 Width of Erosion (ft) 3 Total Area of Erosion (ft²) 90 Soil Type Fluvial deposits Management Recommendations Clean ditch and hydroseed	Total Points	60	Total Points	55
Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes Direct connection to water Yes % of Vegetation 5 Bank Slope Steep Bank Slope Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) Width of Erosion (ft) Width of Erosion (ft) Soil Type Fluvial deposits Management Recommendations  Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  % of Vegetation 25 Bank Slope Low Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 30 Width of Erosion (ft) 30 Width of Erosion (ft) 30 Width of Erosion (ft) Soil Type Fluvial deposits Management Recommendations Clean culvert And Anagement Recommendations Clean ditch and hydroseed	Rank	Hiah	Rank	Hiah
Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water Yes Direct connection to water Yes Mof Vegetation Steep Bank Slope Level of Erosion Length of Erosion (ft) Moderate Length of Erosion (ft)  Width of Erosion (ft)  Total Area of Erosion (ft)  Soil Type Fine sandy loam Management Recommendations  Clean culvert And Management Recommendations  Clean ditch and hydroseed	Harin	111911		J
Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  % of Vegetation 5  Bank Slope Steep Bank Slope Low Level of Erosion (ft) 30  Width of Erosion (ft) 3  Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits  Management Recommendations  Jurisdiction Town Watershed Boquet River  Direct connection to water Yes  Watershed Boquet River  Direct connection to water Yes  Watershed Boquet River  Direct connection to water Yes  Wo of Vegetation 25  Bank Slope Low  Level of Erosion  Moderate  Length of Erosion (ft) 30  Width of Erosion (ft) 30  Width of Erosion (ft) 30  Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits  Clean culvert Anagement Recommendations  Clean ditch and hydroseed	IDENTIFICATION #62	9		3
Watershed Boquet River  Direct connection to water Yes  Direct connection to water Yes  Wof Vegetation 5  Bank Slope Steep Bank Slope Low  Level of Erosion Moderate  Length of Erosion (ft) 30  Width of Erosion (ft) 3  Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits  Management Recommendations  Watershed Boquet River  Pes  Watershed Boquet River  Yes  Direct connection to water Yes  Wof Vegetation 25  Bank Slope Low  Level of Erosion  Moderate  Level of Erosion  Moderate  Soil Type Fluvial deposits Soil Type Fine sandy loam  Management  Recommendations  Clean culvert  And hydroseed	IDENTIFICATION #62 Town		IDENTIFICATION #63 Town	
Direct connection to water Yes  % of Vegetation 5 % of Vegetation 25  Bank Slope Steep Bank Slope Low  Level of Erosion Moderate  Length of Erosion (ft) 30 Length of Erosion (ft) 30  Width of Erosion (ft) 3 Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits  Management Clean culvert Recommendations  Direct connection to water Yes  % of Vegetation 25  Bank Slope Low  Level of Erosion Moderate  Length of Erosion (ft) 30  Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fine sandy loam  Clean ditch and hydroseed	IDENTIFICATION #62 Town		Town Essex	
% of Vegetation5% of Vegetation25Bank SlopeLowLevel of ErosionModerateLevel of ErosionModerateLength of Erosion (ft)30Length of Erosion (ft)30Width of Erosion (ft)3Width of Erosion (ft)3Total Area of Erosion (ft²)90Total Area of Erosion (ft²)90Soil TypeFluvial depositsSoil TypeFine sandy loamManagement RecommendationsClean culvert and hydroseedManagement RecommendationsClean ditch and hydroseed	Town Essex		Town Essex Road Name Cook Road	
Bank Slope Steep Bank Slope Low Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 30 Length of Erosion (ft) 30 Width of Erosion (ft) 3 Width of Erosion (ft) 3 Total Area of Erosion (ft²) 90 Total Area of Erosion (ft²) 90 Soil Type Fluvial deposits Soil Type Fine sandy loam Management Clean culvert And hydroseed Recommendations Clean ditch and hydroseed	Town Essex Road Name Cook Road Jurisdiction Town		Town Essex  Road Name Cook Road Jurisdiction Town	
Level of ErosionModerateLevel of ErosionModerateLength of Erosion (ft)30Length of Erosion (ft)30Width of Erosion (ft)3Width of Erosion (ft)3Total Area of Erosion (ft²)90Total Area of Erosion (ft²)90Soil TypeFluvial depositsSoil TypeFine sandy loamManagement RecommendationsClean culvert and hydroseedManagement RecommendationsClean ditch and hydroseed	Town Essex Road Name Cook Road Jurisdiction Town		Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River	
Length of Erosion (ft)30Length of Erosion (ft)30Width of Erosion (ft)3Width of Erosion (ft)3Total Area of Erosion (ft²)90Total Area of Erosion (ft²)90Soil TypeFluvial depositsSoil TypeFine sandy loamManagement RecommendationsClean culvert and hydroseedManagement RecommendationsClean ditch and hydroseed	Town Essex Road Name Cook Road Jurisdiction Town Watershed Boquet River	Yes	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water	Yes
Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits Soil Type Fine sandy loam  Management Clean culvert Aecommendations And hydroseed Recommendations  Width of Erosion (ft²) 3  Total Area of Erosion (ft²) 90  Soil Type Fine sandy loam  Management Clean ditch and hydroseed	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River  Direct connection to water	Yes 5	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation	Yes 25
Width of Erosion (ft) 3  Total Area of Erosion (ft²) 90  Soil Type Fluvial deposits Management Recommendations  Width of Erosion (ft²) 3  Total Area of Erosion (ft²) 90  Soil Type Fine sandy loam  Management Recommendations  Clean culvert Recommendations  Clean ditch and hydroseed	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope	Yes 5 Steep	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope	Yes 25 Low
Soil Type Fluvial deposits Soil Type Fine sandy loam  Management Clean culvert Management Recommendations and hydroseed Recommendations Clean ditch and hydroseed	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope	Yes 5 Steep Moderate	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion	Yes 25 Low Moderate
Soil Type Fluvial deposits Soil Type Fine sandy loam  Management Clean culvert Management Recommendations and hydroseed Recommendations  Clean ditch and hydroseed	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion	Yes 5 Steep Moderate 30	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft)	Yes 25 Low Moderate 30
Management Clean culvert Management Recommendations and hydroseed Recommendations Clean ditch and hydroseed	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft)	Yes 5 Steep Moderate 30 3	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft)	Yes 25 Low Moderate 30 3
	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft)	Yes 5 Steep Moderate 30 3 90	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²)	Yes 25 Low Moderate 30 3 90
	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²)	Yes 5 Steep Moderate 30 3 90 Fluvial deposits Clean culvert	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²) Soil Type Management	Yes 25 Low Moderate 30 3 90 Fine sandy loam
Total Points 45 Total Points 36	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²) Soil Type Management Recommendations	Yes 5 Steep Moderate 30 3 90 Fluvial deposits Clean culvert and hydroseed	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²) Soil Type Management Recommendations	Yes 25 Low Moderate 30 3 90 Fine sandy loam Clean ditch and hydroseed
Rank High Rank Moderate	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²) Soil Type Management Recommendations	Yes 5 Steep Moderate 30 3 90 Fluvial deposits Clean culvert and hydroseed \$300 - \$500	Town Essex  Road Name Cook Road Jurisdiction Town Watershed Boquet River Direct connection to water % of Vegetation Bank Slope Level of Erosion Length of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft²) Soil Type Management Recommendations Cost	Yes 25 Low Moderate 30 3 90 Fine sandy loam Clean ditch and hydroseed \$300 - \$500

#### **IDENTIFICATION #64 IDENTIFICATION #112** Town Town Jay Essex Road Name Lincoln Hill Road Road Name Leaning Road Jurisdiction Town Jurisdiction Town Ausable River: Watershed Fast Branch Watershed Boquet River Direct connection to water Direct connection to water Yes 25 % of Vegetation % of Vegetation Bank Slope Bank Slope Moderate Low Level of Erosion Level of Erosion Moderate Moderate Length of Erosion (ft) 15 Length of Erosion (ft) 100 Width of Erosion (ft) 3 Width of Erosion (ft) 12 Total Area of Erosion (ft<sup>2</sup>) 300 Total Area of Erosion (ft<sup>2</sup>) 180 Soil Type Silty clay loam Soil Type Fine loamy sand Management Management Clean ditch/culvert and Hydroseed Recommendations Recommendations hydroseed \$3000 - \$4000 Cost Cost \$1000 **Total Points** 36 **Total Points** 40 Rank Moderate Rank High **IDENTIFICATION #117 IDENTIFICATION #116** Town Town Jay Jay Road Name Anthony Road Road Name Styles Brook Road Jurisdiction County Jurisdiction County Ausable River: Ausable River: Watershed Watershed East Branch East Branch Direct connection to water Yes Direct connection to water Yes % of Vegetation 30 % of Vegetation 75 Bank Slope Moderate Moderate Bank Slope Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 500 Length of Erosion (ft) 1000 Width of Erosion (ft) 5 Width of Erosion (ft) 3 Total Area of Erosion (ft<sup>2</sup>) 2500 Total Area of Erosion (ft<sup>2</sup>) 3000 Soil Type **Boulders** Gravelly loamy sand Soil Type Management Stabilize with stone/gravel Management Install sediment basin at Recommendations and hydroseed Recommendations bridge and hydroseed Cost \$3000 - \$5000 \$3000 - \$5000 Cost **Total Points** 45 **Total Points** 40

Rank

High

High

Rank

TOWN OF JAY 51

#### **IDENTIFICATION #110 IDENTIFICATION #106** Town Town Jay Jay Road Name Glen Road Road Name Jay Connector Road Jurisdiction Town Jurisdiction Town Ausable River: Watershed East Branch Watershed Ausable River Direct connection to water Direct connection to water Yes No 25 0 % of Vegetation % of Vegetation Bank Slope Low Bank Slope Low Level of Erosion Level of Erosion Moderate Low Length of Erosion (ft) 25 Length of Erosion (ft) 100 5 Width of Erosion (ft) Width of Erosion (ft) 6 Total Area of Erosion (ft<sup>2</sup>) 125 Total Area of Erosion (ft<sup>2</sup>) 600 Fine loamy sand Soil Type Soil Type Loamy sand Management Clean ditch, fill hole with Management Hydroseed Recommendations stone and hydroseed Recommendations \$500 \$500 Cost Cost **Total Points** 36 **Total Points** 22 Rank Rank Moderate Low **IDENTIFICATION #107 IDENTIFICATION #108** Town Town Jay Jay Road Name Glen Road Jurisdiction Town Road Name Cross Street Jurisdiction Town Ausable River: Watershed East Branch Ausable River Watershed Direct connection to water Direct connection to water No No % of Vegetation 50 % of Vegetation 30 Bank Slope Low Bank Slope Low Level of Erosion Moderate Level of Erosion Low Length of Erosion (ft) Length of Erosion (ft) 100 60 3 Width of Erosion (ft) 6 Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 600 Total Area of Erosion (ft<sup>2</sup>) 180 Soil Type Very bouldery Soil Type Loam Stabilize with gravel/stone Management Management Hydroseed Recommendations Recommendations and hydroseed Cost \$500 Cost \$500 **Total Points** 21 **Total Points** 17 Rank Low Rank Low

IDENITIFICATION #100		IDENTIFICATION #111	
IDENTIFICATION #109		IDENTIFICATION #111	A
Town Jay		Town Jay	
Road Name Alder Street	73	Road Name Grove Road	
Jurisdiction Town	TO VITA	Jurisdiction Town	
Watershed Ausable River		Watershed Ausable River	CR3
Direct connection to water	No	Direct connection to water	No
% of Vegetation	5	% of Vegetation	5
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	100	Length of Erosion (ft)	40
Width of Erosion (ft)	4	Width of Erosion (ft)	3
Total Area of Erosion (ft <sup>2</sup> )	400	Total Area of Erosion (ft²)	120
Soil Type	Gravelly loamy sand	Soil Type	Fine loamy sand
Management	Repave holes in road and	Management	Repave edge of road and
Recommendations	hydroseed	Recommendations	hydroseed
Cost	\$500	Cost	\$300
Total Points	30	Total Points	26
Rank	Low	Rank	Low
IDENTIFICATION #113		IDENTIFICATION #114	
Town Jay		Town Jay	
		· ·	AND TO SEE
Road Name Valley Road		Road Name Glen Road	
Jurisdiction County		Jurisdiction County	
Watershed Ausable River: East Branch		Watershed Ausable River: East Branch	
Direct connection to water	No	Direct connection to water	Yes
% of Vegetation	30	% of Vegetation	30
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	20	Length of Erosion (ft)	20
Width of Erosion (ft)	2	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	40	Total Area of Erosion (ft²)	60
Soil Type	Loamy sand	Soil Type	Very gravelly, loamy sand
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Hydroseed
Cost	\$200	Cost	\$300
Total Points	17	Total Points	27
Rank	Low	Rank	Low

# TOWNS OF JAY & KEENE

IDENTIFICATION #115		IDENTIFICATION #118	
Town		Town	
Jay		Keene	
Road Name Glen Road		Road Name Adirondack Street	1/4 7250
Jurisdiction County		Jurisdiction Town	
Watershed Ausable River: East Branch		Watershed Ausable River: East Branch	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	50	% of Vegetation	0
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	50	Length of Erosion (ft)	300
Width of Erosion (ft)	3	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	150	Total Area of Erosion (ft²)	3000
Soil Type	Very bouldery	Soil Type	Gravelly loamy sand
Management Recommendations	Hydroseed	Management Recommendations	Install infiltration basin
Cost	\$300	Cost	\$10,000 - \$15,000
Total Points	27	Total Points	46
Rank	Low	Rank	High
IDENTIFICATION #120		IDENTIFICATION #130	
Town Keene		Town Keene	
Road Name Adrians Acres Lane		Road Name Schaffer Road	
Jurisdiction Town		Jurisdiction Town	
Watershed Ausable River: East Branch		Watershed Ausable River: East Branch	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	50
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	50	Length of Erosion (ft)	5280
Width of Erosion (ft)	3	Width of Erosion (ft)	2
Total Area of Erosion (ft <sup>2</sup> )	150	Total Area of Erosion (ft²)	10,560
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Hydroseed
Cost	\$1000	Cost	\$1300
Total Points	45	Total Points	40
Rank	High	Rank	High

#### **IDENTIFICATION #121**

#### Town Keene

Road Name Adrians Acres Lane

Jurisdiction Town

Watershed Ausable River: East Branch



#### **IDENTIFICATION #122**

#### Town Keene

Road Name Beede Lane

Jurisdiction Town

Watershed Ausable River: East Branch



	1000		And the second s
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	30	% of Vegetation	30
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	20	Length of Erosion (ft)	15
Width of Erosion (ft)	3	Width of Erosion (ft)	3
Total Area of Erosion (ft <sup>2</sup> )	60	Total Area of Erosion (ft <sup>2</sup> )	45
Soil Type	Fine sandy loam	Soil Type	Fine sandy loam
Management Recommendations	Install sediment basin	Management Recommendations	Install sediment/water deflector and hydroseed
Cost	\$2000	Cost	\$500
Total Points	36	Total Points	36
Rank	Moderate	Rank	Moderate

### **IDENTIFICATION #123**

#### Town Keene

Road Name Hurricane Road

Jurisdiction County

Watershed Ausable River:





# IDENTIFICATION #124

Town Keene

Road Name Hurricane Road

Jurisdiction County

Watershed Ausable River:



East Branch		East Branch	12 3
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	50
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	25	Length of Erosion (ft)	20
Width of Erosion (ft)	6	Width of Erosion (ft)	2
Total Area of Erosion (ft²)	150	Total Area of Erosion (ft²)	40
Soil Type	Gravelly loamy sand	Soil Type	Fine sandy loam
Management Recommendations	Hydroseed	Management Recommendations	Hydroseed
Cost	\$500	Cost	\$200 - \$300
Total Points	36	Total Points	36
Rank	Moderate	Rank	Moderate

### TOWN OF KEENE

Town Keene Road Name Jurisdiction County Watershed Ausable River: East Branch Direct connection to water % of Vegetation Low Level of Erosion Level of Erosion (ft) Width of Erosion (ft) Soil Type Gravelly loamy sand Management Recommendations Cost Soil Total Points Alsable River: Bast Branch Direct connection to water Yes Direct connection to water Yes Direct connection to water Yes Moderate Bank Slope Moderate Bank Slope Moderate Level of Erosion Low Length of Erosion (ft) Low Length of Erosion (ft) Uidth of Erosion (ft) Soil Type Gravelly loamy sand Management Recommendations Cost S1000 - \$2000 Cost S500 Total Points 36 Total Points 31 Rank Moderate  IDENTIFICATION #119 Town Keene Road Name Road Name Adrians Acres Lane Jurisdiction Town Keene Road Name Road Name Adrians Acres Lane Jurisdiction Town Ausable River:  Watershed Ausable River: Watershed Ausable River:  Watershed Ausable River	
Jurisdiction County  Watershed Ausable River: East Branch  Direct connection to water Yes  % of Vegetation 15  Bank Slope Moderate Level of Erosion Low Length of Erosion (ft) 20 Length of Erosion (ft) 3  Total Area of Erosion (ft?) 60  Soil Type Gravelly loamy sand Management Recommendations  Cost \$1000 - \$2000  Total Points 36  Rank Moderate  IDENTIFICATION #119  Jurisdiction Town  Jurisdiction Town  Jurisdiction Town  Jurisdiction Town  Jurisdiction Town  Ausable River: East Branch  Divisdiction County  Ausable River: East Branch  Ausable River: East Bra	
Watershed  Ausable River: East Branch  Direct connection to water  Yes  Direct connection to water  Yes  Direct connection to water  Yes  Of Vegetation  So  Bank Slope  Moderate  Level of Erosion  Low  Length of Erosion (ft)  Width of Erosion (ft)  Total Area of Erosion (ft²)  Soil Type  Gravelly loamy sand  Management Recommendations  Cost  Si 1000 - \$2000  Cost  Si 1000 - \$2000  Total Points  Soil Total Points  Analy  Moderate  IDENTIFICATION #119  Town  Keene  Road Name Adrians Acres Lane Jurisdiction Town  Watershed  Ausable River: East Branch  So  Ovater  Yes  Ausable River: East Branch  Yes  So  Direct connection to water  Yes  Ausable River: East Branch  So  Direct connection to water  Yes  So  Direct connection to water  Yes  So  Davelly loamy and Moderate  Hydroseed  Hydroseed  Hydroseed  Town Keene  Road Name Adrians Acres Lane Jurisdiction Town	
Direct connection to water Yes  % of Vegetation 15 % of Vegetation 50 Bank Slope Moderate Bank Slope Moderate Level of Erosion Low Length of Erosion (ft) 20 Length of Erosion (ft) 100 Width of Erosion (ft) 3 Width of Erosion (ft) 2 Total Area of Erosion (ft²) 60 Total Area of Erosion (ft²) 200 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Management Recommendations Cost \$1000 - \$2000 Cost \$500 Total Points 36 Total Points 31 Rank Moderate Road Name Adrians Acres Lane Jurisdiction Town  Watersned East Branch Direct connection to water Yes  Moderate East Branch Direct connection to water Yes  Direct connection to water Yes  Direct connection to water Yes  Moderate East Branch  Moderate  East Branch  Moderate  East Branch  Moderate  East Branch  Moderate  East Branch  Moderate  East Branch  Moderate  East Branch  Moderate  East Branch  Moderate  For Vegetation  So  Rank Brosion (ft²) 20  Cost \$500  Total Points 31  Rank Moderate  Town Keene  Road Name Lacy Road  Jurisdiction Town	
% of Vegetation15% of Vegetation50Bank SlopeModerateBank SlopeModerateLevel of ErosionLowLevel of ErosionLowLength of Erosion (ft)20Length of Erosion (ft)100Width of Erosion (ft)3Width of Erosion (ft)2Total Area of Erosion (ft2)60Total Area of Erosion (ft2)200Soil TypeGravelly loamy sandSoil TypeGravelly loamy sandManagement RecommendationsInstall sediment basinManagement RecommendationsHydroseedCost\$1000 - \$2000Cost\$500Total Points36Total Points31RankModerateRankModerateIDENTIFICATION #119IDENTIFICATION #126Town KeeneRoad Name Adrians Acres Lane Purisdiction TownRoad Name Lacy Road Jurisdiction Town	
Bank Slope Moderate Bank Slope Moderate Level of Erosion Low Length of Erosion (ft) 20 Length of Erosion (ft) 100 Width of Erosion (ft) 3 Width of Erosion (ft) 2 Total Area of Erosion (ft <sup>2</sup> ) 60 Total Area of Erosion (ft <sup>2</sup> ) 200 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Management Recommendations Cost \$1000 - \$2000 Cost \$500 Total Points 36 Total Points 31 Rank Moderate Rank Moderate  IDENTIFICATION #119  Town Keene Road Name Adrians Acres Lane Jurisdiction Town  Moderate Level of Erosion (Low Level of Erosion (ft) 100  Width of Erosion (ft) 2  Town Keene Road Name Adrians Acres Lane Jurisdiction Town	
Level of Erosion Low Length of Erosion (ft) 20 Length of Erosion (ft) 100 Width of Erosion (ft) 3 Total Area of Erosion (ft²) 60 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Management Recommendations Cost \$1000 - \$2000 Total Points 36 Rank Moderate  IDENTIFICATION #119  Level of Erosion (br 2) 100 Length of Erosion (ft) 100 Rank Area of Erosion (ft) 2 Cotal Area of Erosion (ft) 2 Cost Gravelly loamy sand Management Recommendations Cost \$1000 - \$2000 Cost \$500 Total Points 31 Rank Moderate  Rank Moderate  IDENTIFICATION #126  Town Keene Road Name Adrians Acres Lane Jurisdiction Town	
Length of Erosion (ft)  Width of Erosion (ft)  Total Area of Erosion (ft')  Soil Type  Gravelly loamy sand  Management Recommendations  Cost  \$1000 - \$2000  Total Points  36  Total Points  Rank  Moderate  Moderate  Recom  Recom  Recom  Recom  Moderate  Town  Keene  Road Name  Adrians Acres Lane  Jurisdiction Town	
Width of Erosion (ft) 3 Total Area of Erosion (ft²) 60 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Management Recommendations Cost \$1000 - \$2000 Total Points 36 Rank Moderate Rank Moderate  Town Keene Road Name Adrians Acres Lane Jurisdiction Town  Width of Erosion (ft²) 2 Total Prosion (ft²) 200  Total Area of Erosion (ft²) 200  Total Area of Erosion (ft²) 200  Cost Total Prosion (ft²) 200  Total Area of Erosion (ft²) 200  Total Area of Erosion (ft²) 200  Total Area of Erosion (ft²) 200  Soil Type Gravelly loamy sand  Management Recommendations  Cost \$500 Total Points 31  Rank Moderate  Town Keene Road Name Lacy Road Jurisdiction Town	
Total Area of Erosion (ft²) 60 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Management Recommendations Install sediment basin Recommendations Cost \$1000 - \$2000 Cost \$500 Total Points 36 Total Points 31 Rank Moderate Rank Moderate  IDENTIFICATION #119  Town Keene Road Name Adrians Acres Lane Jurisdiction Town  Total Area of Erosion (ft²) 200 Total Area of Erosion (	
Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Management Recommendations Install sediment basin Recommendations Cost \$1000 - \$2000 Cost \$500 Total Points 36 Total Points 31 Rank Moderate Rank Moderate IDENTIFICATION #119  Town Keene Road Name Adrians Acres Lane Jurisdiction Town	
Management Recommendations  Cost \$1000 - \$2000  Total Points 36  Rank Moderate  IDENTIFICATION #119  Town Keene Road Name Adrians Acres Lane Jurisdiction Town  Management Recommendations  Hydroseed  Hydroseed  Total Points 31  Rank Moderate  IDENTIFICATION #126  Town Keene Road Name Lacy Road Jurisdiction Town	
Recommendations  Cost \$1000 - \$2000  Total Points 36  Rank Moderate  IDENTIFICATION #119  Town Keene  Road Name Adrians Acres Lane Jurisdiction Town  Recommendations  Recommendations  Recommendations  Recommendations  Flydroseed  Recommendations  Recommendations  Flydroseed  Recommendations  Recommendations  Flydroseed  Recommendations  Recommendations  Flydroseed  Recommendations  Flydroseed  Road Name Adrians  Flydroseed  Recommendations  Flydroseed  Flydroseed  Recommendations  Flydroseed  Recommendations  Flydroseed  Flydroseed  Recommendations  Flydroseed	
Total Points 36  Rank Moderate Rank Moderate  IDENTIFICATION #119  IDENTIFICATION #126  Town Keene Road Name Adrians Acres Lane Jurisdiction Town  Jurisdiction Town	
Rank Moderate  IDENTIFICATION #119  IDENTIFICATION #126  Town Keene Road Name Adrians Acres Lane Jurisdiction Town	
Town Keene Road Name Adrians Acres Lane Jurisdiction Town	
Town Keene  Road Name Adrians Acres Lane Jurisdiction Town  Town Keene  Road Name Lacy Road Jurisdiction Town	
Keene Road Name Adrians Acres Lane Jurisdiction Town  Keene Road Name Lacy Road Jurisdiction Town	
Road Name Adrians Acres Lane Jurisdiction Town  Road Name Lacy Road Jurisdiction Town	
Jurisdiction Town  Jurisdiction Town	36
Ausahla Divar	
Watershed Ausable River: East Branch  Ausable River: East Branch  Watershed East Branch	
Direct connection to water No Direct connection to water No	
% of Vegetation 5 % of Vegetation 0	
Bank Slope Low Bank Slope Low	
Level of Erosion Moderate Level of Erosion Moderate	
Length of Erosion (ft) 100 Length of Erosion (ft) 75	
Width of Erosion (ft) 10 Width of Erosion (ft) 3	
Total Area of Erosion (ft²) 1000 Total Area of Erosion (ft²) 225	
Soil Type Very gravelly, loamy sand Soil Type Fine sandy loam	
Management Stabilize with stone and Management Stabilize with stone and	
Recommendations hydroseed Recommendations hydroseed	
Cost \$1000 Cost \$500 - \$700	
Total Points 26 Total Points 26	
Rank Low Rank Low	

# TOWNS OF KEENE & LEWIS

			THE CALL WIS
IDENTIFICATION #127		IDENTIFICATION #128	
Town		Town	
Keene	S - 14 - 14 - 14 - 14 - 14 - 14 - 14 - 1	Keene	
Road Name Glen Road		Road Name Glen Road	
Jurisdiction Town		Jurisdiction Town	
Watershed Ausable River: East Branch		Watershed Styles Brook	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	5	% of Vegetation	5
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	25
Width of Erosion (ft)	3	Width of Erosion (ft)	3
Total Area of Erosion (ft <sup>2</sup> )	60	Total Area of Erosion (ft²)	75
Soil Type	Bouldery loam	Soil Type	Boulderly loam
Management Recommendations	Hydroseed	Management Recommendations	Stabilize with stone/gravel and hydroseed
Cost	\$500	Cost	\$200 - \$300
Total Points	22	Total Points	26
Rank	Low	Rank	Low
IDENTIFICATION #56		IDENTIFICATION #54	
_		Town	
Town Lewis		Lewis	7
rewis		Road Name Crowningshield	
Road Name Eggleston Lane		Road	
Jurisdiction Town		Jurisdiction Town	
Watershed Boquet River	10 V	Watershed Boquet River: North Branch	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	5	% of Vegetation	30
Bank Slope	Steep	Bank Slope	Low
Level of Erosion	High	Level of Erosion	Low
Length of Erosion (ft)	20	Length of Erosion (ft)	25
Width of Erosion (ft)	10	Width of Erosion (ft)	2
Total Area of Erosion (ft²)	200	Total Area of Erosion (ft²)	50
Soil Type	Pittsfield loam	Soil Type	Very rocky, very bouldery
Management Recommendations	Stabilize with stone/gravel and hydroseed	Management Recommendations	Repave side of road and hydroseed
Cost	\$500 - \$1000	Cost	\$500 - \$1000
Total Points	50	Total Points	27
Rank	High	Rank	Low
	J		

### **TOWNS OF LEWIS & MORIAH**

#### **IDENTIFICATION #75 IDENTIFICATION #55** Town Town Moriah Lewis Road Name Fisk Road Road Name Eggleston Lane Jurisdiction Town Town Jurisdiction Watershed McKenzie Brook Watershed Boquet River Direct connection to water Direct connection to water No Yes 20 40 % of Vegetation % of Vegetation Bank Slope Moderate Bank Slope Steep Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 20 Length of Erosion (ft) 60 Width of Erosion (ft) 3 Width of Erosion (ft) 25 Total Area of Erosion (ft<sup>2</sup>) 60 Total Area of Erosion (ft<sup>2</sup>) 1500 Pittsfield loam Soil Type Soil Type Gravelly sandy loam Management Stabilize with Management Stabilize with gravel Recommendations stone or gravel **Recommendations** and hydroseed \$4000 - \$5000 Cost \$300 Cost **Total Points** 30 **Total Points** 40 Rank Low Rank High **IDENTIFICATION #76 IDENTIFICATION #77** Town Town Moriah Moriah Mutton Road Name Hollow Road Road Name Main Road Jurisdiction Town Town Jurisdiction Watershed McKenzie Brook Watershed Lake Champlain Direct connection to water Direct connection to water Yes Yes 5 25 % of Vegetation % of Vegetation Bank Slope Moderate Bank Slope Steep Level of Erosion Moderate Level of Erosion High Length of Erosion (ft) Length of Erosion (ft) 50 50 7 Width of Erosion (ft) 15 Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 750 Total Area of Erosion (ft<sup>2</sup>) 350 Soil Type Gravelly sandy loam Soil Type Gravelly loamy sand Hydroseed and possibly Stabilize with stone/gravel Management Management Recommendations Recommendations and hydroseed repave road Cost \$1000 Cost \$4000 - \$5000 **Total Points Total Points** 40 50 Rank High Rank High

### **IDENTIFICATION #79**

#### Town Moriah

Road Name Witherbee Road

Jurisdiction County

Watershed McKenzie Brook



### **IDENTIFICATION #80**

#### Town Moriah

Road Name Silver Hill Road

Jurisdiction Town

Watershed Mill Brook





Watershed Wickerizie Brook		Watersfred Willi Brook	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	0	% of Vegetation	20
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	1000	Length of Erosion (ft)	50
Width of Erosion (ft)	15	Width of Erosion (ft)	25
Total Area of Erosion (ft²)	15,000	Total Area of Erosion (ft²)	1250
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Needs structural improve- ment after Spring 2011 flood		Fix pavement and repair box culvert
Cost	\$20,000	Cost	\$141,000
Total Points	50	Total Points	50
Rank	High	Rank	High

#### **IDENTIFICATION #81**

#### Town Moriah

Road Name Plank Road/Rt 7



## IDENTIFICATION #82

#### Town Moriah

Road Name Joyce Road





Jurisdiction County		Jurisdiction Town	
Watershed McKenzie Brook		Watershed Mill Brook	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	0	% of Vegetation	10
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	2000	Length of Erosion (ft)	500
Width of Erosion (ft)	5	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	10,000	Total Area of Erosion (ft²)	5000
Soil Type	Loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Install sediment basin	Management Recommendations	Stabilize with gravel and hydroseed
Cost	\$30,000	Cost	\$2000 - \$3000
Total Points	50	Total Points	50
Rank	High	Rank	High

### TOWN OF MORIAH

#### **IDENTIFICATION #84 IDENTIFICATION #78** Town Town Moriah Moriah Bartlett Road Name Pond Road Road Name Mill Brook Road Jurisdiction Town Jurisdiction Town Mill Brook Watershed Bartlett Brook Watershed Direct connection to water Direct connection to water No Yes () % of Vegetation % of Vegetation Bank Slope Moderate Bank Slope Low Level of Erosion Level of Erosion Moderate Moderate Length of Erosion (ft) 300 Length of Erosion (ft) 60 5 Width of Erosion (ft) 20 Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 6000 Total Area of Erosion (ft<sup>2</sup>) 300 Gravelly loamy sand Soil Type Fine sandy loam Soil Type Management Stabilize with gravel Management Hydroseed Recommendations and hydroseed Recommendations \$3000 - \$5000 \$500 - \$700 Cost Cost **Total Points Total Points** 40 36 Rank Moderate Rank High **IDENTIFICATION #83 IDENTIFICATION #74** Town Town Moriah Moriah Bartlett Road Name Pond Road Road Name Fairy Lake Road Jurisdiction Town Jurisdiction Town Watershed Bartlett Brook Watershed Grove Brook Direct connection to water Yes Direct connection to water Yes % of Vegetation 5 50 % of Vegetation Bank Slope Bank Slope Low Low Level of Erosion Level of Erosion Low Low Length of Erosion (ft) Length of Erosion (ft) 20 50 Width of Erosion (ft) 10 Width of Erosion (ft) 5 Total Area of Erosion (ft<sup>2</sup>) 200 Total Area of Erosion (ft<sup>2</sup>) 250 Loamy sand Very gravelly, loamy sand Soil Type Soil Type Replace stone around cul-Stabilize with stone and Management Management Recommendations vert outlet and hydroseed Recommendations hydroseed \$500 Cost Cost \$500 **Total Points** 32 **Total Points** 27 Moderate Rank Rank Low

#### **IDENTIFICATION #85**

#### Town North Elba

Road Name Adk Loj Road

Jurisdiction Town

Watershed Ausable River: West Branch



#### **IDENTIFICATION #97**

#### Town North Elba

Road Name Adk Loj Road

Jurisdiction Town

Watershed Ausable River: West Branch



Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	10
Bank Slope	Steep	Bank Slope	Low
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	50	Length of Erosion (ft)	1500
Width of Erosion (ft)	5	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	250	Total Area of Erosion (ft <sup>2</sup> )	15,000
Soil Type	Fine sandy loam	Soil Type	Fine sandy loam
Management Recommendations	Vegetative or structural	Management Recommendations	Hydroseed
Cost	\$1000	Cost	\$1800
Total Points	50	Total Points	51
Rank	High	Rank	High

### **IDENTIFICATION #89**

#### Town North Elba

Road Name Old Military Road

Jurisdiction County

Watershed Ausable River:



#### **IDENTIFICATION #91**

#### Town North Elba

Road Name Old Military Road

Jurisdiction County

Watershed Ausable River: West Branch





West Branch		West Branch	TO THE SE
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	10	% of Vegetation	5
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	50	Length of Erosion (ft)	500
Width of Erosion (ft)	3	Width of Erosion (ft)	7
Total Area of Erosion (ft <sup>2</sup> )	150	Total Area of Erosion (ft²)	3500
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Install sediment/water deflector	Management Recommendations	Clean ditch and hydroseed
Cost	\$500	Cost	\$1000
Total Points	40	Total Points	40
Rank	High	Rank	High

### TOWN OF NORTH ELBA

#### **IDENTIFICATION #96 IDENTIFICATION #93** Town Town North Elba North Elba Road Name State Highway 73 Road Name State Highway 73 Jurisdiction State Jurisdiction State Ausable River: Ausable River: Watershed Watershed West Branch West Branch Direct connection to water Direct connection to water Yes Yes 10 30 % of Vegetation % of Vegetation Bank Slope Moderate Bank Slope Moderate Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 100 Length of Erosion (ft) 2500 5 Width of Erosion (ft) Width of Erosion (ft) 10 Total Area of Erosion (ft<sup>2</sup>) 500 Total Area of Erosion (ft<sup>2</sup>) 25,000 Soil Type Fine sandy loam Soil Type Gravelly loamy sand Management Management Clean ditch and hydroseed Hydroseed **Recommendations** Recommendations \$500 - \$1000 \$3000 Cost Cost Total Points 40 **Total Points** 45 Rank High Rank High **IDENTIFICATION #88 IDENTIFICATION #94** Town Town North Elba North Elba Road Name Averyville Lane Road Name River Road Jurisdiction County Jurisdiction Town Ausable River: Ausable River: Watershed Watershed West Branch West Branch Direct connection to water Yes Direct connection to water Yes % of Vegetation 5 % of Vegetation Bank Slope Moderate Bank Slope Low Level of Erosion Low Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) 50 40 Width of Erosion (ft) 6 Width of Erosion (ft) 3 Total Area of Erosion (ft<sup>2</sup>) 300 Total Area of Erosion (ft<sup>2</sup>) 120 Fine sandy loam Fluvial deposits Soil Type Soil Type Management Management Stabilize slope, install sediment Clean ditch and hydroseed Recommendations Recommendations collection and hydroseed \$20,000 - \$30,000 Cost \$500 Cost **Total Points** 36 **Total Points** 36

Rank

Moderate

Moderate

Rank

#### **IDENTIFICATION #95**

#### Town North Elba

Road Name Adk Loj Road

Jurisdiction Town

Ausable River: Watershed West Branch



### **IDENTIFICATION #86**

#### Town North Elba

Road Name John Brown Road

Jurisdiction County

Ausable River: Watershed West Branch



West Branen		West Branen	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	2	% of Vegetation	5
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	800	Length of Erosion (ft)	200
Width of Erosion (ft)	10	Width of Erosion (ft)	2
Total Area of Erosion (ft²)	8000	Total Area of Erosion (ft²)	400
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Hydroseed	Management Recommendations	Fill in damaged areas with stone/gravel
Cost	\$1000 - \$2000	Cost	\$100 - \$200
Total Points	36	Total Points	26
Rank	Moderate	Rank	Low

#### **IDENTIFICATION #87**

#### Town North Elba

Road Name Averyville Patch La.

Jurisdiction County

Ausable River



### **IDENTIFICATION #90**

Town North Elba

Road Name Old Military Road

Jurisdiction County

Ausable River



Watershed Ausable River: West Branch	A A SECTION	Watershed West Branch	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	5	% of Vegetation	0
Bank Slope	Low	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	60	Length of Erosion (ft)	50
Width of Erosion (ft)	3	Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	180	Total Area of Erosion (ft²)	250
Soil Type	Fine sandy loam	Soil Type	Gravelly loamy sand
Management Recommendations	Fill in damaged areas with stone/gravel	Management Recommendations	Clean out ditch and hydroseed
Cost	\$200	Cost	\$400 - \$500
Total Points	26	Total Points	30
Rank	Low	Rank	Low

### TOWNS OF NORTH ELBA & ST. ARMAND

#### **IDENTIFICATION #1 IDENTIFICATION #92** Town Town North Elba St. Armand Road Name Old Military Road Road Name River Road Jurisdiction County Jurisdiction County Ausable River: Watershed West Branch Watershed Saranac River Direct connection to water Direct connection to water No Yes 30 % of Vegetation % of Vegetation Bank Slope Bank Slope Moderate Low Level of Erosion Level of Erosion Moderate Low Length of Erosion (ft) 50 Length of Erosion (ft) 100 2 Width of Erosion (ft) Width of Erosion (ft) 25 Total Area of Erosion (ft<sup>2</sup>) 100 Total Area of Erosion (ft<sup>2</sup>) 2500 Soil Type Soil Type Gravelly loamy sand Loamy sand Management Fill in damaged areas with Management Hydroseed Recommendations stone/gravel Recommendations \$100 \$500 Cost Cost **Total Points** 22 **Total Points** 45 Rank Low Rank High **IDENTIFICATION #2 IDENTIFICATION #5** Town Town St. Armand St. Armand Road Name River Road Road Name River Road Jurisdiction County Jurisdiction County Watershed Saranac River Watershed Saranac River Direct connection to water Yes Direct connection to water Yes 5 5 % of Vegetation % of Vegetation Bank Slope Steep Bank Slope Moderate Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) 50 20 Width of Erosion (ft) 25 Width of Erosion (ft) 6 Total Area of Erosion (ft<sup>2</sup>) 1250 Total Area of Erosion (ft<sup>2</sup>) 120 Soil Type Fluvial deposits Soil Type Loamy sand Stabilize with rock Stabilize with rock and Management Management Recommendations and gravel Recommendations gravel and hydroseed Cost \$500 - \$1000 Cost \$1000 **Total Points** 45 **Total Points** 40 Rank High Rank High

Moderate

#### **IDENTIFICATION #6 IDENTIFICATION #3** Town Town St. Armand St. Armand Road Name River Road Road Name Guilespy Road Jurisdiction County Jurisdiction County Watershed Saranac River Watershed Saranac River Direct connection to water Yes Direct connection to water No 25 % of Vegetation % of Vegetation Bank Slope Moderate Bank Slope Low Level of Erosion Low Level of Erosion Moderate Length of Erosion (ft) 15 Length of Erosion (ft) 200 Width of Erosion (ft) 15 Width of Erosion (ft) 50 Total Area of Erosion (ft<sup>2</sup>) 225 Total Area of Erosion (ft<sup>2</sup>) 10,000 Soil Type Soil Type Loamy sand Gravelly loamy sand Management Management Hydroseed Hydroseed Recommendations Recommendations \$300 - \$500 \$1000 - \$1250 Cost Cost **Total Points** 36 **Total Points** 36 Rank Moderate Rank Moderate **IDENTIFICATION #4 IDENTIFICATION #0** Town Town St. Armand St. Armand Road Name Guilespy Road Jurisdiction County Road Name Moose Pond Road Jurisdiction Town Ausable River: Watershed West Branch Watershed Saranac River Direct connection to water Direct connection to water Yes Yes % of Vegetation 20 % of Vegetation 5 Bank Slope Bank Slope Low Low Moderate Level of Erosion Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) 100 25 Width of Erosion (ft) 15 Width of Erosion (ft) 15 Total Area of Erosion (ft<sup>2</sup>) 1500 Total Area of Erosion (ft<sup>2</sup>) 375 Gravelly loamy sand Loamy sand Soil Type Soil Type Stabilize with gravel and Management Management Hydroseed Recommendations Recommendations hydroseed \$500 \$100 - \$200 Cost Cost 36 36 **Total Points Total Points**

Rank

Moderate

Rank

### TOWN OF TICONDEROGA

### **IDENTIFICATION #53**

#### Town Ticonderoga

Road Name Putnam Road Jurisdiction County Watershed Putnam Creek



### **IDENTIFICATION #50**

Town Ticonderoga

Road Name County Route 7 Jurisdiction County Watershed Lake Champlain



Watershed Putnam Creek		Watershed Lake Cha
Direct connection to wate	er Yes	Direct connection t
% of Vegetation	10	% of Vegetation
Bank Slope	Low	Bank Slope
Level of Erosion	Low	Level of Erosion
Length of Erosion (ft)	20	Length of Erosion (f
Width of Erosion (ft)	5	Width of Erosion (ft
Total Area of Erosion (ft²)	100	Total Area of Erosion
Soil Type	Fine sandy Loam	Soil Type
Management Recommendations	Install sediment/water deflector	Management Recommendations
Cost	\$200	Cost
Total Points	32	Total Points
Rank	Moderate	Rank

Direct connection to water	No
% of Vegetation	30
Bank Slope	Low
Level of Erosion	Low
Length of Erosion (ft)	60
Width of Erosion (ft)	3
Total Area of Erosion (ft <sup>2</sup> )	180
Soil Type	Very gravelly loamy sand
Management Recommendations	Fill holes with stone and hydroseed
Cost	\$300
Total Points	17
Rank	Low
IDENTIFICATION #52	

### **IDENTIFICATION #51**

#### Town Ticonderoga

Road Name Lord Howe Road



#### Town Ticonderoga

Road Name State Highway 74



Jurisdiction Town		Jurisdiction State	
Watershed Lake Champlain		Watershed Putnam Creek	
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	70	% of Vegetation	25
Bank Slope	Low	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	50	Length of Erosion (ft)	100
Width of Erosion (ft)	3	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	150	Total Area of Erosion (ft <sup>2</sup> )	1000
Soil Type	Silty clay loam	Soil Type	Fine sandy loam
Management Recommendations	Stabilize with stone and hydroseed	Management Recommendations	Hydroseed
Cost	\$500	Cost	\$1000
Total Points	26	Total Points	30
Rank	Low	Rank	Low

#### **IDENTIFICATION #19**

#### Town Westport

Road Name McMahon Road

Jurisdiction Town

Watershed Stacy Brook



### **IDENTIFICATION #21**

#### Town Westport

Road Name McMahon Road

Jurisdiction Town

Watershed Stacy Brook



	The second secon		Control of the Contro
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	15	% of Vegetation	10
Bank Slope	Low	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	500	Length of Erosion (ft)	100
Width of Erosion (ft)	30	Width of Erosion (ft)	15
Total Area of Erosion (ft <sup>2</sup> )	15,000	Total Area of Erosion (ft <sup>2</sup> )	1500
Soil Type	Gravelly loamy sand	Soil Type	Gravelly loamy sand
Management Recommendations	Stabilize with gravel and hydroseed	Management Recommendations	Stabilize with gravel and hydroseed
Cost	\$2000 - \$3000	Cost	\$500 - \$1000
Total Points	46	Total Points	40
Rank	High	Rank	High

### IDENTIFICATION #23

#### Town Westport

Road Name Lake Shore Road





Road Name Fitzgerald Road



Jurisdiction County		Jurisdiction Town	
Watershed Lake Champlain	1/2 J P3 13 13 15 15	Watershed Hoisington Brook	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	25
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	8	Length of Erosion (ft)	60
Width of Erosion (ft)	2	Width of Erosion (ft)	3
Total Area of Erosion (ft <sup>2</sup> )	16	Total Area of Erosion (ft²)	180
Soil Type	Silty clay loam	Soil Type	Gravelly loamy sand
Management Recommendations	Stabilize with gravel and hydroseed Poss. sediment basin	Management Recommendations	Stabilize with gravel and hydroseed
Cost	\$1500 - \$2000	Cost	\$1000 - \$1500
Total Points	40	Total Points	40
Rank	High	Rank	High

# TOWN OF WESTPORT

		ID ENTIFICATION	
IDENTIFICATION #27		IDENTIFICATION #28	
Town Westport		Town Westport	
Road Name Decker Road		Road Name Decker Road	the best of
Jurisdiction Town		Jurisdiction Town	
Watershed Boquet River		Watershed Boquet River	图4400000000000000000000000000000000000
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	15	% of Vegetation	15
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	50	Length of Erosion (ft)	50
Width of Erosion (ft)	5	Width of Erosion (ft)	50
Total Area of Erosion (ft <sup>2</sup> )	250	Total Area of Erosion (ft²)	2500
Soil Type	Fluvial deposits	Soil Type	Fluvial deposits
Management Recommendations	Stabilize with gravel and hydroseed	Management Recommendations	Install sediment basin and hydroseed
Cost	\$2000 - \$3000	Cost	\$4000 - \$5000
Total Points	40	Total Points	46
Rank	High	Rank	High
IDENTIFICATION #29		IDENTIFICATION #34	
Town Westport		Town Westport	
Road Name Merriam Forge Road		Road Name Mountain Spring Road	Modern .
Jurisdiction Town		Jurisdiction Town	
Watershed Boquet River		Watershed Stacy Brook	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	15	% of Vegetation	0
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	20	Length of Erosion (ft)	200
Width of Erosion (ft)	5	Width of Erosion (ft)	50
Total Area of Erosion (ft²)	100	Total Area of Erosion (ft²)	10,000
Soil Type	Fluvial deposits	Soil Type	Gravelly loamy sand
Management Recommendations	Rebuild road	Management Recommendations	Replace culvert and restructure road
Cost	\$300,000 - \$500,000	Cost	\$60,000
Total Points	40	Total Points	55
Rank	High	Rank	High

Management

**Total Points** 

Cost

Rank

Recommendations

#### **IDENTIFICATION #37 IDENTIFICATION #36** Town Town Westport Westport Mountain Mountain Road Name Road Name Spring Road Spring Road Jurisdiction Town Jurisdiction Town Watershed Stacy Brook Watershed Stacy Brook Direct connection to water Direct connection to water Yes Yes % of Vegetation % of Vegetation 0 Bank Slope Moderate Bank Slope Low Level of Erosion Level of Erosion Moderate Moderate Length of Erosion (ft) 200 Length of Erosion (ft) 200 Width of Erosion (ft) 20 Width of Erosion (ft) 10 Total Area of Erosion (ft<sup>2</sup>) 4000 Total Area of Erosion (ft<sup>2</sup>) 2000 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Clean culvert outlet and Management Replace culvert and stabi-Management Recommendations stabilize ditch with rock Recommendations lize road with rock \$1000 - \$2000 Cost Cost \$5000 - \$10,000 50 **Total Points Total Points** 46 Rank High Rank High **IDENTIFICATION #38 IDENTIFICATION #39** Town Town Westport Westport Mountain Mountain Road Name Road Name Spring Road Spring Road Jurisdiction Town Jurisdiction Town Watershed Stacy Brook Watershed Stacy Brook Direct connection to water Yes Direct connection to water Yes 50 % of Vegetation 10 % of Vegetation Bank Slope Bank Slope Moderate Steep Level of Erosion High Level of Erosion Moderate Length of Erosion (ft) 300 Length of Erosion (ft) 200 Width of Erosion (ft) 20 Width of Erosion (ft) 10 Total Area of Erosion (ft<sup>2</sup>) 6000 Total Area of Erosion (ft<sup>2</sup>) 2000 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand

Stabilize with gravel/stone

and hydroseed

\$2000 - \$3000

60

High

Management

**Total Points** 

Cost

Rank

Recommendations

Hydroseed

\$300 - \$500

45

High

### TOWN OF WESTPORT

#### **IDENTIFICATION #35 IDENTIFICATION #33** Town Town Westport Westport Mountain Mountain Road Name Road Name Spring Road Spring Road Jurisdiction Town Jurisdiction Town Watershed Stacy Brook Watershed Stacy Brook Direct connection to water Direct connection to water % of Vegetation 30 % of Vegetation 20 Bank Slope Moderate Bank Slope Moderate Level of Erosion Moderate Level of Erosion Low Length of Erosion (ft) Length of Erosion (ft) 20 200 Width of Erosion (ft) Width of Erosion (ft) 15 25 Total Area of Erosion (ft<sup>2</sup>) Total Area of Erosion (ft<sup>2</sup>) 5000 300 Gravelly loamy sand Soil Type Gravelly loamy sand Soil Type Management Management Hydroseed Hydroseed Recommendations Recommendations \$1000 - \$3000 \$500 - \$1000 Cost Cost **Total Points** 35 Total Points 36 Moderate Rank Moderate Rank **IDENTIFICATION #16 IDENTIFICATION #20** Town Town Westport Westport Road Name McConley Road Road Name McConley Road Jurisdiction Town Jurisdiction Town Mullen Brook Watershed Watershed Stacy Brook Direct connection to water No Direct connection to water Yes 25 % of Vegetation % of Vegetation 30 Bank Slope Bank Slope Steep Low Level of Erosion low Level of Erosion Low Length of Erosion (ft) Length of Erosion (ft) 150 60 Width of Erosion (ft) 20 Width of Erosion (ft) 15 Total Area of Erosion (ft<sup>2</sup>) 1200 Total Area of Erosion (ft<sup>2</sup>) 2250 Soil Type Gravelly loamy sand Soil Type Gravelly loamy sand Stabilize with gravel Stabilize with gravel Management Management Recommendations and hydroseed Recommendations and hydroseed \$500 - \$1000 Cost Cost \$1000 37 **Total Points** 31 **Total Points** Rank Moderate Rank Moderate

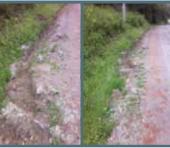
#### **IDENTIFICATION #24 IDENTIFICATION #25** Town Town Westport Westport Furnace Road Name Point Lane Road Name Fitzgerald Road Jurisdiction Town Jurisdiction Town Watershed Lake Champlain Watershed Hoisington Brook Direct connection to water Direct connection to water Yes No 60 10 % of Vegetation % of Vegetation Bank Slope Low Bank Slope Low Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 40 Length of Erosion (ft) 200 40 25 Width of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 1600 Total Area of Erosion (ft<sup>2</sup>) 5000 Gravelly loamy sand Silty clay loam Soil Type Soil Type Management Stabilize with gravel and Management Remove excess sediment Recommendations hydroseed Recommendations and hydroseed Cost \$1000 \$600 - \$700 Cost **Total Points** 31 **Total Points** 36 Rank Moderate Rank Moderate **IDENTIFICATION #17 IDENTIFICATION #31** Town Town Westport Westport Mountain Merriam Road Name Road Name Forge Road Spring Road

Jurisdiction Town



Jurisdiction Town





Watershed Boquet River		Watershed Stacy Brook	
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	40	% of Vegetation	55
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Low
Length of Erosion (ft)	30	Length of Erosion (ft)	100
Width of Erosion (ft)	10	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	300	Total Area of Erosion (ft²)	1000
Soil Type	Silty clay loam	Soil Type	Mucky, silty clay loam
Management Recommendations	Rebuild road	Management Recommendations	Stabilize with stone and hydroseed
Cost	\$200,000 - \$300,000	Cost	\$500
Total Points	35	Total Points	12
Rank	Moderate	Rank	Low

# TOWN OF WESTPORT

IDENTIFICATION #18		IDENTIFICATION #22	
		IDENTIFICATION #22	
Town Westport	ALC: NO.	Town	
		Westport	
Road Name Mountain Spring Road		Dood Name - Fitzgerald Dood	
Jurisdiction Town		Road Name Fitzgerald Road  Jurisdiction Town	
Watershed Stacy Brook		Watershed Hoisington Brook	TO STATE
Direct connection to water	No	Direct connection to water	No
% of Vegetation	55	% of Vegetation	15
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	75	Length of Erosion (ft)	15
Width of Erosion (ft)	10	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	750	Total Area of Erosion (ft²)	45
Soil Type	Loamy sand	Soil Type	Fine sandy loam
Management	Remove excess sediment	Management	Fill in washed out areas with
Recommendations	and hydroseed	Recommendations	stone
Cost	\$300 - \$500	Cost	\$500
Total Points	12	Total Points	26
Rank	Low	Rank	Low
IDENTIFICATION #30		IDENTIFICATION #32	
_			
Town		Town	
Westport		Westport	- JAMES W
Road Name Eggleston Lane		Road Name Eggleston Lane	
Jurisdiction Town		Jurisdiction Town	
Watershed Boquet River		Watershed Boquet River	
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	30	% of Vegetation	5
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	100	Length of Erosion (ft)	25
Width of Erosion (ft)	10	Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	1000	Total Area of Erosion (ft²)	125
Soil Type	Silty clay loam	Soil Type	Pittsfield loam
Management	Stabilize with gravel and	Management	Stabilize with gravel and
Recommendations	hydroseed	Recommendations	hydroseed
Cost	\$500	Cost	\$500
Total Points	27	Total Points	22
Rank	Low	Rank	Low

Town

### TOWNS OF WILLSBORO & WILMINGTON

# **IDENTIFICATION #58**

### Willsboro

Road Name Joe Rivers Road Jurisdiction Town

Watershed Boquet River



#### **IDENTIFICATION #57**

#### Town Willsboro

Road Name Reber Road Jurisdiction Town

Watershed Boquet River



Direct connection to water	No	Direct connection to water	No
% of Vegetation	10	% of Vegetation	50
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	5280	Length of Erosion (ft)	60
Width of Erosion (ft)	25	Width of Erosion (ft)	3
Total Area of Erosion (ft <sup>2</sup> )	132,000	Total Area of Erosion (ft²)	180
Soil Type	Silty clay loam	Soil Type	Silty clay loam
Management Recommendations	Clean ditches on both sides of road and hydroseed	Management Recommendations	Structural
Cost	\$15,000 - \$20,000	Cost	\$500
Total Points	40	Total Points	30
Rank	High	Rank	Low

### **IDENTIFICATION #9**

#### Town Wilmington

Road Name Hazelton Road Jurisdiction County

Ausable River:



### **IDENTIFICATION #10**

Town Wilmington

Road Name Lenny Preston Road

Jurisdiction Town

Ausable River:





Watershed West Branch	10000000000000000000000000000000000000	Watershed West Branch	
Direct connection to water	No	Direct connection to water	Yes
% of Vegetation	0	% of Vegetation	0
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	300	Length of Erosion (ft)	20
Width of Erosion (ft)	25	Width of Erosion (ft)	60
Total Area of Erosion (ft²)	7500	Total Area of Erosion (ft²)	1200
Soil Type	Loamy sand	Soil Type	Loamy sand
Management Recommendations	Hydroseed	Management Recommendations	Stabilize with rock and hydroseed
Cost	\$1000 - \$2000	Cost	\$5000
Total Points	45	Total Points	40
Rank	High	Rank	High

#### TOWN OF WILMINGTON

#### **IDENTIFICATION #15**

#### Town Wilmington

Road Name Reservoir Lane

Jurisdiction Town

Watershed Ausable River: West Branch



#### **IDENTIFICATION #12**

#### Town Wilmington

Road Name Fox Farm Road

Jurisdiction County

Watershed Ausable River: West Branch



	THE RESIDENCE OF THE PARTY OF T		THE RESIDENCE OF THE PARTY OF T
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	5	% of Vegetation	10
Bank Slope	Steep	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Low
Length of Erosion (ft)	25	Length of Erosion (ft)	15
Width of Erosion (ft)	6	Width of Erosion (ft)	6
Total Area of Erosion (ft2)	150	Total Area of Erosion (ft²)	90
Soil Type	Gravelly loamy sand	Soil Type	Loamy sand
Management Recommendations	Stabilize with gravel and hydroseed	Management Recommendations	Hydroseed
Cost	\$500 - \$1000	Cost	\$300 - \$500
Total Points	45	Total Points	32
Rank	High	Rank	Moderate
IDENTIFICATION #4.4		IDENTIFICATION "T	

#### **IDENTIFICATION #14**

#### Town Wilmington

Road Name State Highway 86

Jurisdiction State

Watershed Ausable River:
West Branch



#### IDENTIFICATION #7

#### Town Wilmington

Road Name Perkins Lane

Jurisdiction Town

Vatershed Auable River: West Branch



West Branch		West Branch	ALCOHOL: SECTION AND ADDRESS OF THE PARTY OF
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	10	% of Vegetation	40
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	30	Length of Erosion (ft)	40
Width of Erosion (ft)	5	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	150	Total Area of Erosion (ft²)	400
Soil Type	Gravelly loamy sand	Soil Type	Fluvial deposits
Management Recommendations	Install sediment basin or infiltration system	Management Recommendations	Install water/sediment deflector
Cost	\$10,000 - \$20,000	Cost	\$200
Total Points	36	Total Points	27
Rank	Moderate	Rank	Low

#### **IDENTIFICATION #8 IDENTIFICATION #11** Town Town Wilmington Wilmington Road Name Deep Wood Lane Road Name Guilespy Road Jurisdiction Town Jurisdiction County Ausable River: Ausable River: Watershed Watershed West Branch West Branch Direct connection to water Direct connection to water No No 25 30 % of Vegetation % of Vegetation Bank Slope Low Bank Slope Low Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) 50 Length of Erosion (ft) 100 15 5 Width of Erosion (ft) Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 750 Total Area of Erosion (ft<sup>2</sup>) 500 Soil Type Loamy sand Soil Type Gravelly loamy sand Management Management Stabilize with gravel and Hydroseed Recommendations Recommendations hydroseed Cost \$500 - \$700 Cost \$300 - \$500 **Total Points** 21 **Total Points** 26 Rank Rank Low Low

#### **IDENTIFICATION #13**

Town	
Wilmington	

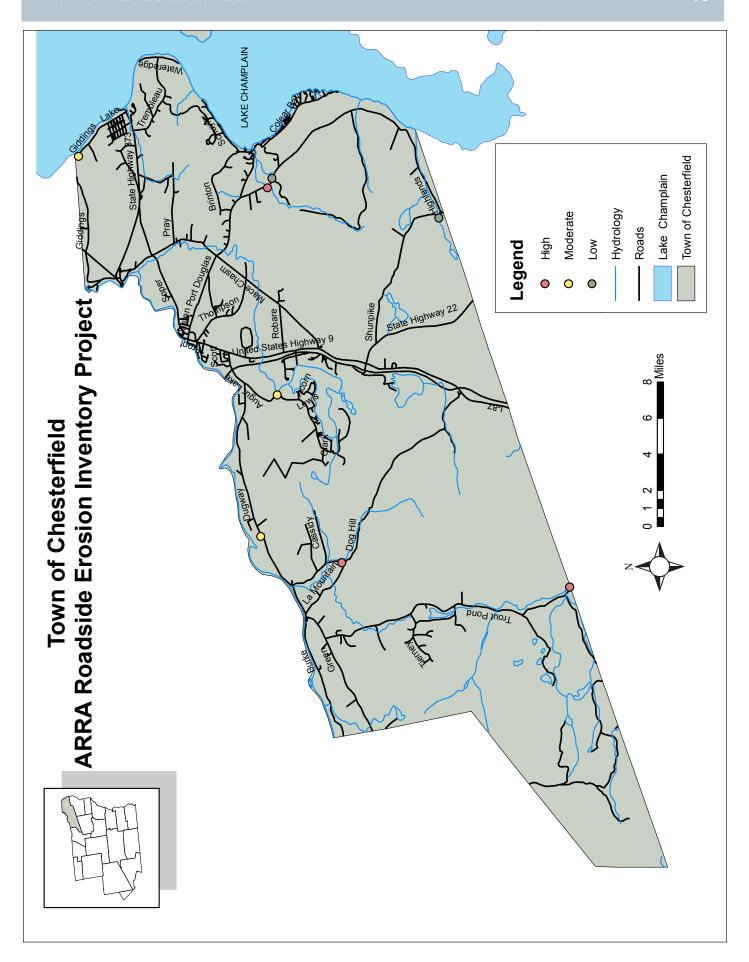
Road Name Quaker Mt. Road

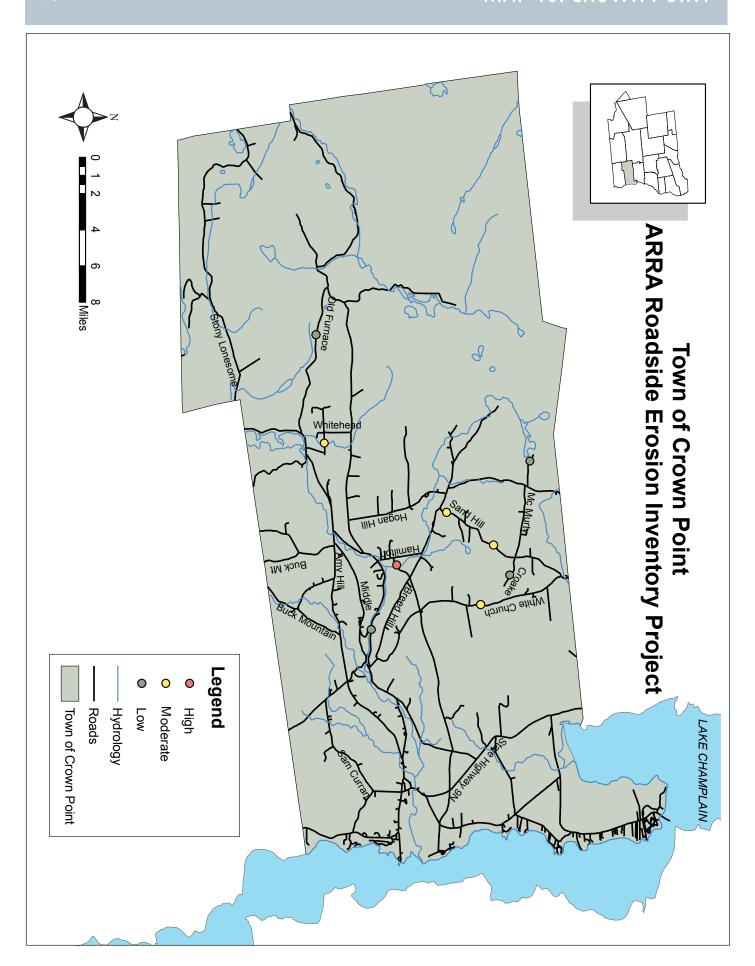
Jurisdiction Town

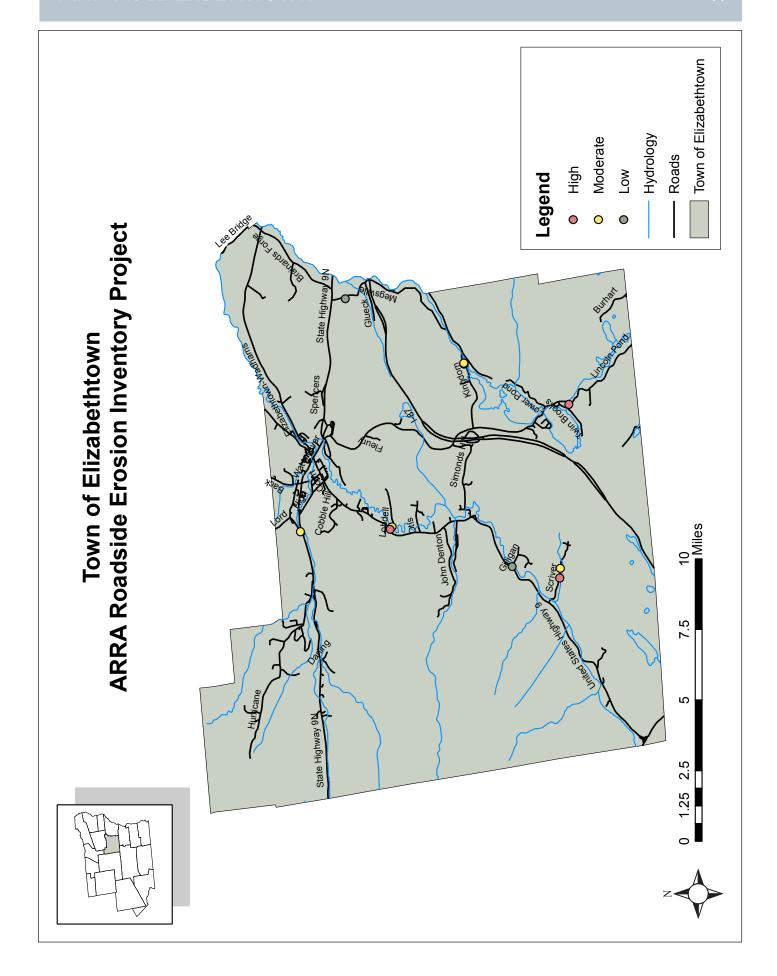
Watershed West Branch:
Ausable River

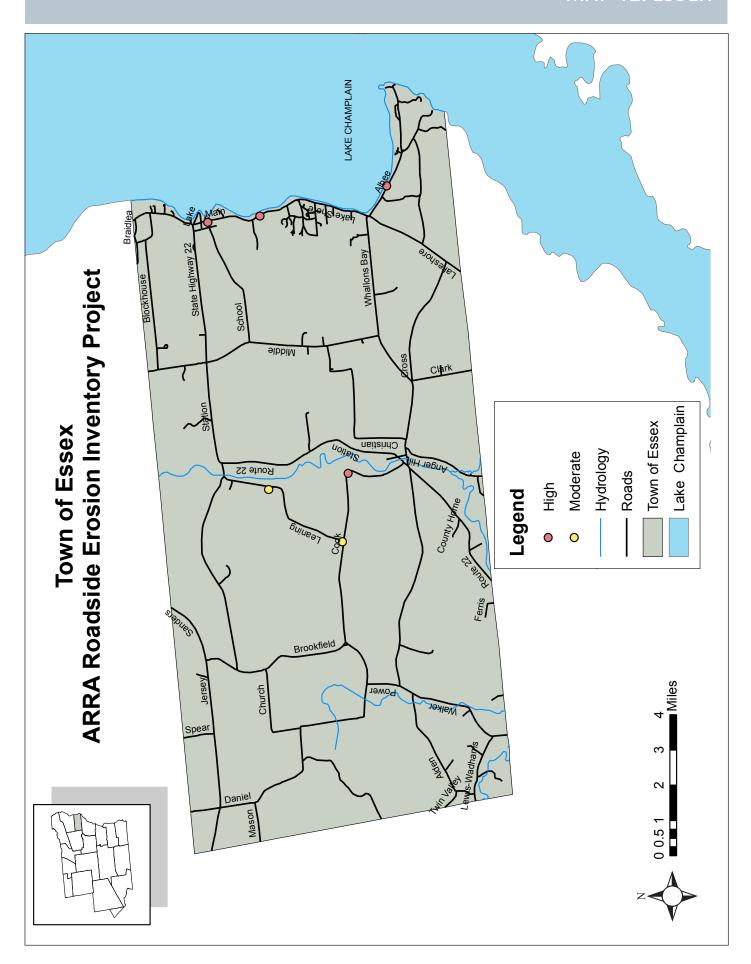


/ tasable tilver	THE SHAREST STATE
Direct connection to water	No
% of Vegetation	0
Bank Slope	Low
Level of Erosion	Moderate
Length of Erosion (ft)	60
Width of Erosion (ft)	20
Total Area of Erosion (ft²)	1200
Soil Type	Gravelly loamy sand
Management Recommendations	Install infiltration measures and hydroseed
Cost	\$3000 - \$5000
Total Points	26
Rank	Low

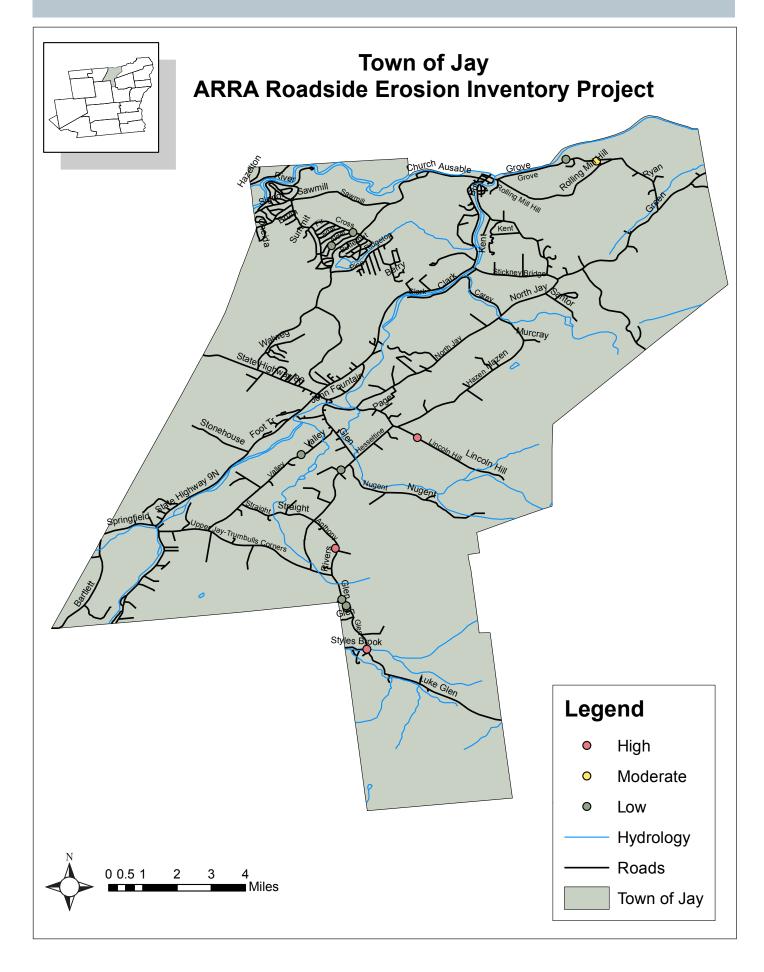


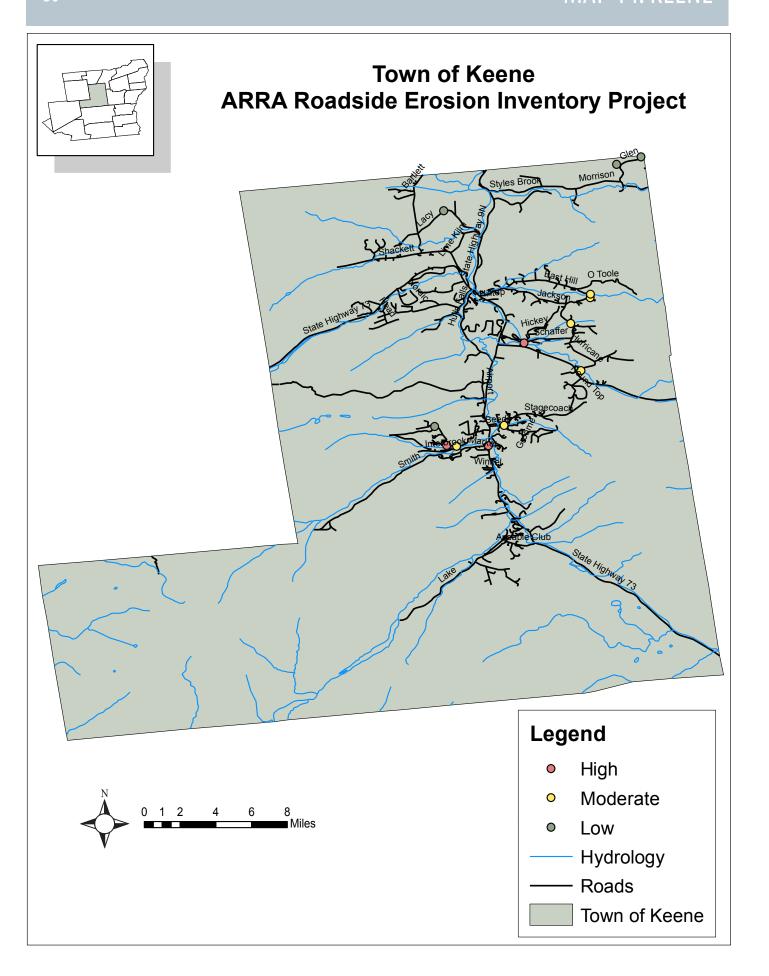


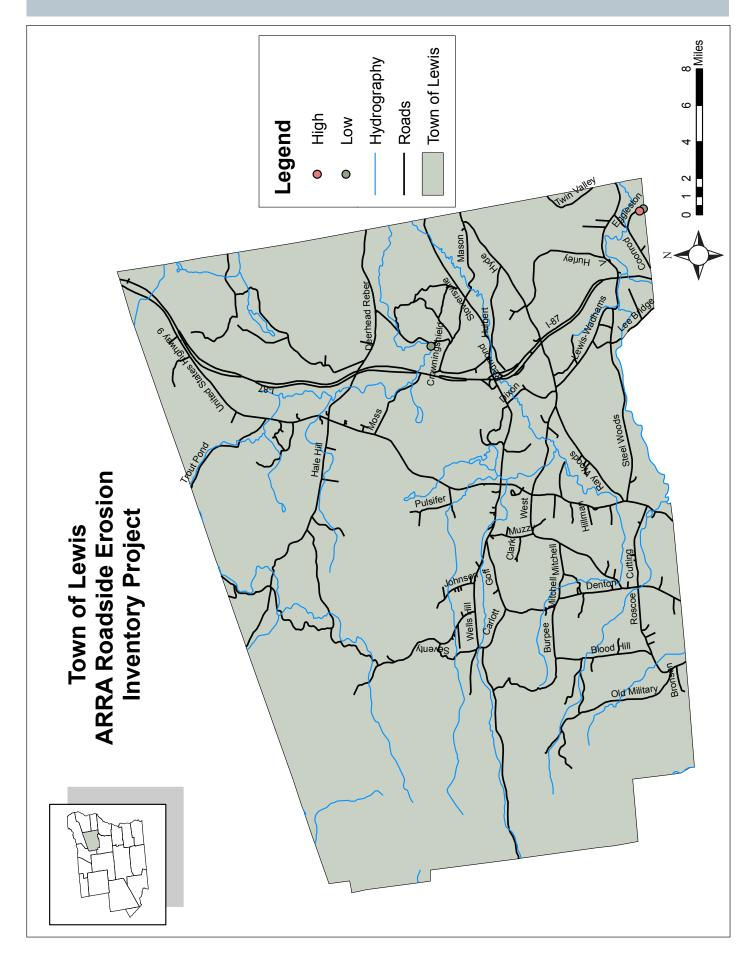


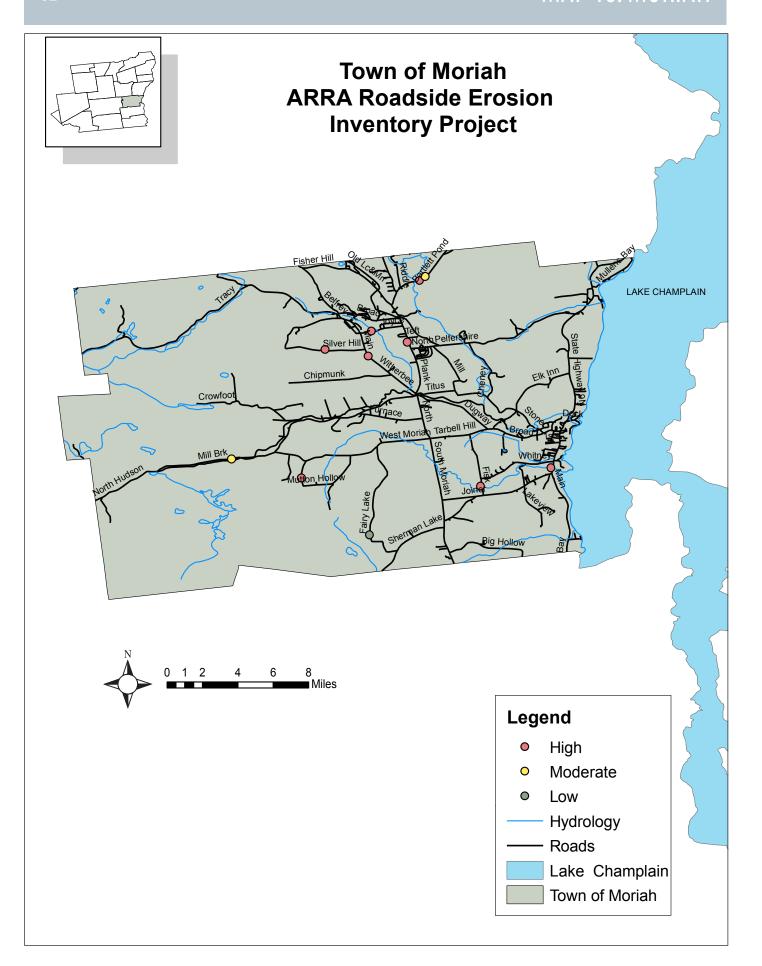


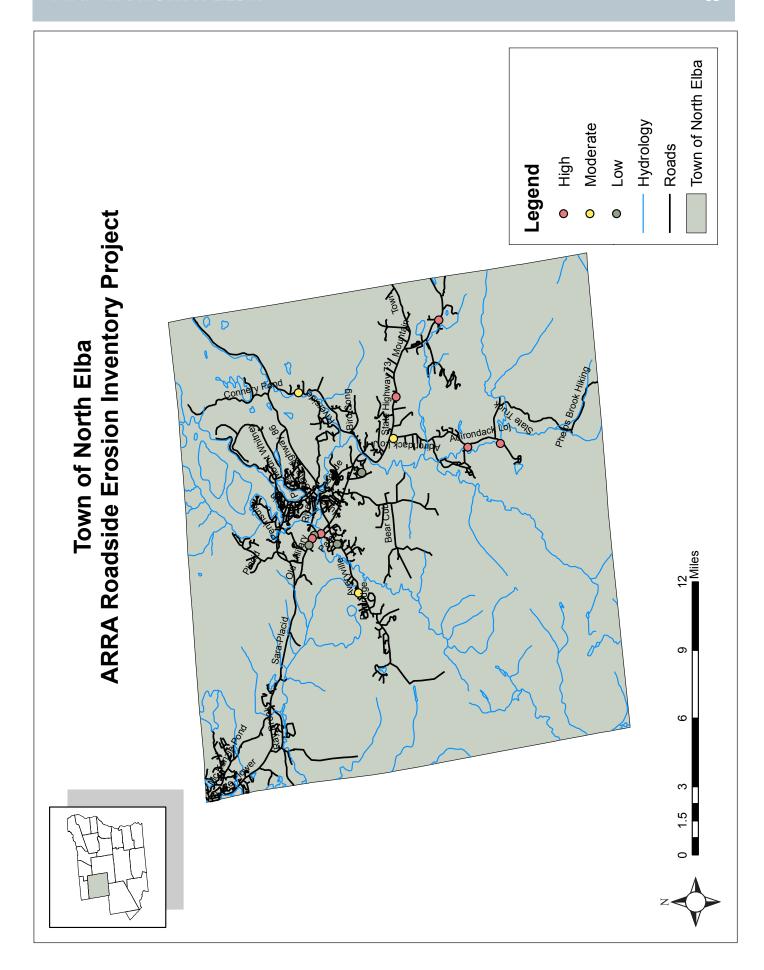
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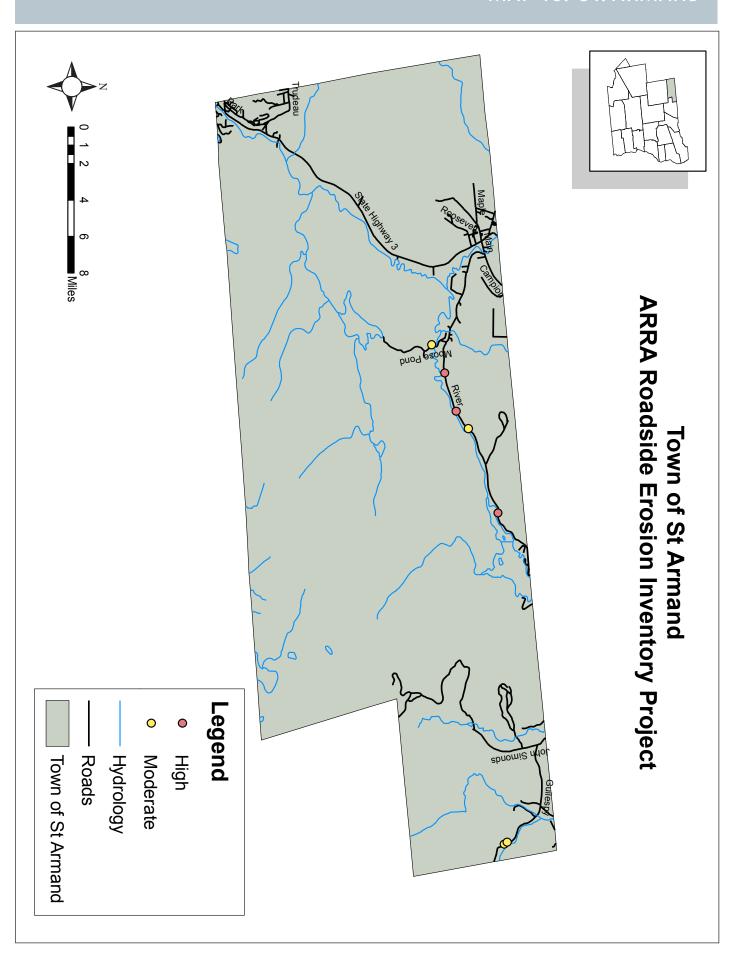


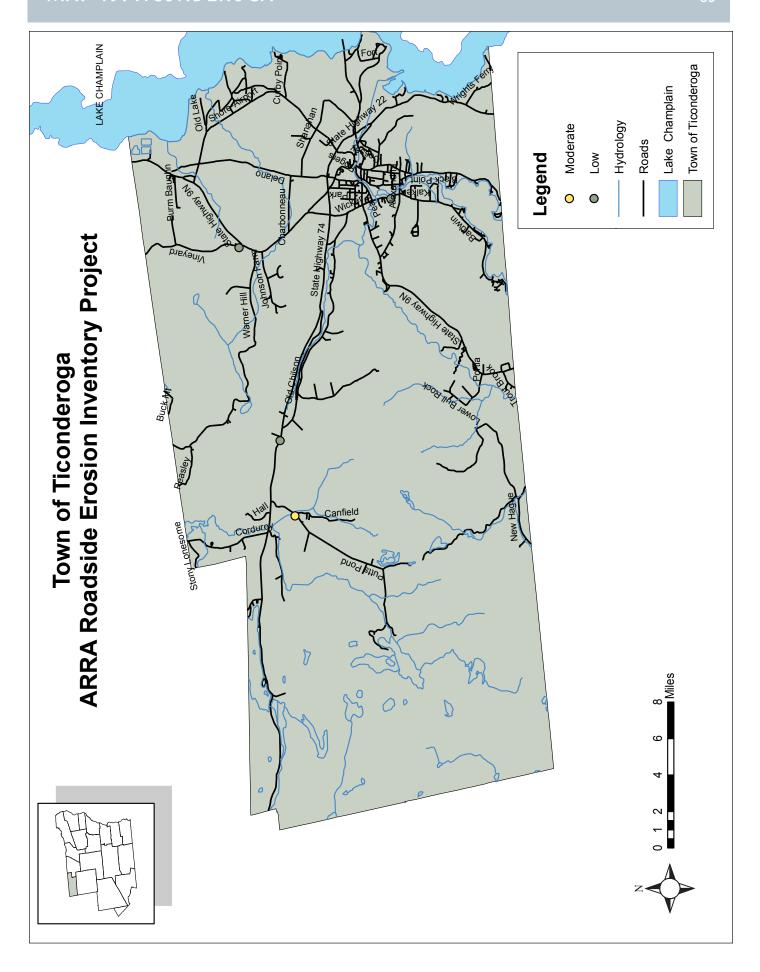


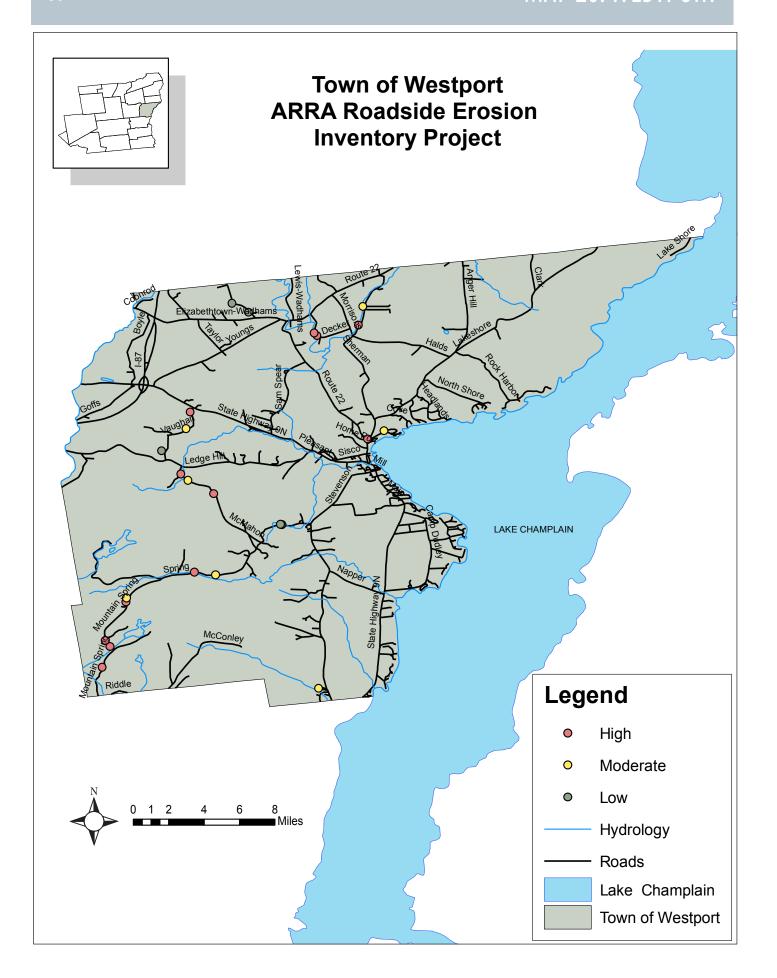


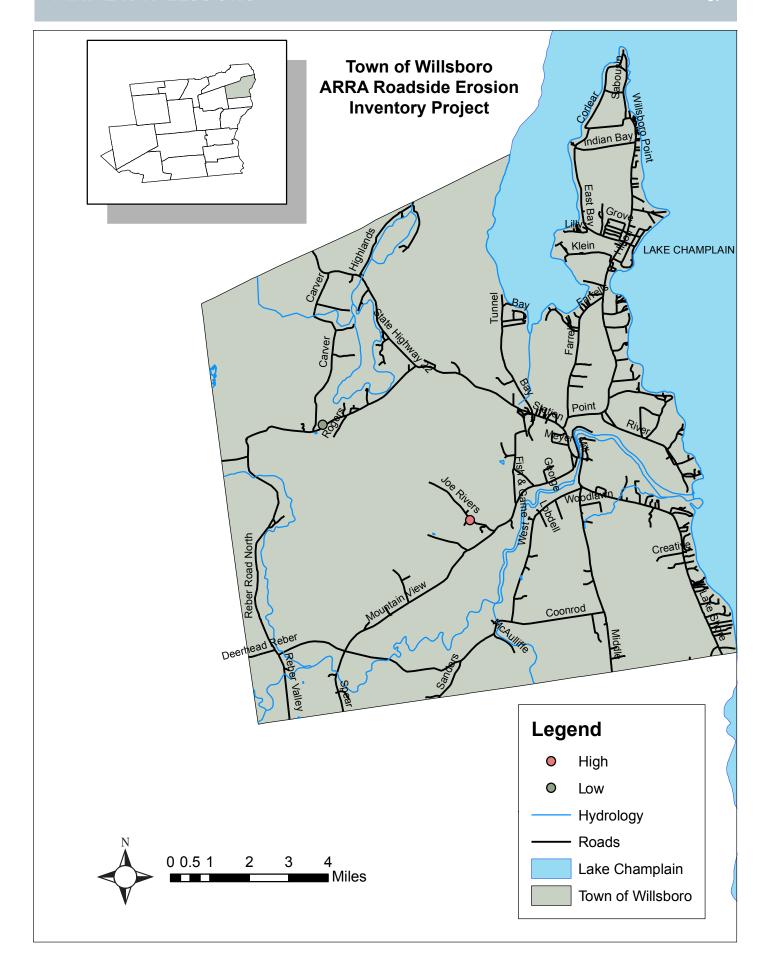


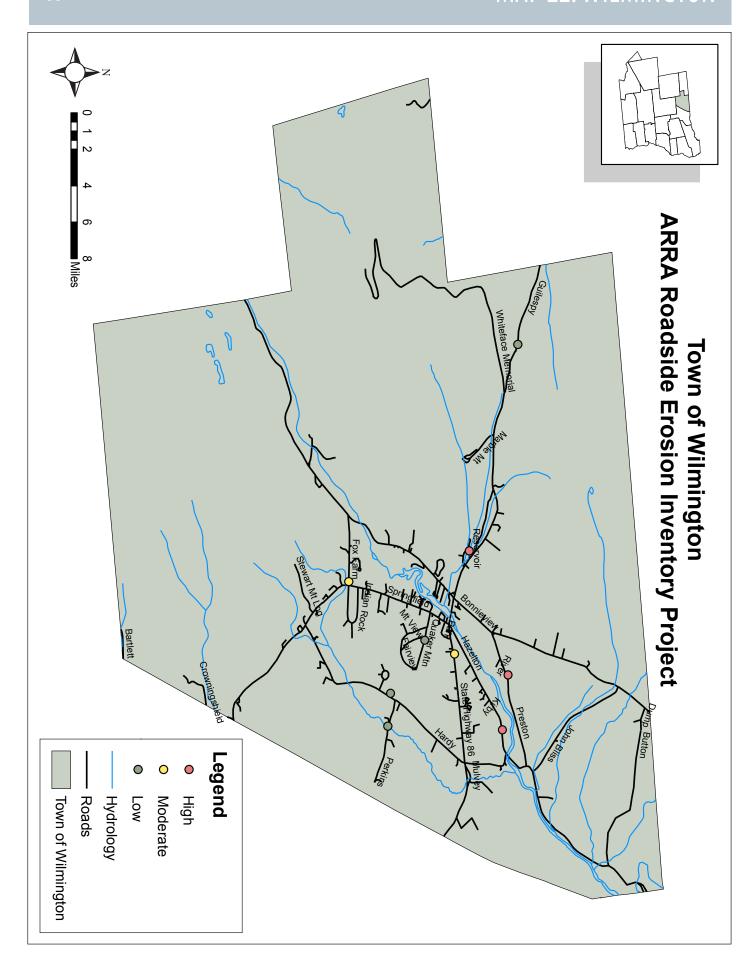


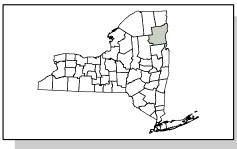




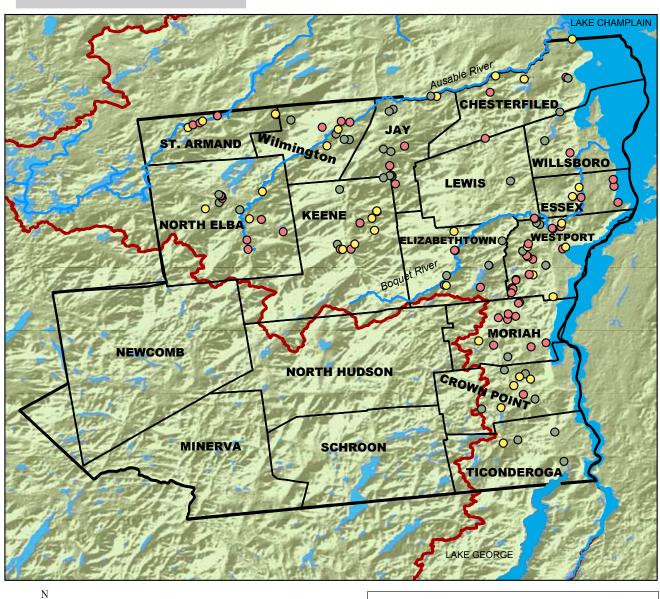


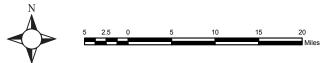


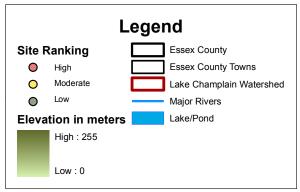




### American Recovery and Reinvestment Act Roadside Erosion Inventory Project Essex County, New York







LCLGRPB \ 2012 91



The towns of Brighton, Franklin, Harrietstown and Santa Clara, located in the southeast corner of Franklin County, make up the western-most extent of the Lake Champlain Watershed. The largest population center in that area, the Village of Saranac Lake, is encompassed by the Town of Harrietstown. Within this small, rural drainage area is a large network of rural roads that connect the hamlets and residential properties. Land use in this portion of the watershed is predominately horticulture and logging, cash crops, and a growing number of hobby farms.

The topography of the area is steep and very mountainous with lakes, ponds and wetlands occupying the narrow valleys and sinks. The soils consist primarily of glacial till, well drained sand and gravel deposits. The sands and gravels in this area are relatively sterile soils and have great difficulty revegetating once disturbed. The only tributary to Lake Champlain from Franklin County is the Saranac River,

which originates from several source lakes and ponds in the Adirondack Mountains. The river flows easterly through the Village of Saranac Lake and across the county border into Clinton County, where it continues until it discharges into Lake Champlain in the City of Plattsburgh.

In total, 89 roadside erosion sites were identified in Franklin County; 14 High Priority, 13 Moderate Priority and 62 Low Priority. The majority of the roadside erosion sites were identified within the Towns of Franklin (56) and Harrietstown (26). Remediation practices for these sites include hydroseeding with various seed mixes and soil amendments as well as installing additional erosion control best management practices. Corrective actions for the sites range in price from \$200 to \$2,000 each, with an overall total cost to remediate all the sites of \$72,700.

#### FRANKLIN COUNTY SITES

#### TOWN | MAJOR SUBWATERSHEDS | ROADS

Ta	Num	Number of Sites per Priority		
Town	High	Moderate	Low	of sites in County
Brighton	0	1	2	3%
Franklin	11	10	35	64%
Harrietstown	3	2	21	29%
Santa Clara	0	0	4	4%

Major	Nun	Number of Sites per Priority		
Subwatershed	High	Moderate	Low	of sites in County
Saranac River	14	13	62	100%

Road	Number of Sites per Priority			Percentage
Jurisdiction	High	Moderate	Low	of sites in County
State Roads	0	0	10	11%
County Roads	4	2	12	20%
Town Roads	9	10	40	67%
Private Roads	1	0	0	1%
Unknown Jurisdiction	0	1	0	1%

#### TOWNS OF BRIGHTON & FRANKLIN

#### **IDENTIFICATION #6241130**

#### Town Brighton

Road Name Clark Wardner

Jurisdiction Town

Watershed Saranac River



#### **IDENTIFICATION #6241117**

#### Town Brighton

Road Name Clark Wardner Jurisdiction Town

Watershed Saranac River



Direct connection to water	Yes - Culvert
% of Vegetation	50
Bank Slope	Moderate
Level of Erosion	Moderate
Length of Erosion (ft)	40
Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	200
Soil Type	Loamy sand
Management Recommendations	Remove leaves and hydroseed with tackifier
Cost	\$300 - \$500
Total Points	35

Total Points 35 Rank Moderate

IDENTIFICATION #6241121

Direct connection to water	No
% of Vegetation	50
Bank Slope	Low
Level of Erosion	Moderate
Length of Erosion (ft)	15
Width of Erosion (ft)	10
Total Area of Erosion (ft²)	150
Soil Type	Sandy
Management Recommendations	Hydroseed with conservation mix
Cost	\$200 - \$300
Total Points	21

Low

#### **IDENTIFICATION #681017**

#### Town Brighton

Road Name Clark Wardner

Jurisdiction Town



#### Town Franklin

Rank

Road Name French Road

Jurisdiction Town



Janisaiction Town		Sansaretion Town	WOODS TO THE PROPERTY OF THE PARTY OF THE PA
Watershed Saranac River		Watershed Saranac River	
Direct connection to water	No	Direct connection to water	Unknown
% of Vegetation	50	% of Vegetation	20
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	400
Width of Erosion (ft)	10	Width of Erosion (ft)	5
Total Area of Erosion (ft²)	200	Total Area of Erosion (ft <sup>2</sup> )	2000
Soil Type	Sandy	Soil Type	Loamy sand
Management Recommendations	Hydroseed with conservation mix and tackifier	Management Recommendations	Install erosion control mats and hydroseed with tackifier
Cost	\$300 - \$500	Cost	\$1000 - \$2000
Total Points	25	Total Points	40
Rank	Low	Rank	High

# Town Franklin Road Name Plank Road Jurisdiction Town Watershed Saranac River Direct connection to water Yes - Stream % of Vegetation Bank Slope Steep IDENTIFICATION #68148 Town Franklin Road Name Franklin Falls Road Jurisdiction County Watershed Saranac River Direct connection to water Yes - Stream % of Vegetation Steep Bank Slope Model

Rank	High	Rank	High
Total Points	50	Total Points	41
Cost	\$1000 - \$2000	Cost	\$300 - \$500
Management Recommendations	Install erosion control mats and hydroseed with tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Soil Type	Loam	Soil Type	Loam
Total Area of Erosion (ft <sup>2</sup> )	200	Total Area of Erosion (ft²)	2000
Width of Erosion (ft)	10	Width of Erosion (ft)	10
Length of Erosion (ft)	20	Length of Erosion (ft)	200
Level of Erosion	High	Level of Erosion	Low
Bank Slope	Steep	Bank Slope	Moderate
% of Vegetation	10	% of Vegetation	50
Direct connection to water	Yes - Stream	Direct connection to water	Yes - Other

Town

#### **IDENTIFICATION #6101001**

## Town Franklin Road Name Blue Spruce Road Jurisdiction Town Watershed Saranac River

Jurisdiction Town	
Watershed Saranac River	
Direct connection to water	Yes - Stream
% of Vegetation	20
Bank Slope	Steep
Level of Erosion	High
Length of Erosion (ft)	50
Width of Erosion (ft)	15
Total Area of Erosion (ft²)	750
Soil Type	Sandy gravel
Management Recommendations	Install erosion control mats and hydroseed with tackifier
Cost	\$1200 - \$2000
Total Points	50
Rank	Hiah

#### IDENTIFICATION #6101004

Franklin			
Road Name	Blue Spruce Road	بان ۾	
Iurisdiction	Town		
Watershed	Saranac River		
			-

Watershed Saranac River	
Direct connection to water	Yes - Other
% of Vegetation	5
Bank Slope	Steep
Level of Erosion	High
Length of Erosion (ft)	75
Width of Erosion (ft)	6
Total Area of Erosion (ft²)	450
Soil Type	Sandy gravel
Management Recommendations	Install erosion control mats and hydroseed with tackifier
Cost	\$1200 - \$2000
Total Points	50
Rank	High

#### **IDENTIFICATION #6101008**

#### Town Franklin

Road Name Blue Spruce Road Jurisdiction Town

Watershed Saranac River



#### **IDENTIFICATION #6101131**

#### Town Franklin

Road Name Merril Road Jurisdiction Town



Watershed Saranac River	は国際の大学の大学の大学の	vvatersned Saranac River	The state of the s
Direct connection to water	Unknown	Direct connection to water	Yes - Stream
% of Vegetation	0	% of Vegetation	20
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	150	Length of Erosion (ft)	200
Width of Erosion (ft)	8	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	1200	Total Area of Erosion (ft <sup>2</sup> )	2000
Soil Type	Sandy gravel	Soil Type	Sandy loam
Management Recommendations	Install erosion control mats and hydroseed with tackifier	Management Recommendations	Install erosion control mats and hydroseed with tackifier
Cost	\$1200 - \$2000	Cost	\$1200 - \$2000
Total Points	40	Total Points	60
Rank	High	Rank	High

#### IDENTIFICATION #6101144

#### Town Franklin

Road Name Thatcherville Road



#### **IDENTIFICATION #6101203**

#### Town Franklin

Road Name

Kushaqua Mud Pond Road



Jurisdiction Town		Jurisdiction Town	
Watershed Saranac River		Watershed Saranac River	
Direct connection to water	Unknown	Direct connection to water	Yes - Stream
% of Vegetation	30	% of Vegetation	70
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	100	Length of Erosion (ft)	30
Width of Erosion (ft)	30	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	3000	Total Area of Erosion (ft <sup>2</sup> )	300
Soil Type	Gravelly sand	Soil Type	Gravelly sand
Management Recommendations	Install erosion control mats and hydroseed with tackifier	Management Recommendations	Install erosion control mats and hydroseed with tackifier
Cost	\$1200 - \$2000	Cost	\$1200 - \$2000
Total Points	40	Total Points	40
Rank	High	Rank	High

#### **IDENTIFICATION #610924 IDENTIFICATION #610933** Town Town Franklin Franklin Road Name County Route 26 Road Name Bass Lake Road County Jurisdiction Jurisdiction Private Watershed Saranac River Watershed Saranac River Direct connection to water Direct connection to water Yes - Other Yes - Other % of Vegetation 70 % of Vegetation 40 Bank Slope Moderate Bank Slope Steep Level of Erosion Moderate Level of Erosion High Length of Erosion (ft) 400 Length of Erosion (ft) 200 Width of Erosion (ft) Width of Erosion (ft) 4 Total Area of Erosion (ft<sup>2</sup>) 2800 Total Area of Erosion (ft<sup>2</sup>) 800 Soil Type Gravelly sand Soil Type Gravelly sand Management Install erosion control mats Management Install erosion control mats Recommendations and hydroseed with tackifier Recommendations and hydroseed with tackifier \$1000 - \$2000 \$1200 - \$2000 Cost Cost **Total Points** 40 **Total Points** 45 Rank High Rank High **IDENTIFICATION #681022 IDENTIFICATION #6101127** Town Town Franklin Franklin Road Name French Road Road Name Merril Road Jurisdiction Town Jurisdiction Town Watershed Saranac River Watershed Saranac River Unknown Direct connection to water Direct connection to water Unknown % of Vegetation 10 % of Vegetation 80 Moderate Bank Slope Bank Slope Steep Level of Erosion Moderate Level of Erosion High Length of Erosion (ft) Length of Erosion (ft) 150 300 Width of Erosion (ft) 7 Width of Erosion (ft) 7 Total Area of Erosion (ft<sup>2</sup>) 1050 Total Area of Erosion (ft<sup>2</sup>) 2100 Soil Type Loamy sand Soil Type Sandy gravel Add top soil and hydroseed with Management Install erosion control mats Management Recommendations Recommendations conservation mix and tackifier and hydroseed with tackifier \$1000 - \$2000 Cost \$1000 - \$1500 Cost **Total Points** 35 **Total Points** 31 Moderate Rank Moderate Rank

#### **IDENTIFICATION #681102**

#### Town Franklin

Road Name Alderbrook Road

Jurisdiction Town

Watershed Saranas Pin



#### **IDENTIFICATION #681114**

#### Town Franklin

Road Name Alderbrook Road

Jurisdiction Town



Watershed Saranac River		Watershed Saranac River	
Direct connection to water	Unknown	Direct connection to water	Yes - Other
% of Vegetation	10	% of Vegetation	40
Bank Slope	Low	Bank Slope	Low
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	500	Length of Erosion (ft)	200
Width of Erosion (ft)	6	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	3000	Total Area of Erosion (ft²)	2000
Soil Type	Sandy loam	Soil Type	Sandy loam
Management Recommendations	Hydroseed with conservation mix and tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$300 - \$500	Cost	\$500 - \$700
Total Points	32	Total Points	37
Rank	Moderate	Rank	Moderate

#### **IDENTIFICATION #68110**

#### Town Franklin

Road Name Plank Road Jurisdiction Town



#### IDENTIFICATION #610950

#### Town Franklin

Road Name Garden Road Jurisdiction Town



Julisuiction Town	· 人人名英格兰	Julisaletion Town	
Watershed Saranac River		Watershed Saranac River	
Direct connection to water	Yes - Stream	Direct connection to water	Unknown
% of Vegetation	40	% of Vegetation	0
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	20	Length of Erosion (ft)	50
Width of Erosion (ft)	6	Width of Erosion (ft)	7
Total Area of Erosion (ft²)	120	Total Area of Erosion (ft²)	350
Soil Type	Sandy loam	Soil Type	Gravelly sand
Management Recommendations	Hydroseed with conservation mix and tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$500 - \$700	Cost	\$500 - \$700
Total Points	35	Total Points	35
Rank	Moderate	Rank	Moderate

#### **IDENTIFICATION #610939 IDENTIFICATION #6101149** Town Town Franklin Franklin Road Name County Route 26 Road Name Thatcherville Road County Jurisdiction Jurisdiction Town Watershed Saranac River Watershed Saranac River Direct connection to water Direct connection to water Yes - Other 50 % of Vegetation 80 % of Vegetation Bank Slope Moderate Bank Slope Moderate Level of Erosion Level of Erosion Moderate Moderate Length of Erosion (ft) 200 Length of Erosion (ft) 200 Width of Erosion (ft) 15 Width of Erosion (ft) 20 Total Area of Erosion (ft<sup>2</sup>) 3000 Total Area of Erosion (ft<sup>2</sup>) 4000 Soil Type Gravelly sand Soil Type Gravelly sand Management Hydroseed with conservation Management Install erosion control mats Recommendations mix and tackifier Recommendations and hydroseed with tackifier \$400 - \$600 \$1200 - \$2000 Cost Cost **Total Points** 36 **Total Points** 35 Rank Moderate Rank Moderate **IDENTIFICATION #6101029 IDENTIFICATION #6101039** Town Town Franklin Franklin Road Name Thatcherville Road Road Name Thatcherville Road Jurisdiction Town Jurisdiction Town Saranac River Saranac River Watershed Watershed Yes - Stream Direct connection to water Yes - Stream Direct connection to water % of Vegetation 30 % of Vegetation 80 Bank Slope Bank Slope Steep Steep Level of Erosion Moderate Level of Erosion Moderate Length of Erosion (ft) Length of Erosion (ft) 5 50 4 Width of Erosion (ft) 30 Width of Erosion (ft) Total Area of Erosion (ft<sup>2</sup>) 1500 Total Area of Erosion (ft<sup>2</sup>) 20 Soil Type Sandy loam Soil Type Sandy loam Management Install erosion control mats Management Install erosion control mats Recommendations Recommendations and hydroseed with tackifier and hydroseed with tackifier Cost \$1200 - \$2000 Cost \$1000 **Total Points** 40 **Total Points** 31 Moderate Rank Moderate Rank

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	LOW		Rank			21	IOTAI POINTS
\$300 - \$500	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Loam	1600	8	200	Low	Moderate	60	Unknown
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		French Road	Road Name
IDENTIFICATION #681005	ID						Town of Franklin
	Low		Rank			12	Total Points
\$200 - \$300	Cost				ion mix	Hydroseed with conservation mix	Management Recommendation
Sandy	1200	4	300	Low	Low	70	Unknown
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		Gabriels - Onchiota Road	Road Name
IDENTIFICATION #6101234	IDE						Town of Franklin
	Low		Rank			25	Total Points
\$600 - \$800	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Sandy	500	10	50	Moderate	Steep	75	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		Gabriels - Onchiota Road	Road Name
IDENTIFICATION #6241200	IDE						Town of Franklin
	Low		Rank			17	Total Points
\$600 - \$800	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Loamy sand	75	5	15	Low	Low	50	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		Gabriels - Onchiota Road	Road Name
IDENTIFICATION #6241156	IDE						Town of Franklin
	Low		Rank			21	Total Points
\$300 - \$500	Cost					Hydroseed with tackifier	Management Recommendation
Sandy	1200	6	200	Low	Moderate	30	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		Gabriels - Onchiota Road	Road Name
IDENTIFICATION #6241151	IDE						Town of Franklin
	Low		Rank			12	Total Points
\$600 - \$800	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Sandy	80	4	20	Low	Low	75	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		Gabriels - Onchiota Road	Road Name
IDENTIFICATION #6241148	IDE						Town of Franklin

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Town of Franklin						OI .	IDENTIFICATION #681011
Road Name	French Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	%Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Unknown	40	Low	Low	150	5	750	Loamy sand
Management Recommendation	Hydroseed with conservation	n mix				Cost	\$200 - \$400
Total Points	17			Rank		Low	
Town of Franklin							IDENTIFICATION #681029
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Culvert	40	Low	Low	30	10	300	Loamy sand
Management Recommendation	Hydroseed with conservation	n mix				Cost	\$200 - \$300
Total Points	27			Rank		Low	
Town of Franklin							IDENTIFICATION #681039
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Stream	95	Low	Low	200	12	2400	Loamy sand
Management Recommendation	Hydroseed with conservation mix	n mix				Cost	\$200 - \$300
Total Points	28			Rank		Low	
Town of Franklin						IDE	IDENTIFICATION #6810460
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Unknown	95	Moderate	Low	300	10	3000	Sandy Loam
Management Recommendation	Hydroseed with conservation mix and tackifier	n mix and tackifier				Cost	\$600 - \$800
Total Points	22			Rank		Low	
Town of Franklin							IDENTIFICATION #681128
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Unknown	06	Low	Low	300	12	3600	Sandy Ioam
Management Recommendation	Hydroseed with conservation mix	n mix				Cost	\$200 - \$300
Total Points	18			Rank		Low	
Town of Franklin							IDENTIFICATION #68244
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Unknown	40	Low	Low	300	5	1500	Sandy Ioam
Management Recommendation	Add topsoil and hydroseed with conservation mix	with conservation mix				Cost	\$400 - \$600
Total Points	17			Rank		Low	

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	Low		Rank			18	Total Points
Cost					ion mix	Hydroseed with conservation mix	Management Recommendation
9 4500	9		500	Low	Low	80	Unknown
Width of Erosion (ft)  Total Area of Erosion (ft²)	Width of Erosion (ft)		Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
Watershed Saranac River	Watershed		Town	Jurisdiction		Rock Street	Road Name
IDENTIFICATION #681200							Town of Franklin
Low			Rank			26	Total Points
Cost					ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
8 2400	00		300	Low	Moderate	75	Unknown
Width of Erosion (ft)  Total Area of Erosion (ft²)	Width of Erosion (ft)		Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
Watershed Saranac River	Watershed		Town	Jurisdiction		Rock Street	Road Name
IDENTIFICATION #681156		_					Town of Franklin
Low			Rank			12	Total Points
Cost					ion mix	Hydroseed with conservation mix	Management Recommendation
5 1250	5		250	Low	Low	60	Unknown
Width of Erosion (ft)  Total Area of Erosion (ft²)	Width of Erosion (ft)		Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
Watershed Saranac River	Watershed		Town	Jurisdiction		Rock Street	Road Name
IDENTIFICATION #681150		_					Town of Franklin
Low			Rank			8	Total Points
Cost					ion mix	Hydroseed with conservation mix	Management Recommendation
10 1500	10		150	Low	Low	75	Unknown
Width of Erosion (ft)  Total Area of Erosion (ft²)	Width of Erosion (ft)		Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
Watershed Saranac River	Watershed		Town	Jurisdiction		Alderbrook Road	Road Name
IDENTIFICATION #681140							Town of Franklin
Low			Rank			21	Total Points
Cost					ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
10 750	10		75	Low	Moderate	40	Unknown
Width of Erosion (ft)  Total Area of Erosion (ft²)	Width of Erosion (ft)		Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
Watershed Saranac River	Watershed		Town	Jurisdiction		Alderbrook Road	Road Name
IDENTIFICATION #681135							Town of Franklin
Low			Rank			17	Total Points
Cost					d with conservation mix	Add topsoil and hydroseed with conservation mix	Management Recommendation
4 1000	4	ı	250	Low	Low	10	Unknown
Width of Erosion (ft)  Total Area of Erosion (ft²)	Width of Erosion (ft)		Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
Watershed Saranac River	Watershed		Town	Jurisdiction		Alderbrook Road	Road Name
IDENTIFICATION #681058							Town of Franklin

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TOWN OF FRANKLIN	RANKLIN						103
Town of Franklin							IDENTIFICATION #681206
Road Name	Rock Street		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	SoilType
Unknown	09	Moderate	Moderate	400	4	1600	Loamy
Management Recommendation   Hydroseed with conservation mix and tackifier	Hydroseed with conservati	ion mix and tackifier				Cost	\$300 - \$500
Total Points	25			Rank		Low	
Town of Franklin							IDENTIFICATION #681219
Road Name	River Road		Jurisdiction	County	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Unknown	65	Moderate	Low	250	5	1250	Sandy loam
Management Recommendation	Hydroseed with conservation mix and tackifier	ion mix and tackifier				Cost	\$300 - \$500
Total Points	16			Rank		Low	
Town of Franklin						OI .	IDENTIFICATION #681226
Road Name	Franklin Falls Road		Jurisdiction	County	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Other	06	Moderate	Moderate	100	10	1000	Loamy
Management Recommendation	Hydroseed with conservation mix and tackifier	ion mix and tackifier				Cost	\$300 - \$500
Total Points	26			Rank		Low	
Town of Franklin						_	IDENTIFICATION #68120
Road Name	Franklin Falls Road		Jurisdiction	County	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	SoilType
Unknown	86	Moderate	Moderate	300	8	2400	Loamy
Management Recommendation	Hydroseed with conservation mix and tackifier	ion mix and tackifier				Cost	\$300 - \$500
Total Points	26			Rank		Low	
Town of Franklin						_	IDENTIFICATION #68201
Road Name	Fletcher Farm Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	SoilType
Unknown	09	Low	Moderate	200	3	1500	Sandy loam
Management Recommendation	Hydroseed with conservation mix	ion mix				Cost	\$200 - \$300
Total Points	16			Rank		Low	
Town of Franklin							IDENTIFICATION #68206
Road Name	Fletcher Farm Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	SoilType
Unknown	40	Low	Low	200	4	2000	Loamy
Management Recommendation	Hydroseed with conservation mix	ion mix				Cost	\$200 - \$300
Total Points	27			Rank		Low	

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Total Points	Management Recommendation	Unknown	Direct connection to Water?	Road Name	lown of Franklin		Total Points	Management Recommendation	Unknown	Direct connection to Water?	Road Name	Town of Franklin	Total Points	Management Recommendation	Unknown	Direct connection to Water?	Road Name	Town of Franklin	Total Points	Management Recommendation	Unknown	Direct connection to Water?	Road Name	Town of Franklin	Total Points	Management Recommendation	Unknown	Direct connection to Water?	Road Name	Town of Franklin	Total Points	Management Recommendation	Unknown	Direct connection to Water?	Road Name	Town of Franklin
(1)			Water?		III		(.)			Water?		lin				Water?		lin	(.)			Water?		lin				Water?		lin				Water?		lin
30	Add topsoil and hydroseed with conservation mix	0	% Vegetation	Howel Road			30	Hydroseed with conservation mix and tackifier	40	% Vegetation	Blue Spruce Road		30	Add topsoil and hydroseed	0	% Vegetation	Garden Road		30	nstall mats and hydroseed	0	% Vegetation	Garden Road		17	Hydroseed with conservation mix	50	% Vegetation	Keith Road		17	Hydroseed with conservation mix	50	% Vegetation	Keith Road	
	with conservation mix	Moderate	Bank Slope					on mix and tackifier	Moderate	Bank Slope				Add topsoil and hydroseed with conservation mix and tackifier	Moderate	Bank Slope				Install mats and hydroseed with conservation mix and tackifier	Moderate	Bank Slope				on mix	Low	Bank Slope				on mix	Low	Bank Slope		
		Moderate	Level of Erosion	Jurisdiction					Moderate	Level of Erosion	Jurisdiction			d tackifier	Moderate	Level of Erosion	Jurisdiction			d tackifier	Moderate	Level of Erosion	Jurisdiction				Low	Level of Erosion	Jurisdiction				Low	Level of Erosion	Jurisdiction	
Rank		50	Length of Erosion (ft)	Town		1000000	Rank		200	Length of Erosion (ft)	Town		Rank		200	Length of Erosion (ft)	Town		Rank		50	Length of Erosion (ft)	Town		Rank		250	Length of Erosion (ft)	Town		Rank		250	Length of Erosion (ft)	Town	
		10	Width of Erosion (ft)	Watershed					8	Width of Erosion (ft)	Watershed				ω	Width of Erosion (ft)	Watershed				15	Width of Erosion (ft)	Watershed				4	Width of Erosion (ft)	Watershed				ω	Width of Erosion (ft)	Watershed	
Low	Cost	500	Total Area of Erosion (ft²)	Saranac River	ID		Low	Cost	1600	Total Area of Erosion (ft²)	Saranac River		Low	Cost	600	Total Area of Erosion (ft²)	Saranac River	ID	Low	Cost	750	Total Area of Erosion (ft²)	Saranac River		Low	Cost	1000	Total Area of Erosion (ft²)	Saranac River		Low	Cost	750	Total Area of Erosion (ft²)	Saranac River	
	\$400 - \$600	Sandy gravel	SoilType		IDENTIFICATION #6101019	THE PROPERTY OF THE PROPERTY O		\$400 - \$600	Gravelly sand	SoilType		IDENTIFICATION #610955		\$1000 - \$1500	Gravelly sand	SoilType		IDENTIFICATION #6101046		\$400 - \$600	Gravelly sand	SoilType		IDENTIFICATION #610946		\$200 - \$300	Loamy	SoilType		IDENTIFICATION #68235		\$200 - \$300	Loamy	Soil Type		IDENTIFICATION #68232

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Town of Franklin						IOI	IDENTIFICATION #6101025
Road Name	Thatcherville Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Stream	80	Low	Low	50	4	200	Sandy Ioam
Management Recommendation	Add topsoil and hydroseed with conservation mix	with conservation mix				Cost	\$400 - \$600
Total Points	18			Rank		Low	
Town of Franklin						IDI	IDENTIFICATION #6101034
Road Name	Thatcherville Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Unknown	09	Moderate	Moderate	20	30	909	Sandy Ioam
Management Recommendation	Install mats and hydroseed	Install mats and hydroseed with conservation mix and tackifier	l tackifier			Cost	\$1000 - \$1500
Total Points	20			Rank		Low	
Town of Franklin						IDI	DENTIFICATION #6101054
Road Name	Goldsmith Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Stream	80	Low	High	300	2	9009	Gravelly sand
Management Recommendation	Install mats and hydroseed with conservation mix and tackifier	with conservation mix and	l tackifier			Cost	\$1000 - \$1500
Total Points	27			Rank		Low	
Town of Franklin						IDI	IDENTIFICATION #6101101
Road Name	Goldsmith Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Stream	80	Moderate	Moderate	09	4	240	Sandy loam
Management Recommendation	Install mats and hydroseed	Install mats and hydroseed with conservation mix and tackifier	l tackifier			Cost	\$1000 - \$1500
Total Points	26			Rank		Low	
Town of Franklin						IDI	IDENTIFICATION #6101113
Road Name	Goldsmith Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Stream	06	Low	Low	50	4	200	Silty
Management Recommendation	Install mats and hydroseed	Install mats and hydroseed with conservation mix and tackifier	l tackifier			Cost	\$1000 - \$1500
Total Points	18			Rank		Low	

#### TOWN OF HARRIETSTOWN

#### **IDENTIFICATION #6221251**

#### Town Harrietstown

Road Name County Highway 18 Jurisdiction County

Watershed Saranac River



#### **IDENTIFICATION #622202**

#### Town Harrietstown

Road Name Kiwassa Lake Road

Jurisdiction Town

Watershed Saranac River



950		Size Control of the C	MINE CONTRACTOR OF THE PARTY OF
Direct connection to water	No	Direct connection to water	No
% of Vegetation	50	% of Vegetation	20
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	400	Length of Erosion (ft)	30
Width of Erosion (ft)	15	Width of Erosion (ft)	20
Total Area of Erosion (ft <sup>2</sup> )	6000	Total Area of Erosion (ft²)	600
Soil Type	Loamy sand	Soil Type	Sandy loam
Management Recommendations	Hydroseed with conservation mix and tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$400 - \$600	Cost	\$400 - \$600
Total Points	40	Total Points	40
Rank	High	Rank	High

#### **IDENTIFICATION #622307**

#### Town Harrietstown

Road Name County Highway 45 Jurisdiction County



#### Town

IDENTIFICATION #622248

Harrietstown

Road Name County Highway 45

Jurisdiction County



Watershed Saranac River		Watershed Saranac River	· · · · · · · · · · · · · · · · · · ·
Direct connection to water	Yes - Other	Direct connection to water	Yes - Stream
% of Vegetation	50	% of Vegetation	50
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	1000	Length of Erosion (ft)	150
Width of Erosion (ft)	10	Width of Erosion (ft)	5
Total Area of Erosion (ft²)	10,000	Total Area of Erosion (ft²)	750
Soil Type	Loamy	Soil Type	Loamy
Management Recommendations	Hydroseed with conservation mix and tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$1000 - \$2000	Cost	\$400 - \$600
Total Points	45	Total Points	35
Rank	High	Rank	Moderate

#### TOWN OF HARRIETSTOWN

#### IDENTIFICATION #671155

Town Harrietstown							
Road Name Unmarked Road							
Jurisdiction County							
Watershed Saranac River							
Direct connection to wat	er No						
% of Vegetation	85						
Bank Slope	Steep						
Level of Erosion	High						
Length of Erosion (ft)	300						
Width of Erosion (ft)	20						
Total Area of Erosion (ft <sup>2</sup> )	6000						
Soil Type	Loam						
Management Recommendations	Install erosion control mats and hydroseed with tackifier						
Cost	\$1000 - \$2000						
Total Points	40						
Rank	High						

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	low		Rank			21	Total Points
\$200 - \$300	Cost				tion mix	Hydroseed with conservation mix	Management Recommendation
Sandy	300	6	50	Moderate	Low	50	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		Airport Road	Road Name
IDENTIFICATION #6221129	IDE					Nn N	Town of Harrietstown
	Low		Rank			12	Total Points
\$200 - \$300	Cost				tion mix	Hydroseed with conservation mix	Management Recommendation
Sandy	100	5	20	Low	Low	75	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		Airport Road	Road Name
IDENTIFICATION #6221124	IDE					Nn Nn	Town of Harrietstown
	Low		Rank			30	Total Points
\$400 - \$600	Cost				tion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Sandy	750	15	50	Moderate	Moderate	40	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		Airport Road	Road Name
IDENTIFICATION #6221119	IDE					Nn Nn	Town of Harrietstown
	Low		Rank			12	Total Points
\$200 - \$300	Cost				tion mix	Hydroseed with conservation mix	Management Recommendation
Sandy muck	500		100	Low	Low	75	Unknown
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
	Saranac River	Watershed	State	Jurisdiction		State Highway 186	Road Name
IDENTIFICATION #6221113	IDE					Nn Nn	Town of Harrietstown
	Low		Rank			30	Total Points
\$400 - \$600	Cost				tion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Sandy	500	10	50	Moderate	Moderate	15	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
	Saranac River	Watershed	State	Jurisdiction		State Highway 186	Road Name
IDENTIFICATION #6221105	IDE					Nn	Town of Harrietstown
	Low		Rank			17	Total Points
\$200 - \$300	Cost				tion mix	Hydroseed with conservation mix	Management Recommendation
Sandy	1000	10	100	Low	Low	45	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	% Vegetation	Direct connection to Water?
	Saranac River	Watershed	State	Jurisdiction		State Highway 186	Road Name
IDENTIFICATION #6221047	IDE					Wn	Town of Harrietstown

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Town of Harrietstown  Road Name Direct connection to Water? % Vegetation No 50 Management Recommendation Hydroseed with conservation mix	-		! ! ! ! !	Town	Watershed	IDE Saranac River	IDENTIFICATION #6221137
Road Name Donal Direct connection to Water? No Management Recommendation Hydro	-		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Town	Watershed	Saranac River	
Direct connection to Water?  No  Management Recommendation Hydro  Total Points	Donaldson Road		Jurisalction				
Management Recommendation Hydro	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Management Recommendation Hydro	50	Low	Moderate	20	10	200	Sandy
	oseed with conservation	xim r				Cost	\$200 - \$300
				Rank		Low	
Town of Harrietstown						301	IDENTIFICATION #6221142
Road Name Donal	Donaldson Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
ON	75	Low	Low	20	5	100	Loamy sand
Management Recommendation Hydro	Hydroseed with conservation mix	xim r				Cost	\$200 - \$300
Total Points 12				Rank		Low	
Town of Harrietstown						301 IDE	IDENTIFICATION #6221147
Road Name Donal	Donaldson Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
Yes - Stream	90	Low	Low	20	5	100	Sandy
Management Recommendation Hydro	Hydroseed with conservation mix	xim r				Cost	\$200 - \$300
Total Points 27				Rank		Low	
Town of Harrietstown						IDE	IDENTIFICATION #6221152
Road Name Donal	Donaldson Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
NO	90	Moderate	Low	20	5	100	Sandy
Management Recommendation   Install	Install mats and hydroseed with conservation mix	ith conservation mix				Cost	\$800 - \$1000
Total Points 21				Rank		Low	
Town of Harrietstown						IDE	IDENTIFICATION #6221158
Road Name Donal	Donaldson Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
No	50	Low	Moderate	20	9	120	Loamy sand
Management Recommendation Hydro	Hydroseed with conservation mix	xim r				Cost	\$200 - \$300
Total Points				Rank		Low	
Town of Harrietstown						IDE	IDENTIFICATION #6221203
Road Name Donal	Donaldson Road		Jurisdiction	Town	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
ON	50	Moderate	Moderate	30	15	450	Loamy sand
Management Recommendation Hydro	Hydroseed with conservation mix	xim r				Cost	\$200 - \$300
Total Points 25				Rank		Low	

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# TOWN OF HARRIETSTOWN

	Low		Rank			25	Total Points
\$300 - \$500	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Sandy loam	150	10	15	Moderate	Moderate	50	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		Kiwassa Lake Road	Road Name
DENTIFICATION #622205	ID					Nn Nn	Town of Harrietstown
	Low		Rank			12	Total Points
\$300 - \$500	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Sandy Loam	200	10	20	Low	Moderate	80	Unknown
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		Kiwassa Lake Road	Road Name
IDENTIFICATION #622156	ID					Nn Nn	Town of Harrietstown
	Low		Rank			20	Total Points
\$400 - \$600	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Loamy	400	10	40	Moderate	Moderate	75	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		County Highway 18	Road Name
DENTIFICATION #6221247	IDE					Nn Nn	Town of Harrietstown
	Low		Rank			17	Total Points
\$300 - \$500	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	Management Recommendation
Loamy	150	5	30	Low	Low	50	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		County Highway 18	Road Name
DENTIFICATION #6221244	IDE					Nn Nn	Town of Harrietstown
	Low		Rank			12	Total Points
\$300 - \$500	Cost				ion mix and tackifier	Hydroseed with conservation mix and tackifier	ManagementRecommendation
Loamy	200	5	40	Low	Low	75	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	County	Jurisdiction		County Highway 18	Road Name
DENTIFICATION #6221238	IDE					Nn	Town of Harrietstown
	Low		Rank			12	Total Points
\$200 - \$300	Cost				ion mix	Hydroseed with conservation mix	Management Recommendation
Sandy loam	100	5	20	Low	Low	75	No
Soil Type	Total Area of Erosion (ft²)	Width of Erosion (ft)	Length of Erosion (ft)	Level of Erosion	Bank Slope	%Vegetation	Direct connection to Water?
	Saranac River	Watershed	Town	Jurisdiction		Donaldson Road	Road Name
DENTIFICATION #6221208	IDE					∨n	Town of Harrietstown

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Town of Harrietstown	Wn					OI ID	IDENTIFICATION #622230
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
No	90	Low	Low	10	5	90	Loamy sand
Management Recommendation	Hydroseed with conservation mix and tackifier	ion mix and tackifier				Cost	\$300 - \$500
Total Points	17			Rank		Low	
Town of Harrietstown	wn					QI	IDENTIFICATION #622233
Road Name	State Route 3		Jurisdiction	State	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
No	50	Low	Low	50	5	250	Loamy sand
Management Recommendation   Add topsoil and hydroseed with conservation mix	Add topsoil and hydroseec	d with conservation mix				Cost	\$400 - \$600
Total Points	17			Rank		Low	
Town of Harrietstown	Wn					OI ID	IDENTIFICATION #622255
Road Name	County Highway 45		Jurisdiction	County	Watershed	Saranac River	
Direct connection to Water?	% Vegetation	Bank Slope	Level of Erosion	Length of Erosion (ft)	Width of Erosion (ft)	Total Area of Erosion (ft²)	Soil Type
No	75	Moderate	Moderate	30	10	300	Loamy
Management Recommendation	Hydroseed with conservation mix and tackifier	ion mix and tackifier				Cost	\$300 - \$500
Total Points	20			Rank		Low	

# TOWN OF SANTA CLARA

#### **IDENTIFICATION #622336**

#### Town Santa Clara

Road Name State Route 30

Jurisdiction State

Watershed Saranac River



#### **IDENTIFICATION #622342**

#### Town Santa Clara

Road Name Stanley Drive

Jurisdiction Town

Watershed Saranac River



	The state of the s		CONTRACTOR OF THE PROPERTY OF
Direct connection to water	No	Direct connection to water	No
% of Vegetation	50	% of Vegetation	30
Bank Slope	Low	Bank Slope	Moderate
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	60
Width of Erosion (ft)	5	Width of Erosion (ft)	5
Total Area of Erosion (ft <sup>2</sup> )	100	Total Area of Erosion (ft <sup>2</sup> )	300
Soil Type	Sandy	Soil Type	Sandy
Management Recommendations	Hydroseed with conservation mix and tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$300 - \$500	Cost	\$300 - \$500
Total Points	17	Total Points	25
Rank	Low	Rank	Low

#### **IDENTIFICATION #622355**

#### Town Santa Clara

Road Name Stanley Drive

Jurisdiction Town

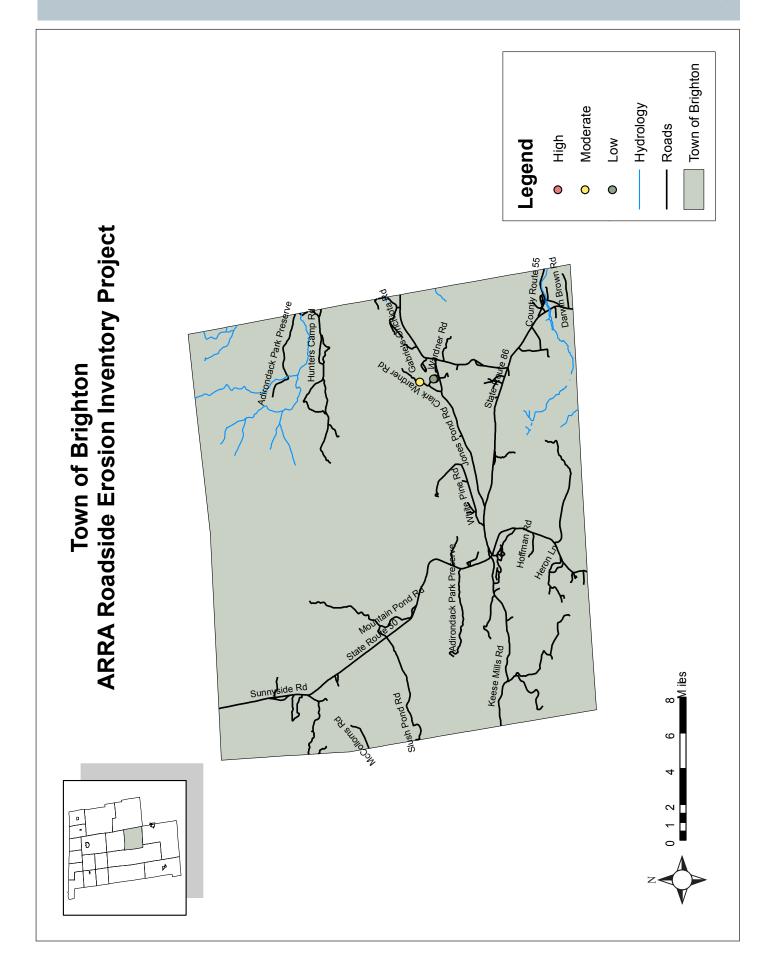
#### **IDENTIFICATION #622347**

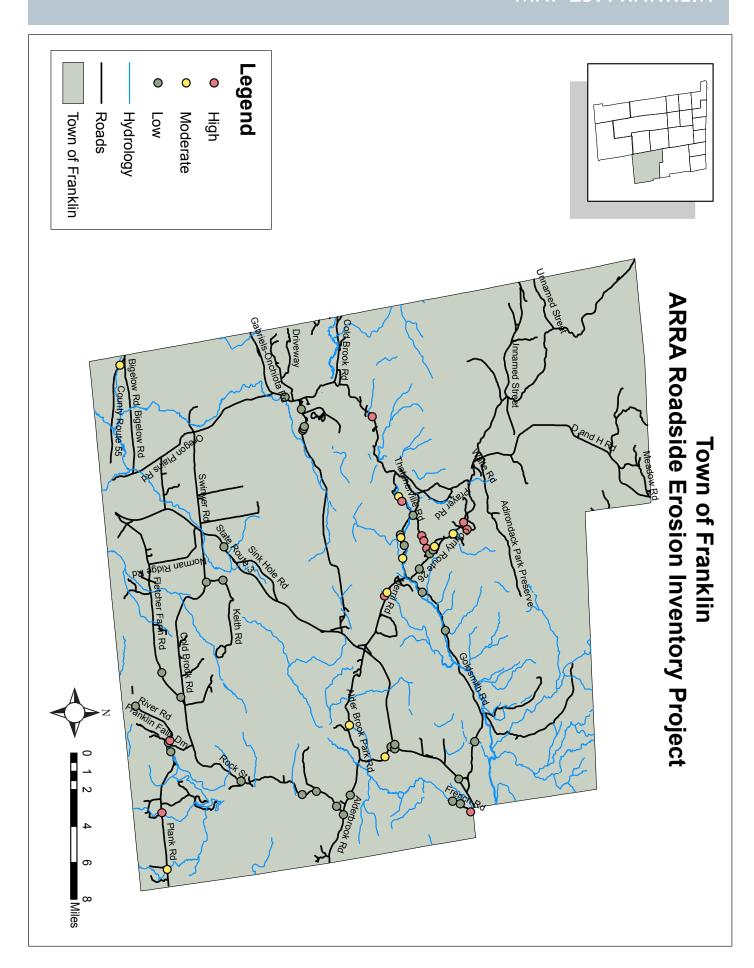
#### Town Santa Clara

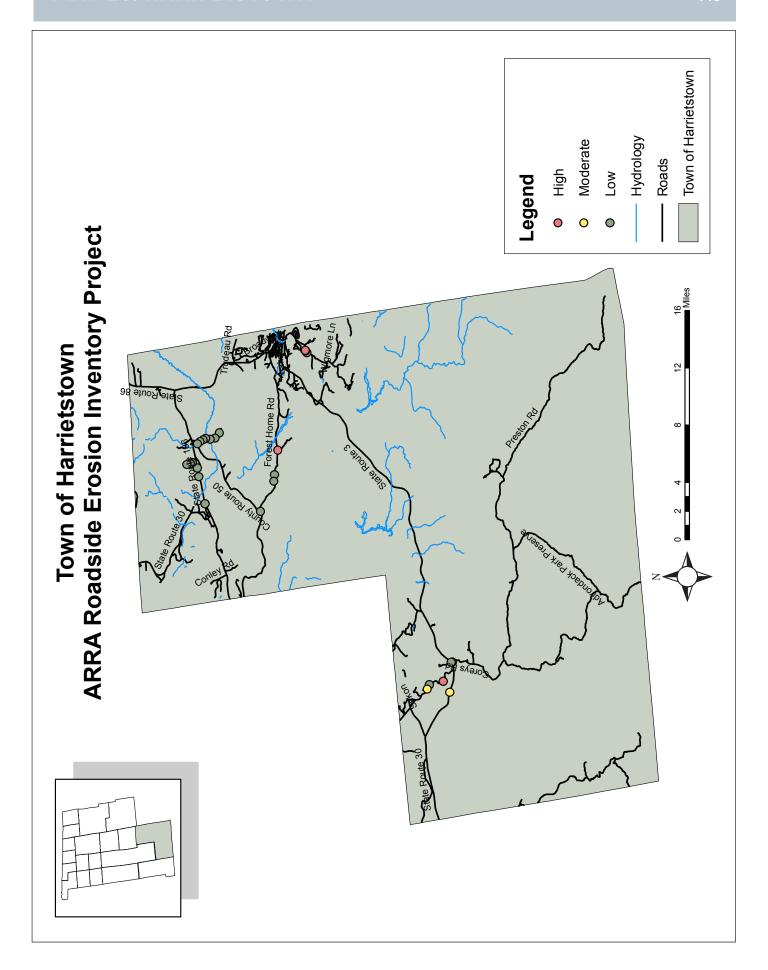
Road Name County Highway 46 Jurisdiction County

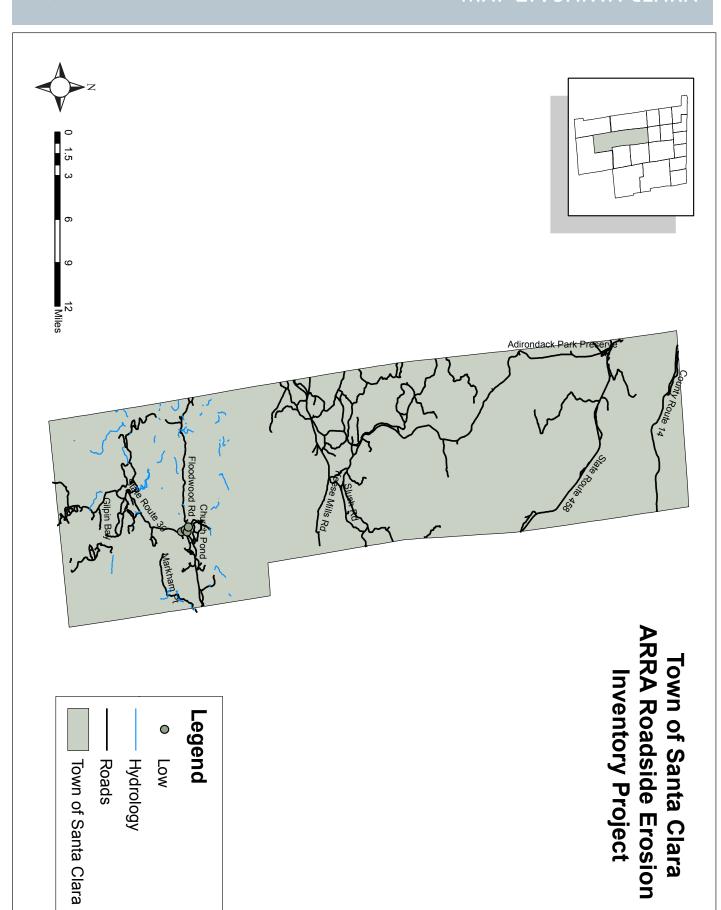


Watershed Saranac River		Watershed Saranac River	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	40	% of Vegetation	60
Bank Slope	Moderate	Bank Slope	Low
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	70
Width of Erosion (ft)	8	Width of Erosion (ft)	5
Total Area of Erosion (ft²)	160	Total Area of Erosion (ft²)	350
Soil Type	Sandy	Soil Type	Sandy
Management Recommendations	Hydroseed with tackifier	Management Recommendations	Hydroseed with conservation mix and tackifier
Cost	\$300 - \$500	Cost	\$300 - \$500
Total Points	25	Total Points	16
Rank	Low	Rank	Low



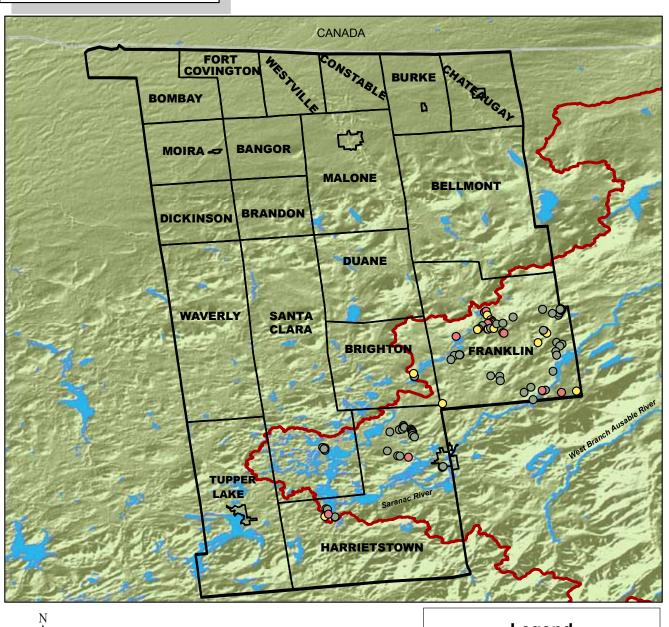


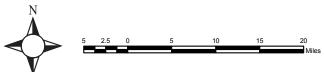


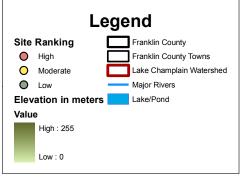




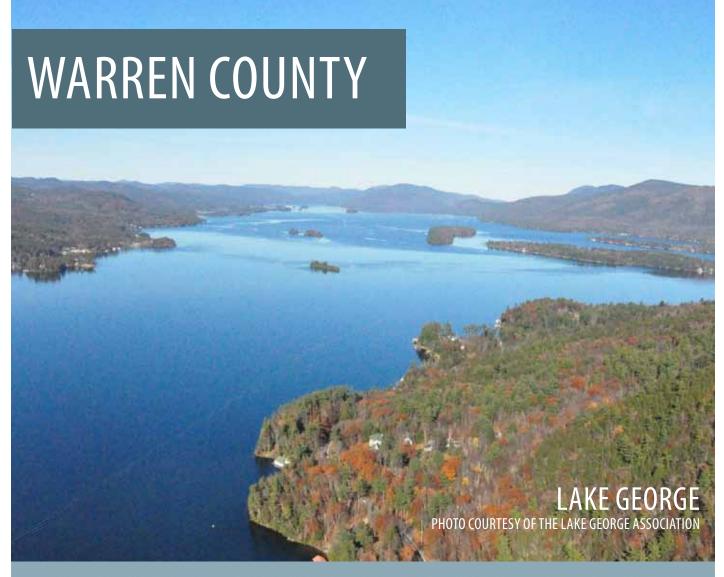
# American Recovery and Reinvestment Act Roadside Erosion Inventory Project Franklin County, New York







LCLGRPB \ 2012 119



Six of the 13 municipalities within Warren County have lands that are all or predominately within the Champlain Basin. Many of these areas have a substantial amount of development, including the City of Glens Falls, the southern end of the Town of Queensbury, the Village of Lake George and the highly developed shorelines of Lake George. However, these developed areas are connected by a slue of more rural road networks, owned and maintained by the State, Warren County, and the individual towns.

The soils within Warren County are predominately highly erodible sands, remnants of the glacier that passed through and carved out Lake George, which is the main tributary to Lake Champlain from Warren County. The Lake George watershed is over 230 square miles and has over 140 tributaries, but some of the larger ones include East Brook, Edmund's Brook, English Brook, Finkle Brook, Huddle Brook, Indian Brook and Stewart Brook. Lake George flows north into the two mile long LaChute River in Essex County which outlets into southern Lake Champlain in the Town of Ticonderoga. The other major tributary to Lake Champlain is Halfway Brook, which begins from a spring on West Mountain in Queensbury and flows through the most developed areas of the County before it discharges into the Champlain Canal in Washington County. There, the water flows directly into Lake Champlain at its southern end.

In the spring of 2011, the Warren County SWCD drove over 600 miles and located and assessed 34 sites of roadside erosion. In total, 19 sites were identified as High Priority, 8 as Moderate Priority and 7 as Low Priority. In the fall of 2011, following the devastation caused by tropical storm Irene and other torrential storms, all 34 sites were re-assessed for further damage and erosion. Surprisingly, the changes observed at all the sites appeared to be on par with the average rate of erosion expected in a given season and therefore no changes were needed to the original data collected.

Recommended remediation practices for the sites in Warren County include hydroseeding, ditch lining and stabilization with stone, removing trees that are too heavy to sustain on eroding slopes and installing erosion control blankets. These practices range in price from \$300 to \$4,000 each. All together, the total restoration cost for the Warren County sites is \$35,350. This is a relatively low cost for remediation, as many of the sites can be restored using the Warren County SWCD Hydroseeding Program that is actively being used throughout the county at little or no cost to the Towns.

# WARREN COUNTY

# TOWN | MAJOR SUBWATERSHEDS | ROADS

<b>-</b>	Num	ber of Sites per P	riority	Percentage
Town	High	Moderate	Low	of sites in County
Bolton	11	1	3	44%
Hague	0	2	0	6%
Lake George	3	1	0	12%
Queensbury	5	4	4	38%

Major	Number of Sites per Priority			
Subwatershed	High	Moderate	Low	of sites in County
Halfway Brook	5	4	3	35%
Lake George	14	4	4	65%

Road	Num	Number of Sites per Priority		
Jurisdiction	High	Moderate	Low	of sites in County
State Roads	2	3	9	15%
County Roads	6	1	1	24%
Town Roads	11	4	6	61%
Private Roads	0	0	0	0%

#### **IDENTIFICATION #3**

#### Town Bolton

Road Name Bolton Road
Jurisdiction County
Watershed Indian Brook



#### **IDENTIFICATION #6**

#### Town Bolton

Road Name Coolidge Hill Road
Jurisdiction County
Watershed Edmonds Brook



Direct connection to water	Yes - Culvert
% of Vegetation	25
Bank Slope	Steep
Level of Erosion	Moderate
Length of Erosion (ft)	400
Width of Erosion (ft)	8
Total Area of Erosion (ft²)	3200
Soil Type	Sandy gravelly loam
Management Recommendations	Hydroseed with tackifier and clover, consider rock ditching
Cost	\$400 - \$1000
Total Points	55
Rank	High

Watershed	Edmonds Brook	
Direct conr	nection to water	Yes - Culvert
% of Vegeta	ation	15
Bank Slope		Steep
Level of Erc	sion	Moderate
Length of E	Frosion (ft)	150
Width of Er	osion (ft)	10
Total Area c	of Erosion (ft²)	1500
Soil Type		Fine sandy loam
Manageme Recommer		Remove leaves and hydroseed
Cost		\$400 - \$500
Total Points		40
Rank		High

#### IDENTIFICATION #7

#### Town Botlon

Road Name Coolidge Hill Road

Jurisdiction County



# IDENTIFICATION #8

#### Town Bolton

Road Name Coolidge Hill Road

Jurisdiction County



Jurisdiction County	等。 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Jurisdiction County	
Watershed Edmonds Brook		Watershed Edmonds Brook	
Direct connection to water	Yes - Culvert	Direct connection to water	No
% of Vegetation	10	% of Vegetation	60
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	High
Length of Erosion (ft)	80	Length of Erosion (ft)	120
Width of Erosion (ft)	6	Width of Erosion (ft)	20
Total Area of Erosion (ft <sup>2</sup> )	480	Total Area of Erosion (ft²)	2400
Soil Type	Fine sandy loam	Soil Type	Bouldery sandy loam
Management Recommendations	Hydroseed with tackifier, crown vetch and clover	Management Recommendations	Remove trees, hydroseed with tackifier and crown vetch
Cost	\$300	Cost	\$500 - \$700
Total Points	40	Total Points	40
Rank	High	Rank	High

# TOWN OF BOLTON

IDENTIFICATION #9		IDENTIFICATION #11	
Town Bolton		Town Bolton	
Road Name Coolidge Hill Road		Road Name Potter Hill Road	A CANADA
Jurisdiction County		Jurisdiction Town	
Watershed Edmonds Brook	VILENCE THE STATE OF THE STATE	Watershed Stewart Brook	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	55	% of Vegetation	25
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	Moderate
Length of Erosion (ft)	100	Length of Erosion (ft)	80
Width of Erosion (ft)	20	Width of Erosion (ft)	15
Total Area of Erosion (ft²)	2000	Total Area of Erosion (ft²)	1200
Soil Type	Bouldery sandy loam	Soil Type	Bouldery, fine sandy loam
Management	Remove weight of trees and	Management	Clean rock ditch, add stone,
Recommendations	hydroseed	Recommendations	remove weight of trees
Cost	\$1000 - \$1500	Cost	\$1000 - \$1500
Total Points	40	Total Points	40
Rank	High	Rank	High
IDENTIFICATION #12		IDENTIFICATION #13	
Town Botlon		Town Bolton	
Road Name Trout Lake Road	The state of the s	Road Name Wall Street	1704
Jurisdiction County		Jurisdiction Town	
Watershed Huddle Brook		Watershed Huddle Brook	
Direct connection to water	No	Direct connection to water	Yes - Culvert
% of Vegetation	25	% of Vegetation	40
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	270	Length of Erosion (ft)	200
Width of Erosion (ft)	10	Width of Erosion (ft)	15
Total Area of Erosion (ft²)	2700	Total Area of Erosion (ft²)	3000
Soil Type	Rock outcrop complex	Soil Type	Bouldery fine sandy loam
Management	Hydroseed to establish	Management	Hydroseed with dense seed
Recommendations	vegetation	Recommendations	mix, crown vetch and clover
Cost	\$500 - \$800	Cost	\$500 - \$1000
Total Points	45	Total Points	45
Rank	High	Rank	High

#### **IDENTIFICATION #14**

#### Town Bolton

Road Name Wall Street

Jurisdiction Town

Watershed Edmonds Brook



#### **IDENTIFICATION #16**

#### Town Bolton

Road Name Potter Hill Road
Jurisdiction Town
Watershed Finkle Brook



2.4	ACCURACY CO.		The second secon
Direct connection to water	Yes - Culvert	Direct connection to water	Yes - Stream
% of Vegetation	25	% of Vegetation	5
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	High
Length of Erosion (ft)	300	Length of Erosion (ft)	60
Width of Erosion (ft)	15	Width of Erosion (ft)	40
Total Area of Erosion (ft²)	4500	Total Area of Erosion (ft²)	2400
Soil Type	Bouldery, fine sandy loam	Soil Type	Bouldery, fine sandy loam
Management Recommendations	Clear leaves and hydroseed	Management Recommendations	Vegetative plugs and shrubs, stone, fabric, remove trees
Cost	\$500	Cost	\$3000 - \$4000
Total Points	60	Total Points	60
Rank	High	Rank	High

#### **IDENTIFICATION #17**

#### Town Botlon

Road Name Potter Hill Road

Jurisdiction Town



#### IDENTIFICATION #4

Town Bolton

Road Name Padanarum Road

Jurisdiction Town



Watershed Finkle Brook		10.0	
watershed Filikle brook		Watershed Indian Brook	
Direct connection to water N	lo	Direct connection to water	No
% of Vegetation 25	5	% of Vegetation	60
Bank Slope St	teep	Bank Slope	Steep
Level of Erosion H	ligh	Level of Erosion	Moderate
Length of Erosion (ft) 30	00	Length of Erosion (ft)	300
Width of Erosion (ft) 20	0	Width of Erosion (ft)	15
Total Area of Erosion (ft²) 60	000	Total Area of Erosion (ft²)	4500
Soil Type Bo	ouldery, fine sandy loam	Soil Type	Rock outcrop complex
3	lydroseed with bonded fiber natrix, crown vetch, clover	Management Recommendations	Hydroseed with tackifier, crown vetch and clover
Cost \$	1200 - \$1500	Cost	\$600 - \$800
Total Points 55	5	Total Points	35
Rank H	ligh	Rank	Moderate

# TOWNS OF BOLTON & HAGUE

IDENTIFICATION "F			
IDENTIFICATION #5		IDENTIFICATION #10	
Town Bolton		Town Bolton	
Road Name Tout Lake Road		Road Name Coolidge Hill Road	
Jurisdiction Town		Jurisdiction County	
Watershed Huddle Brook		Watershed Edmonds Brook	No. of Concession, Name of Street, or other party of the Concession, Name of Street, or other pa
Direct connection to water	No	Direct connection to water	No
% of Vegetation	40	% of Vegetation	60
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	60	Length of Erosion (ft)	50
Width of Erosion (ft)	15	Width of Erosion (ft)	15
Total Area of Erosion (ft²)	900	Total Area of Erosion (ft²)	750
Soil Type	Bouldery sandy loam	Soil Type	Bouldery sandy loam
Management	Hydroseed with tackifier and	Management	Hydroseed with tackifier,
Recommendations	crown vetch	Recommendations	crown vetch & clover
Cost	\$300 - \$400	Cost	\$300
Total Points	25	Total Points	25
Rank	Low	Rank	Low
IDENTIFICATION #15		IDENTIFICATION #1	
Town Botlon		Town Hague	
Road Name Brailey Hill Road		Lake Shore Road Name Drive/9N	
Jurisdiction Town		Jurisdiction State	
Watershed Lake George		Watershed Lake George	<b>《</b>
Direct connection to water	No	Direct connection to water	No
% of Vegetation	50	% of Vegetation	5
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	100	Length of Erosion (ft)	38
Width of Erosion (ft)	8	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	800	Total Area of Erosion (ft²)	380
Soil Type	Fine sandy loam	Soil Type	Sandy gravel
Management Recommendations	Hydroseed with traditional mix	Management Recommendations	Hydroseed with tackifier and crown vetch
Cost	\$300	Cost	\$300 - \$500
Total Points	25	Total Points	35
Rank	Low	Rank	Moderate

# TOWNS OF HAGUE & LAKE GEORGE

#### **IDENTIFICATION #2**

#### Town Hague

Road Name Lake Shore Drive/9N

Jurisdiction State

Watershed Lake George



#### **IDENTIFICATION #19**

#### Town Lake George

Road Name Finkle Farm Road

Jurisdiction Town

Watershed English Brook



Tracersfied Earle George	MUTERAL CONTROL SECURITION OF THE PROPERTY OF	Watershed English blook	
Direct connection to water	No	Direct connection to water	Yes - Culvert
% of Vegetation	15	% of Vegetation	50
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	160	Length of Erosion (ft)	160
Width of Erosion (ft)	6	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	960	Total Area of Erosion (ft²)	1600
Soil Type	Bouldery, fine sandy loam	Soil Type	Cobbly sandy loam
Management Recommendations	Hydroseed with tackifier and crown vetch	Management Recommendations	Hydroseed
Cost	\$300 - \$500	Cost	\$350 - \$450
Total Points	35	Total Points	45
Rank	Moderate	Rank	High

#### IDENTIFICATION #20

#### Town Lake George

Road Name Route 9

Jurisdiction State



#### Town Lake George

**IDENTIFICATION #21** 

Road Name Route 9N

Jurisdiction State



Jurisdiction State		Julisuiction State	
Watershed English Brook		Watershed Lake George	S
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	15	% of Vegetation	20
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	Moderate
Length of Erosion (ft)	30	Length of Erosion (ft)	260
Width of Erosion (ft)	50	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	1500	Total Area of Erosion (ft <sup>2</sup> )	2600
Soil Type	Gravelly sand, silty clay loam	Soil Type	Cobbly sandy loam
Management Recommendations	Stabilize toe, hydroseed with bonded fiber matrix, add plants	Management Recommendations	Hydroseed with polymer, crown vetch and clover
Cost	\$3000 - \$4000	Cost	\$700 - \$900
Total Points	40	Total Points	40
Rank	High	Rank	High

### TOWNS OF LAKE GEORGE & QUEENSBURY

#### **IDENTIFICATION #18 IDENTIFICATION #26** Town Town Lake George Queensbury Road Name Bloody Pond Road Road Name Glen Lake Road Jurisdiction Jurisdiction Town County Watershed East Brook Watershed Halfway Brook Direct connection to water Direct connection to water No No % of Vegetation 30 % of Vegetation 40 Bank Slope Bank Slope Steep Steep Level of Erosion Low Level of Erosion High Length of Erosion (ft) Length of Erosion (ft) 160 250 Width of Erosion (ft) 25 Width of Erosion (ft) 8 Total Area of Erosion (ft<sup>2</sup>) 6250 Total Area of Erosion (ft<sup>2</sup>) 1280 Soil Type Cobbly sandy loam Soil Type Gravelly sand Management Management Hydroseed, Hydroseed with polymer Recommendations Recommendations consider polymer \$400 \$300 - \$400 Cost Cost Total Points 36 Total Points 40 Rank Moderate Rank High **IDENTIFICATION #27 IDENTIFICATION #31** Town Town Queensbury Queensbury Road Name Butler Pond Road Road Name Glen Lake Road Jurisdiction Town Jurisdiction Town Watershed Halfway Brook Watershed Halfway Brook Direct connection to water No Direct connection to water Yes - Stream 5 30 % of Vegetation % of Vegetation Bank Slope Steep Bank Slope Steep Level of Erosion High Level of Erosion Moderate Length of Erosion (ft) 285 Length of Erosion (ft) 300 Width of Erosion (ft) 10 Width of Erosion (ft) 20 Total Area of Erosion (ft<sup>2</sup>) 2850 Total Area of Erosion (ft<sup>2</sup>) 6000 Soil Type Cobbly sandy loam Soil Type Bouldery, fine sandy loam Management Management Plant native, deep rooted Hydroseed with polymer Recommendations Recommendations vegetation \$1500 - \$2000 Cost \$900 - \$ 1000 Cost **Total Points Total Points** 50 45 Rank High Rank High

# TOWN OF QUEENSBURY

#### **IDENTIFICATION #32**

#### Town Queensbury

Road Name Buckbee Road

Jurisdiction Town

Watershed Halfway Brook



#### **IDENTIFICATION #33**

#### Town Queensbury

Road Name Buckbee Road
Jurisdiction Town

Watershed Halfway Brook



Watershed Hallway Brook	<b>的现在分词形式的现在分词形式的现在分词形式的</b>	Watershed Hallway Brook	AND DESCRIPTION OF THE PARTY OF
Direct connection to water	Yes - Culvert	Direct connection to water	Yes - Culvert
% of Vegetation	5	% of Vegetation	30
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	High	Level of Erosion	Moderate
Length of Erosion (ft)	200	Length of Erosion (ft)	450
Width of Erosion (ft)	8	Width of Erosion (ft)	10
Total Area of Erosion (ft <sup>2</sup> )	1600	Total Area of Erosion (ft <sup>2</sup> )	4500
Soil Type	Bouldery, fine sandy loam	Soil Type	Bouldery, fine sandy loam
Management Recommendations	Re-grade, remove weight on bank, rock stacked revetment	Management Recommendations	Hydroseed with polymer and clover
Cost	\$600 - \$850	Cost	\$1350 - \$1500
Total Points	55	Total Points	50
Rank	Moderate	Rank	High

#### IDENTIFICATION #24

#### Town Queensbury

Road Name Ridge Road/RT9L



# IDENTIFICATION #28

#### Town Queensbury

Road Name Glen Lake Road

Jurisdiction Town



Jurisdiction State	THE RESERVE OF THE PARTY OF THE	Jurisdiction Town	
Watershed Halfway Brook		Watershed Halfway Brook	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	35	% of Vegetation	40
Bank Slope	Moderate	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	200	Length of Erosion (ft)	1500
Width of Erosion (ft)	20	Width of Erosion (ft)	8
Total Area of Erosion (ft²)	4000	Total Area of Erosion (ft²)	12000
Soil Type	Loamy fine sand	Soil Type	Gravelly sand
Management Recommendations	Hydroseed with tackifier	Management Recommendations	Hydroseed
Cost	\$800 - \$900	Cost	\$2400 - \$3000
Total Points	35	Total Points	35
Rank	Moderate	Rank	Moderate

# TOWN OF QUEENSBURY

IDENTIFICATION #29		IDENTIFICATION #34		
Town Queensbury		Town Queensbury		
Road Name Butler Pond Road		Road Name Birdsall Road		
Jurisdiction Town	William Programme Comments of the Comments of	Jurisdiction Town		
Watershed Halfway Brook		Watershed Halfway Brook		
Direct connection to water	No	Direct connection to water	No	
% of Vegetation	30	% of Vegetation	50	
Bank Slope	Moderate	Bank Slope	Moderate	
Level of Erosion	Moderate	Level of Erosion	Low	
Length of Erosion (ft)	300	Length of Erosion (ft)	150	
Width of Erosion (ft)	20	Width of Erosion (ft)	20	
Total Area of Erosion (ft <sup>2</sup> )	6000	Total Area of Erosion (ft²)	3000	
Soil Type	Loamy fine sand	Soil Type	Gravelly sand	
Management Recommendations	Install fabric, stone and large plantings	Management Recommendations	Hydroseed	
Cost	\$1200 - \$1500	Cost	\$600 - \$700	
Total Points	35	Total Points	31	
Rank	Moderate	Rank	Moderate	
IDENTIFICATION #22		IDENTIFICATION #23		
Town Queensbury		Town Queensbury		
Road Name Pickle Hill Road		Road Name Jenkinsville Road		
Jurisdiction Town		Jurisdiction Town		
Watershed Lake George		Watershed Halfway Brook		
Direct connection to water	No	Direct connection to water	No	
% of Vegetation	30	% of Vegetation	25	
Bank Slope	Moderate	Bank Slope	Moderate	
Level of Erosion	Moderate	Level of Erosion	Low	
Length of Erosion (ft)	140	Length of Erosion (ft)	350	
Width of Erosion (ft)	6	Width of Erosion (ft)	4	
Total Area of Erosion (ft <sup>2</sup> )	840	Total Area of Erosion (ft²)	1400	
Soil Type	Fine sandy loam	Soil Type	Cobbly sandy loam	
Management Recommendations	Remove weight, hydroseed with tackifier and clover	Management Recommendations	Re-grade bank and hydroseed	
	With tacking and clover			
Cost	\$300 - \$400	Cost	\$300 - \$400	
Cost Total Points		Cost Total Points	·	

# TOWN OF QUEENSBURY

#### IDENTIFICATION #25

#### Town Queensbury

Road Name Walk Up Road
Jurisdiction Town
Watershed Halfway Brook



#### IDENTIFICATION #30

#### Town Queensbury

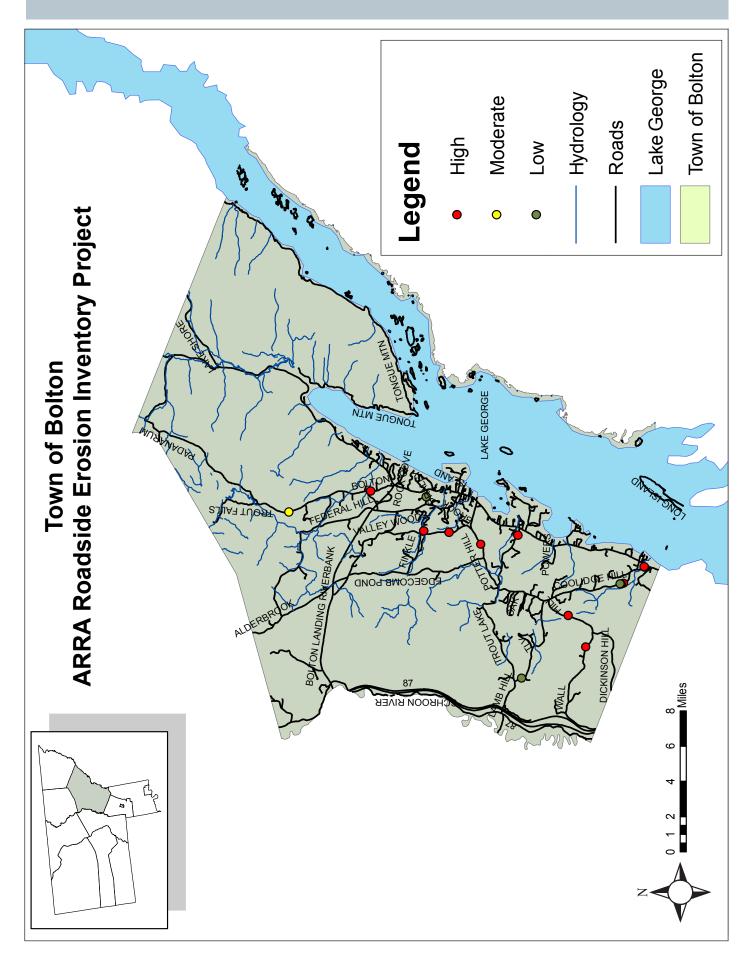
Road Name Butler Pond Road

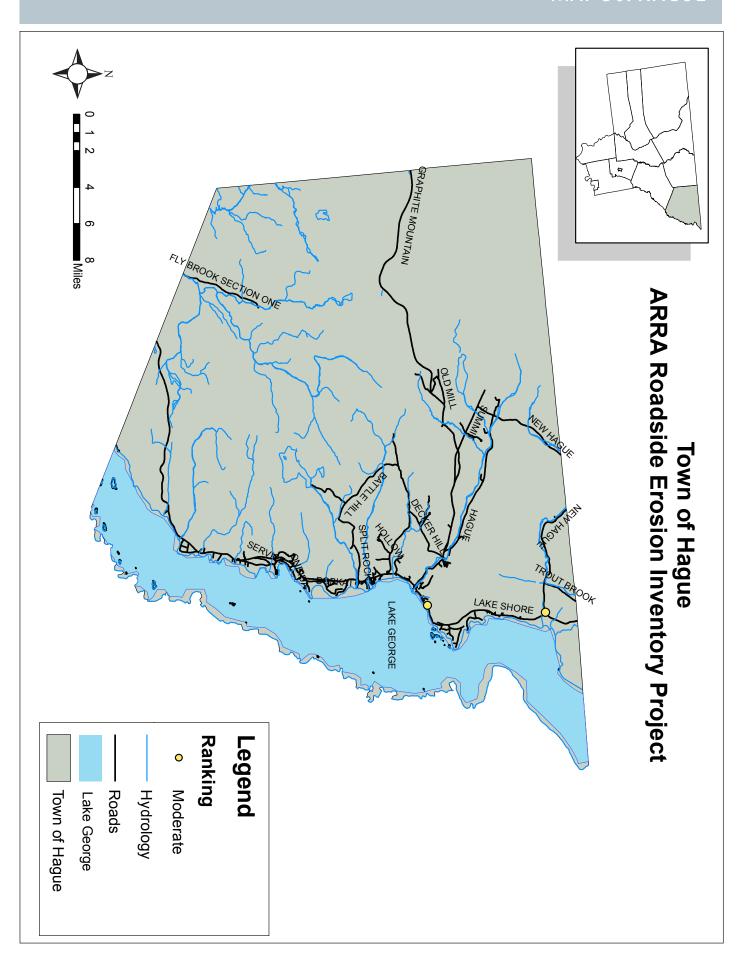
Jurisdiction Town

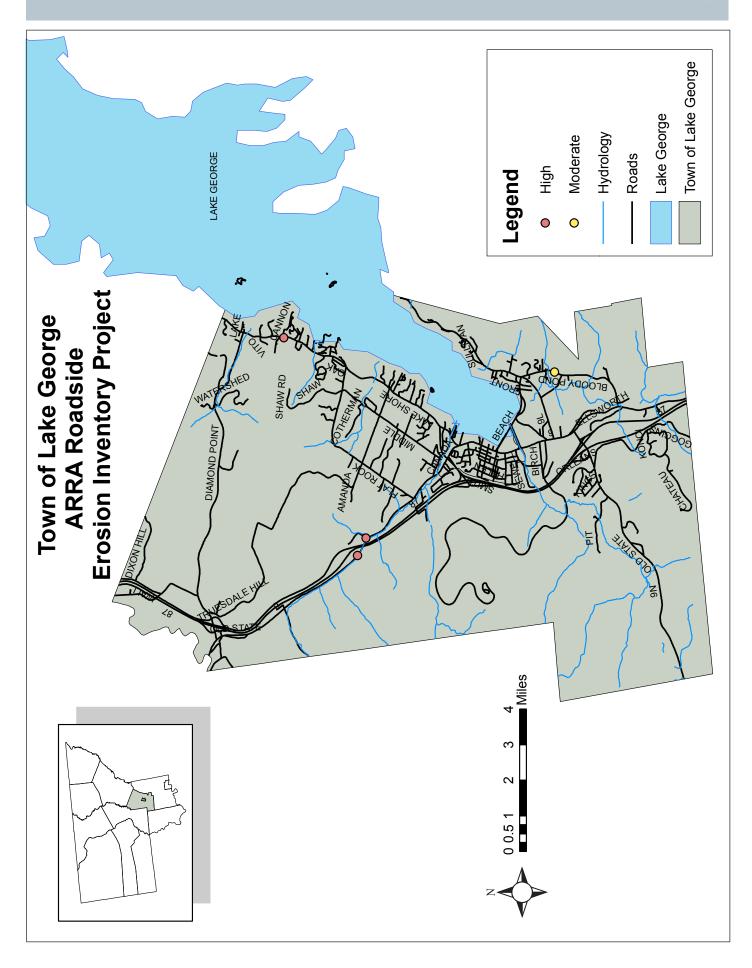
Watershed Halfway Brook

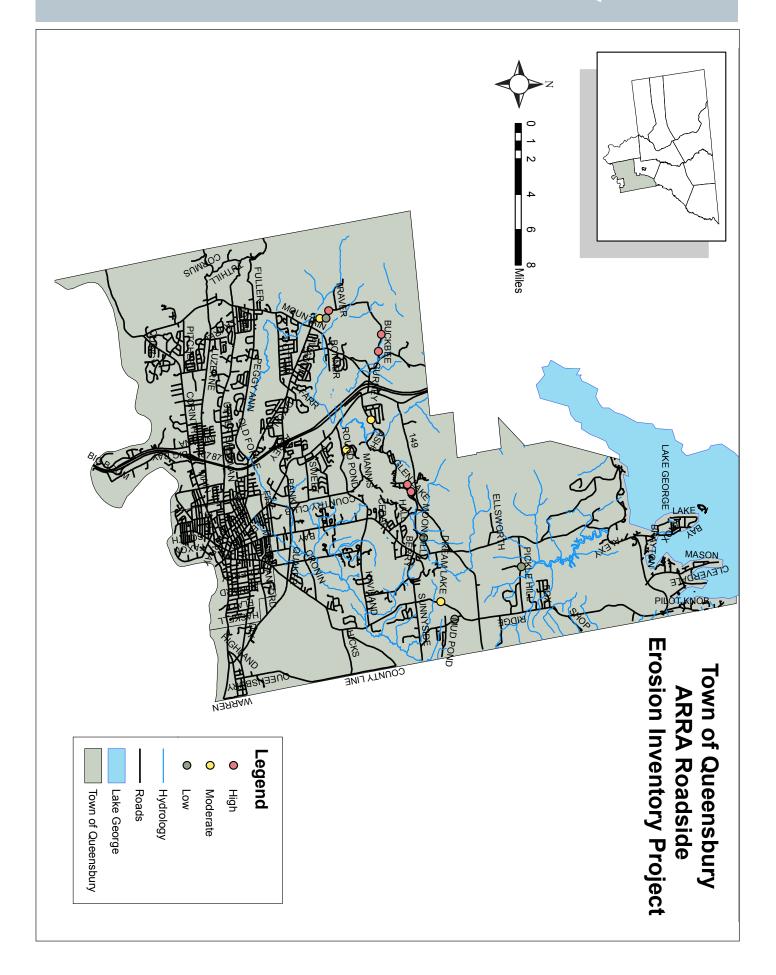


Watershed Halfway Brook	The same of the sa	Watershed Halfway Brook	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	30	% of Vegetation	10
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	150	Length of Erosion (ft)	220
Width of Erosion (ft)	10	Width of Erosion (ft)	6
Total Area of Erosion (ft²)	1500	Total Area of Erosion (ft²)	1320
Soil Type	Loamy fine sand	Soil Type	Bouldery, fine sandy loam
Management Recommendations	Hydroseed	Management Recommendations	Hydroseed with clover
Cost	\$300 - \$400	Cost	\$350 - \$450
Total Points	30	Total Points	30
Rank	Low	Rank	Low



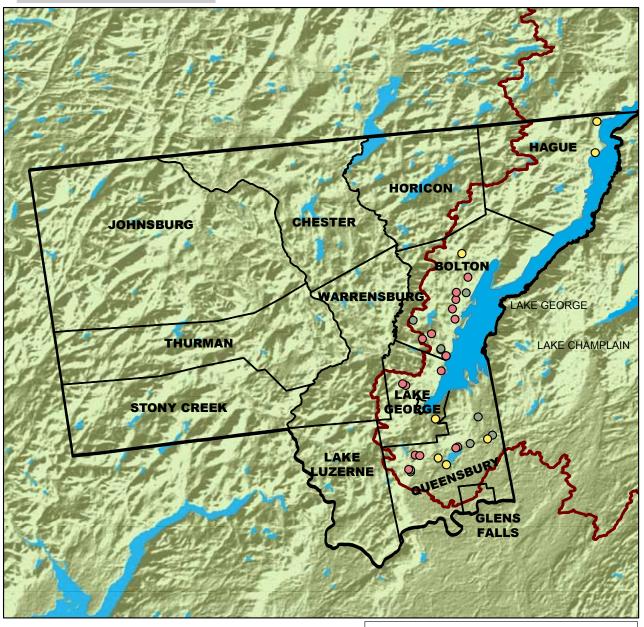




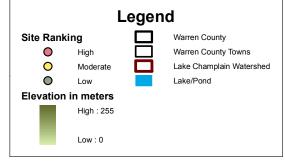




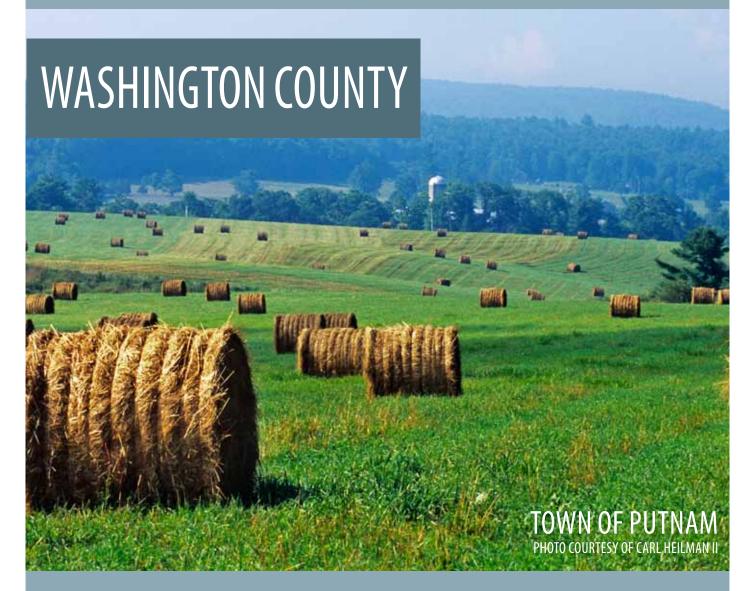
#### American Recovery and Reinvestment Act Roadside Erosion Inventory Project Warren County, New York







LCLGRPB \ 2012 137



Washington County straddles the southern Lake Champlain and upper Hudson River watershed divide in New York. The northern and western borders of the county are drawn by the shorelines of Lake Champlain and Lake George, respectively. The Lake Champlain Watershed is comprised predominantly of rural farmland and woodland, encompassing eight towns and four villages. Population centers in the county include the Village of Granville on the shores of the Mettawee River and the Village of Whitehall on the shores of southern Lake Champlain.

Similar to Clinton County, clays and loams are the principal soils throughout the low-lying agricultural lands while sand and gravel soils are primarily found throughout woodland areas. Hundreds of miles of high quality stream networks and acres of wetlands outlet into two main rivers; the Mettawee River and the Poultney River. Both rivers originate in the State of Vermont, cross state lines, and flow through Washington County until they discharge into southern Lake Champlain. The Mettawee River is important to local anglers

for its trout habitat and the Poultney River shoreline spans for 20 miles as undeveloped, highly diverse, natural shoreline. The remaining areas with Washington County discharge into the western portion of Lake George and southern Lake Champlain.

Thirty one roadside erosion sites (12 High Priority, 11 Moderate Priority, and 8 Low Priority) were identified in Washington County throughout eight municipalities on state, county and local roads. Most of these sites are found within areas with highly erodible sand and gravel soils, which is consistent with findings throughout the watershed. The predominant recommendations for remediating the identified sites are hydroseeding, re-grading and stabilizing slopes and installing erosion and sediment control structures. The remediation cost for the sites range from \$300 to \$15,000. The cumulative site assessment for the 31 sites in Washington County totals \$65,750.

# WASHINGTON COUNTY SITES

# TOWN | MAJOR SUBWATERSHEDS | ROADS

T	Number of Sites per Priority			Percentage
Town	High	Moderate	Low	of sites in County
Dresden	0	0	1	3%
Fort Ann	2	4	1	23%
Granville	1	0	1	6%
Hampton	1	0	1	6%
Hartford	2	2	1	16%
Kingsbury	1	0	1	6%
Putnam	2	1	1	13%
Whitehall	3	4	1	27%
Major	Nur	nber of Sites per Pri	ority	Percentage
Subwatershed	High	Moderate	Low	of sites in County
Halfway Brook	0	1	1	6%
Champlain Canal	1	0	0	3%
Lake George	2	2	1	16%
Mettawee River	3	4	2	29%
Poultney River	1	0	1	6%
South Lake Champlain	5	4	3	40%
Road	Num	Number of Sites per Priority		Percentage
Jurisdiction	High	Moderate	Low	of sites in County
State Roads	1	0	0	3%
County Roads	3	2	1	19%
Town Roads	7	9	7	75%
Private Roads	1	0	0	3%

Recommendations

Cost

Rank

**Total Points** 

## TOWNS OF DRESDEN & FORT ANN

#### **IDENTIFICATION #24 IDENTIFICATION #20** Town Town Dresden Fort Ann Road Name Lake Nebo Road Road Name Clemmons Road Jurisdiction Town Jurisdiction Town Watershed S. Lake Champlain Watershed Lake George Direct connection to water Yes - Wetland Direct connection to water Yes - Stream % of Vegetation 10 % of Vegetation 0 Bank Slope Moderate Bank Slope Steep Level of Erosion Low Level of Erosion Moderate Length of Erosion (ft) 75 Length of Erosion (ft) 100 Width of Erosion (ft) 10 Width of Erosion (ft) 10 Total Area of Erosion (ft²) 750 Total Area of Erosion (ft<sup>2</sup>) 1000 Soil Type Sand Soil Type Sand Management Stabilize with french drains, Management Stabilize with E&SC install E&SC blankets and blankets and stone and Recommendations Recommendations hydroseed with conservation hydroseed with soil mix and soil amendments amendments \$500 - \$600 \$1500 - \$1750 Cost Cost **Total Points** 30 **Total Points** 45 Rank Low Rank High **IDENTIFICATION #0 IDENTIFICATION #23** Town Town Fort Ann Fort Ann Road Name Hogtown Road Road Name Burquist Road Jurisdiction Town Jurisdiction Town Watershed S. Lake Champlain Watershed Halfway Brook Direct connection to water Direct connection to water Yes Yes - Stream % of Vegetation 0 % of Vegetation 30 Bank Slope Bank Slope Moderate Steep Level of Erosion Moderate Level of Erosion Low Length of Erosion (ft) 100 Length of Erosion (ft) 150 Width of Erosion (ft) 50 Width of Erosion (ft) 10 Total Area of Erosion (ft<sup>2</sup>) 5000 Total Area of Erosion (ft2) 1500 Soil Type Sandy loam Soil Type Sand Management Management Install E&SC blankets and Hydroseed with

Recommendations

Cost

Rank

**Total Points** 

hydroseed with conservation mix and soil amendments

\$5500 - \$6000

50

High

conservation mix, soluble

fertilizers and tackifier

\$400 - \$500

Moderate

36

# TOWN OF FORT ANN

IDENTIFICATION #27		IDENTIFICATION #29	
Town Fort Ann  Road Name Copeland Pond Road		Town Fort Ann	
Jurisdiction Town	<b>使基本</b> 。	Road Name Hogtown Road  Jurisdiction Town	
Watershed Lake George	M A BELLEVILLE	Watershed S. Lake Champlain	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	20	% of Vegetation	20
Bank Slope	Steep	Bank Slope	Steep
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	50
Width of Erosion (ft)	5	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	100	Total Area of Erosion (ft²)	500
Soil Type	Sand	Soil Type	Sand
Management Recommendations	Re-grade slope, stabilize with E&SC blankets and hydroseeding with conservation mix and soil amendments	Management Recommendations	Re-grade slope, stabilize with E&SC blankets and hydroseeding with conservation mix and soil amendments
Cost	\$350 - \$400	Cost	\$600 - \$650
Total Points	35	Total Points	35
Rank	Moderate	Rank	Moderate
IDENTIFICATION #30		IDENTIFICATION #28	
Town Fort Ann		Town Fort Ann	
Road Name Kelsey Pond Road		Road Name Copeland Pond Road	
Jurisdiction Town	Carried Towns	Jurisdiction Town	
Watershed S. Lake Champlain		Watershed Lake George	
Direct connection to water	No	Direct connection to water	No
% of Vegetation	10	% of Vegetation	75
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	200	Length of Erosion (ft)	75
Width of Erosion (ft)	5	Width of Erosion (ft)	10
Total Area of Erosion (ft²)	1000	Total Area of Erosion (ft²)	750
Soil Type	Gravel	Soil Type	Sand
Management Recommendations	Re-grade slope, stabilize with E&SC blankets and hydroseeding with conservation mix and soil amendments	Management Recommendations	Re-grade slope, stabilize with E&SC blankets and hydroseeding with conservation mix and soil amendments
Cost	\$2250 - \$3000	Cost	\$650 - \$700
Total Points	36	Total Points	25
Rank	Moderate	Rank	Low

# TOWNS OF GRANVILLE & HAMPTON

IDENTIFICATION #7		IDENTIFICATION #9	
Town Granville Road Name Cross Road		Town Granville Road Name Conety Road	
Jurisdiction Town		Jurisdiction Town	
Watershed Mettawee River		Watershed Mettawee River	
Direct connection to water	Yes	Direct connection to water	Yes - Pond
% of Vegetation	25	% of Vegetation	75
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	High	Level of Erosion	Low
Length of Erosion (ft)	2000	Length of Erosion (ft)	200
Width of Erosion (ft)	15	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	30,000	Total Area of Erosion (ft²)	600
Soil Type	Gravelly sand	Soil Type	Loose gravel
Management Recommendations	Re-grade slope with E&SC blankets and hydroseeding with conservation mix and soil amendments	Management Recommendations	Stabilize with french drains and hydroseed with conservation mix and soil amendments
Cost	\$5500 - \$6000	Cost	\$3500 - \$4000
Total Points	60	Total Points	16
Rank	High	Rank	Low
IDENTIFICATION #10		IDENTIFICATION #11	
Town Hampton Road Name Hickey Road Jurisdiction Town		Town Hampton Road Name Hickey Road Jurisdiction Town	
Watershed Poultney River		Watershed Poultney River	
Direct connection to water	Yes - Stream	Direct connection to water	No
% of Vegetation	15	% of Vegetation	15
Bank Slope	Steep	Bank Slope	Gradual
Level of Erosion	Low	Level of Erosion	Low
Length of Erosion (ft)	300	Length of Erosion (ft)	300
Width of Erosion (ft)	3	Width of Erosion (ft)	3
Total Area of Erosion (ft²)	900	Total Area of Erosion (ft²)	900
Soil Type	Gravel	Soil Type	Gravel
Management Recommendations	Construct retaining wall or cribs and hydroseed	Management Recommendations	Re-grade swale and hydroseed with conservation mix and soil amendments
Cost	\$12,000 - \$15,000	Cost	\$550 - \$650
Total Points	51	Total Points	22
Rank	High	Rank	Low

# TOWN OF HARTFORD

IDENTIFICATION #6		IDENTIFICATION #19	
Town Hartford		Town Hartford	
Road Name Warren Road	Maghing .	Road Name State Route 149	三三年 美元 第二
Jurisdiction Town	- Walley Harry	Jurisdiction State	
Watershed S. Lake Champlain		Watershed S. Lake Champlain	
Direct connection to water	Yes - Culvert	Direct connection to water	Yes - Stream
% of Vegetation	15	% of Vegetation	35
Bank Slope	Steep	Bank Slope	Moderate
Level of Erosion	High	Level of Erosion	Moderate
Length of Erosion (ft)	20	Length of Erosion (ft)	75
Width of Erosion (ft)	10	Width of Erosion (ft)	100
Total Area of Erosion (ft²)	200	Total Area of Erosion (ft²)	7500
Soil Type	Gravel	Soil Type	Sandy gravel
Management Recommendations	Regrade, install stone and hydroseed with conservation mix	Management Recommendations	Hydroseed with conservation mix and soil amendments
Cost	\$3000 - \$3750	Cost	\$450 - \$550
Total Points	50	Total Points	45
Rank	High	Rank	High
IDENTIFICATION #4		IDENTIFICATION #8	
Town Hartford		Town Hartford	
Road Name Warren Road		Road Name Washburn Hill Road	The Cal
Jurisdiction Town		Jurisdiction Town	the state of the
Watershed S. Lake Champlain		Watershed S. Lake Champlain	
Direct connection to water	Yes	Direct connection to water	Yes
% of Vegetation	50	% of Vegetation	50
Bank Slope	Gradual	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	200	Length of Erosion (ft)	500
Width of Erosion (ft)	1	Width of Erosion (ft)	1
Total Area of Erosion (ft²)	200	Total Area of Erosion (ft²)	500
Soil Type	Gravel	Soil Type	Silt
Management Recommendations	Re-shape ditch and hydroseed with conservation mix and soil amendments	Management Recommendations	Hydroseed with conservation mix
Cost	\$300 - \$500	Cost	\$300 - \$400
Total Points	31	Total Points	35
Rank	Moderate	Rank	Moderate

# TOWNS OF HARTFORD, KINGSBURY & PUTNAM

IDENTIFICATION #5		IDENTIFICATION #3	
Town Hartford		Town Kingsbury	
Road Name Warren Road	A TOWNS TO	Road Name County Route 41	
Jurisdiction Town		Jurisdiction County	THE RESIDENCE OF THE PARTY OF T
Watershed S. Lake Champlain		Watershed Champlain Canal	
Direct connection to water	No	Direct connection to water	Yes - Feeder Canal
% of Vegetation	10	% of Vegetation	50
Bank Slope	Moderate	Bank Slope	Steep
Level of Erosion	Low	Level of Erosion	Moderate
Length of Erosion (ft)	200	Length of Erosion (ft)	75
Width of Erosion (ft)	1	Width of Erosion (ft)	25
Total Area of Erosion (ft²)	200	Total Area of Erosion (ft <sup>2</sup> )	1875
Soil Type	Gravel	Soil Type	Sandy - limestone deposit
Management Recommendations	Hydroseed with conservation mix and soil amendments	Management Recommendations	Stabilize slope, construct containment earth dyke with water retention, stone-line outlet and hydroseed with conservation mix
Cost	\$350 - \$500	Cost	\$3500 - \$4000
Total Points	26	Total Points	45
Rank	Low	Rank	High
IDENTIFICATION #2		IDENTIFICATION #21	
Town Kingsbury		Town Putnam	
Road Name County Route 36		Road Name County Route 1	
Jurisdiction County		Jurisdiction County	MOVE HER PARTY HAVE AND ADDRESS OF THE PARTY HAVE AND ADDRESS OF THE PARTY HAVE AND ADDRESS OF THE PARTY HAVE A
Watershed Halfway Brook		Watershed Lake George	STATE OF THE PARTY
Direct connection to water	Yes	Direct connection to water	No
% of Vegetation	75	% of Vegetation	10
Bank Slope	Gradual	Bank Slope	Moderate
Level of Erosion	Moderate	Level of Erosion	Moderate
Length of Erosion (ft)	75	Length of Erosion (ft)	100
Width of Erosion (ft)	1	Width of Erosion (ft)	50
Total Area of Erosion (ft²)	75	Total Area of Erosion (ft²)	5000
Soil Type	Silty loam	Soil Type	Sandy loam
Management Recommendations	Re-shape swale and hydroseed with conservation mix	Management Recommendations	Hydroseed with conservation mix and soild amendments
Cost	\$500 - \$750	Cost	\$750 - \$1000
Total Points	26	Total Points	40
Rank	Low	Rank	High

# TOWNS OF PUTNAM & WHITEHALL

IDENTIFICATION #22		IDENTIFICATION #25		
Town Putnam		Town Putnam		
Road Name Best Road		Road Name County Route 1		
Jurisdiction Private		Jurisdiction County		
Watershed S. Lake Champlain		Watershed Lake George	Charles of the Control of the Contro	
Direct connection to water	No	Direct connection to water	No	
% of Vegetation	0	% of Vegetation	25	
Bank Slope	Steep	Bank Slope	Steep	
Level of Erosion	High	Level of Erosion	Low	
Length of Erosion (ft)	200	Length of Erosion (ft)	50	
Width of Erosion (ft)	50	Width of Erosion (ft)	10	
Total Area of Erosion (ft²)	10,000	Total Area of Erosion (ft²)	500	
Soil Type	Gravel	Soil Type	Sand	
Management Recommendations	Re-grade slope, install E&CS blankets and hydroseed with reclamation mix and soil amendments	Management Recommendations	Re-grade slope and hydroseed with conservation mix and soil amendments	
Cost	\$2000 - \$2500	Cost	\$750 - \$1000	
Total Points	50	Total Points	31	
Rank	High	Rank	Moderate	
IDENTIFICATION #26		IDENTIFICATION #1		
Town Putnam		Town Whitehall		
Road Name Pulpit Point		Road Name County Route 10		
Jurisdiction Town		Jurisdiction County		
Watershed S. Lake Champlain		Watershed S. Lake Champlain	<b>第一个第一个</b>	
Direct connection to water	No	Direct connection to water	Yes - Culvert	
% of Vegetation	30	% of Vegetation	0	
Bank Slope	Low	Bank Slope	Moderate	
Level of Erosion	Low	Level of Erosion	Low	
Length of Erosion (ft)	100	Length of Erosion (ft)	500	
Width of Erosion (ft)	20	Width of Erosion (ft)	2	
Total Area of Erosion (ft²)	2000	Total Area of Erosion (ft²)	1000	
Soil Type	Gravel	Soil Type	Gravel	
Management Recommendations	Hydroseed with conservation mix and soil amendments	Management Recommendations	Install 5 stone check dams and hydroseed with conservation mix	
Cost	\$450 - \$500	Cost	\$1300 - \$1500	
Total Points	27	Total Points	40	
Rank	Low	Rank	High	

# TOWN OF WHITEHALL

IDENTIFICATION #13		IDENTIFICATION #15			
Town Whitehall Welch-Tanner- Road Name Truthville Intersection		Town Whitehall Road Name Baker Road			
Jurisdiction Town	100	Jurisdiction Town			
Watershed Mettawee River		Watershed Mettawee River	STATE OF THE STATE		
Direct connection to water	No	Direct connection to water	Yes - Stream		
% of Vegetation	10	% of Vegetation	25		
Bank Slope	Steep	Bank Slope	Moderate		
Level of Erosion	High	Level of Erosion	Moderate		
Length of Erosion (ft)	73	Length of Erosion (ft)	150		
Width of Erosion (ft)	2	Width of Erosion (ft)	2		
Total Area of Erosion (ft <sup>2</sup> )	146	Total Area of Erosion (ft²)	300		
Soil Type	Gravel	Soil Type	Gravel		
Management Recommendations	Re-grade slope, install stone check dam and hydroseed with conservation mix and soil amendments	Management Recommendations	Re-grade slope, install E&SC blankets and hydroseed with conservation mix and soil amendments		
Cost	\$450 - \$550	Cost	\$450 - \$550		
Total Points	49	Total Points	40		
Rank	High	Rank	High		
IDENTIFICATION #12		IDENTIFICATION #14			
Town Whitehall		Town Whitehall			
Road Name Tanner Hill Road		Road Name Winters Road	The state of the s		
Jurisdiction Town		Jurisdiction Town	Comment of the Party of the Par		
Watershed Mettawee River	2000年	Watershed Mettawee River	TO A VIETE OF THE PARTY OF		
Direct connection to water	No	Direct connection to water	Yes - Stream		
% of Vegetation	25	% of Vegetation	0		
Bank Slope	Steep	Bank Slope	Moderate		
Level of Erosion	Low	Level of Erosion	Low		
Length of Erosion (ft)	500	Length of Erosion (ft)	200		
Width of Erosion (ft)	3	Width of Erosion (ft)	50		
Total Area of Erosion (ft²)	1500	Total Area of Erosion (ft²)	10,000		
Soil Type	Gravel	Soil Type	Silt		
Management Recommendations	Re-grade slope and hydroseed with conservation mix and soil amendments	Management Recommendations	Re-grade slope, install 2 check dams and hydroseed with conservation mix		
Cost	\$750 - \$1200	Cost	\$2800 - \$3300		
Total Points	31	Total Points	36		
Rank	Moderate	Rank	Moderate		

# TOWN OF WHITEHALL

### **IDENTIFICATION #17 IDENTIFICATION #18** Town Town Whitehall Whitehall Road Name County Route 12 Road Name Upper Turnpike Jurisdiction Town Jurisdiction County Watershed Mettawee River Watershed Mettawee River Direct connection to water Yes - Stream Direct connection to water No 90 50 % of Vegetation % of Vegetation Bank Slope Steep Bank Slope Steep Level of Erosion Level of Erosion Moderate Low Length of Erosion (ft) 30 Length of Erosion (ft) 40 Width of Erosion (ft) 50 Width of Erosion (ft) 40 Total Area of Erosion (ft<sup>2</sup>) Total Area of Erosion (ft2) 1500 1600 Soil Type Sandy gravel Soil Type Sandy gravel Re-grade slope and hydroseed Management Management Install woody vegetation with conservation mix and soil Recommendations Recommendations amendments Cost \$350 - \$450 Cost \$1500 - \$1750 **Total Points** 31 Total Points 31

Rank

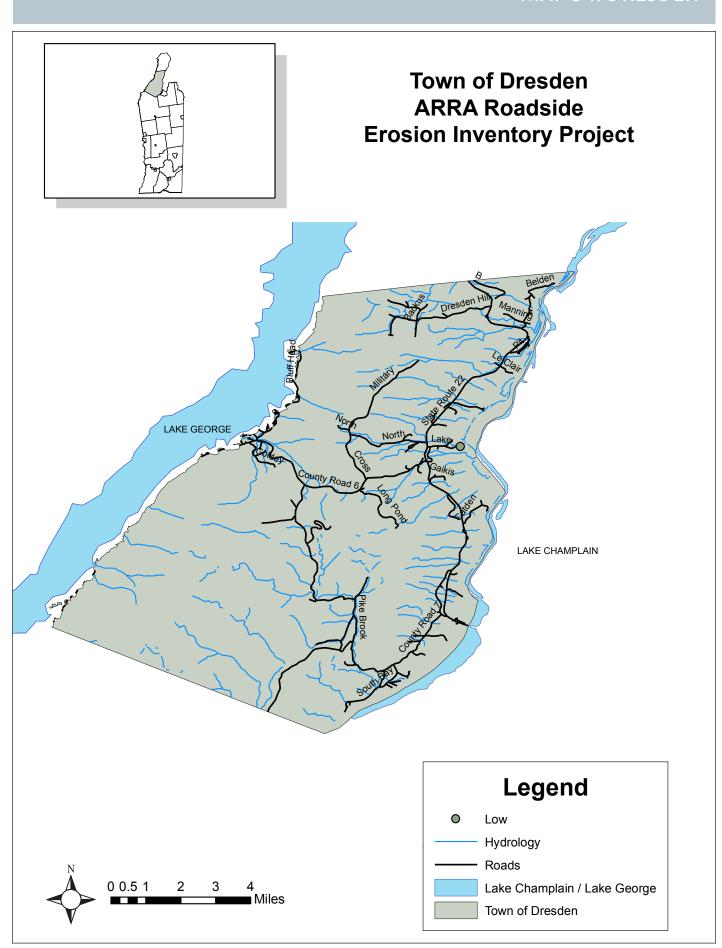
Moderate

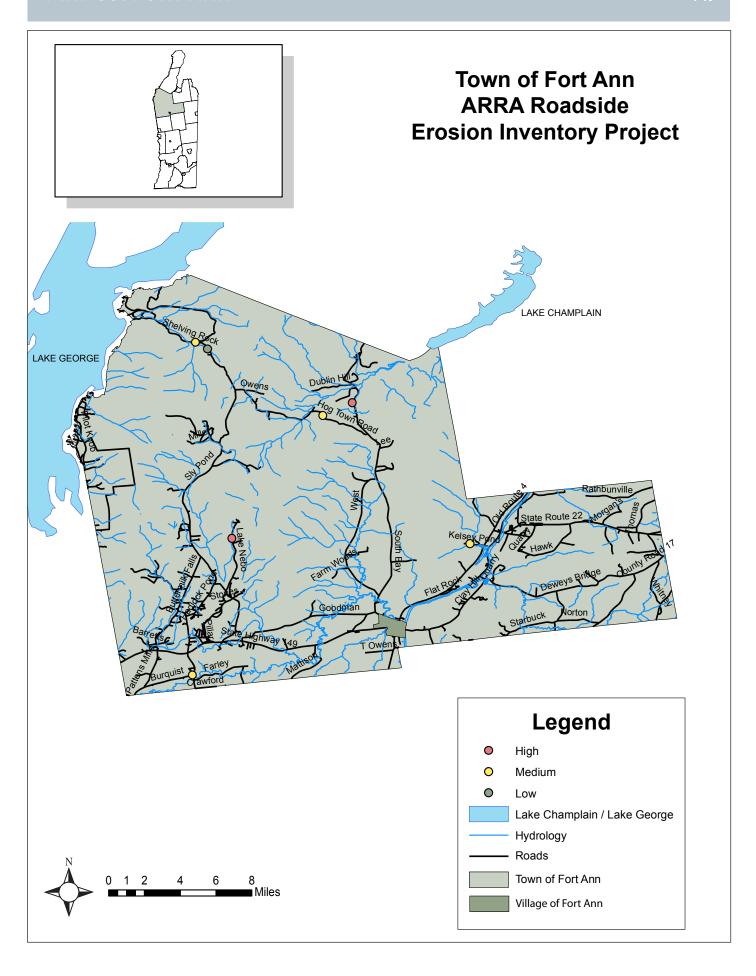
# **IDENTIFICATION #16**

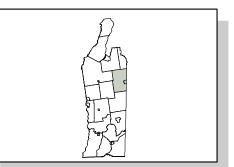
Rank

Town Whitehal	I	
Road Name	Beckett Road	A PART OF LA
Jurisdiction	Town	松三心正理
Watershed	Mettawee River	
Direct conr	nection to water	No
% of Vegeta	ation	25
Bank Slope		Moderate
Level of Erc	sion	Low
Length of E	rosion (ft)	300
Width of Er	osion (ft)	4
Total Area o	of Erosion (ft²)	1200
Soil Type		Gravel
Managem Recomme		Re-grade slope and hydroseed with conservation mix and soil amendments
Cost		\$1500 - \$1750
Total Points	,	26
Rank		Low

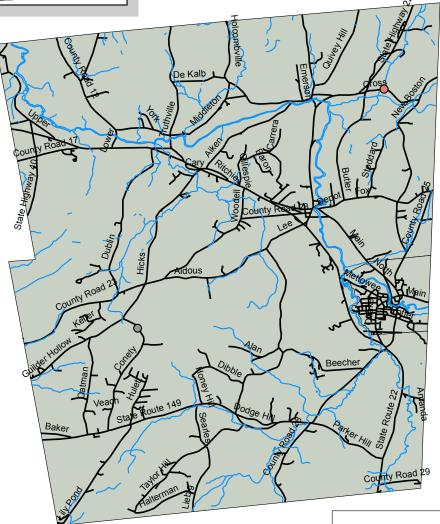
Moderate







# Town of Granville ARRA Roadside Erosion Inventory Project



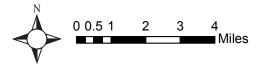
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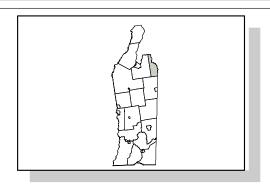
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Hydrology

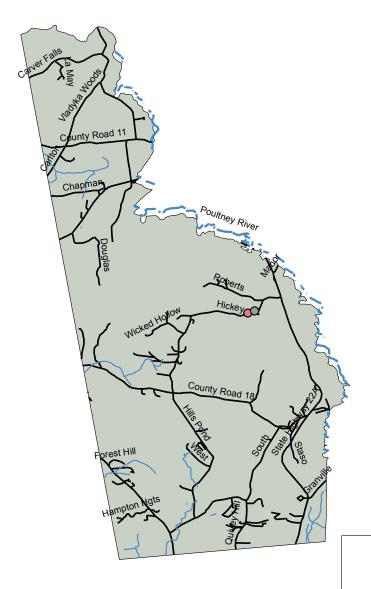
----- Roads

Town of Granville





# Town of Hampton ARRA Roadside Erosion Inventory Project



# Legend

High

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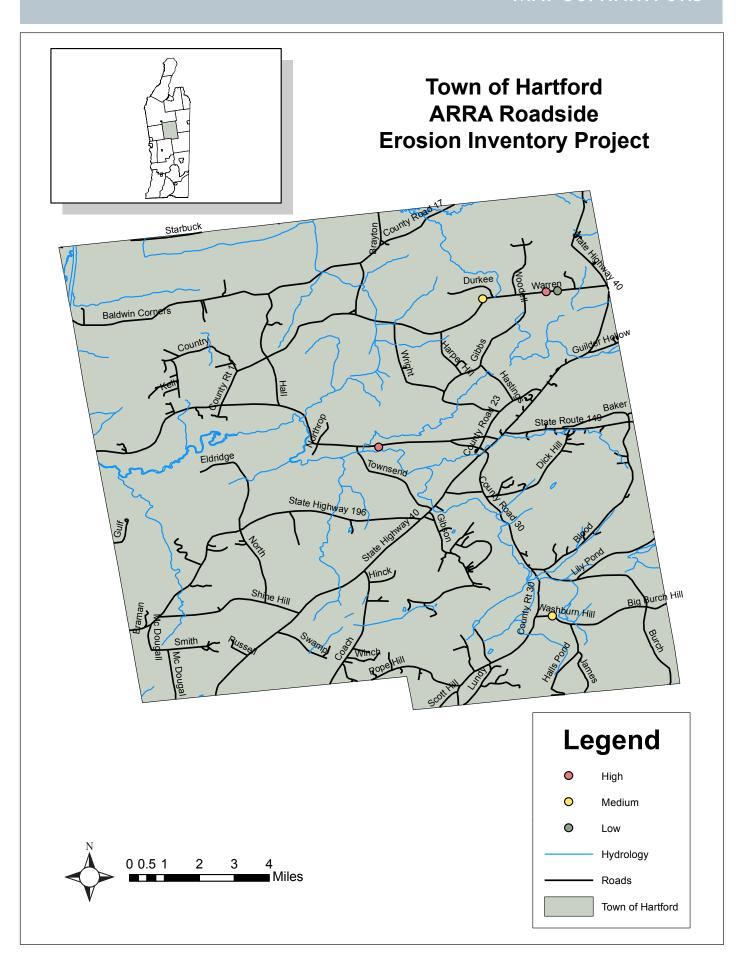
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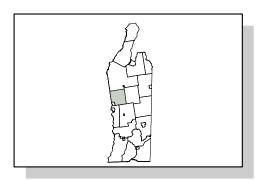
----- Roads

Town of Hampton

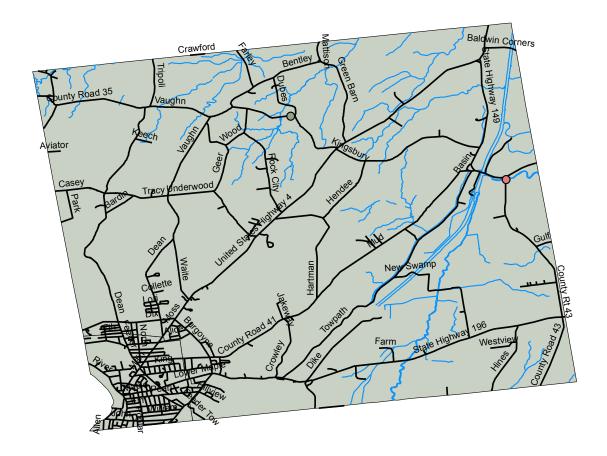


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# Town of Kingsbury ARRA Roadside Erosion Inventory Project





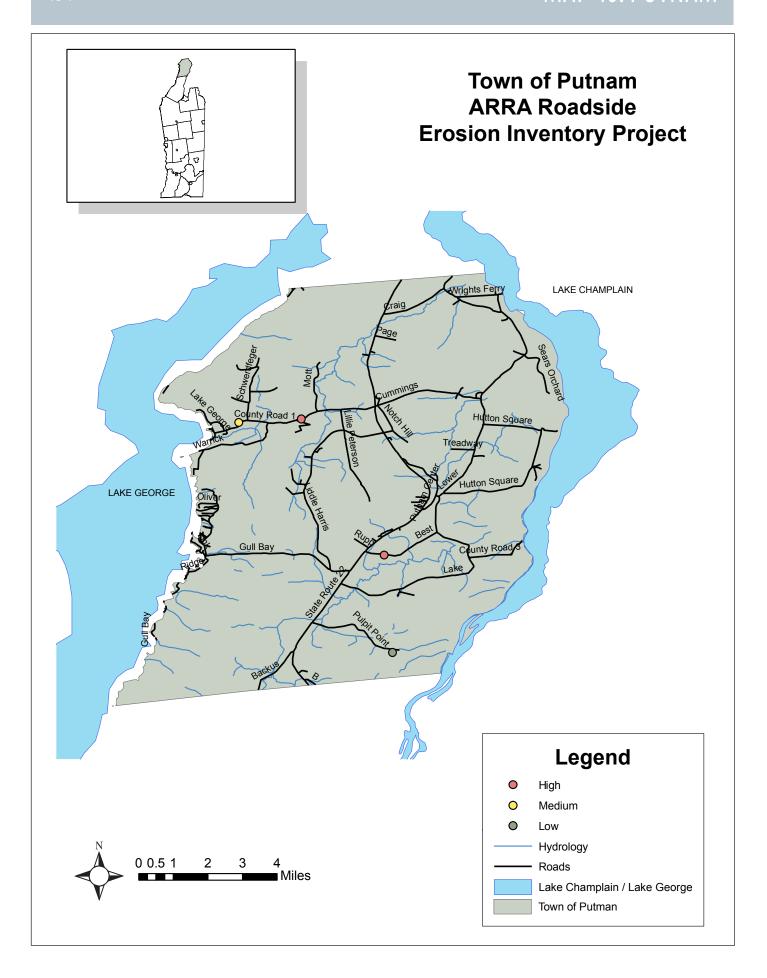
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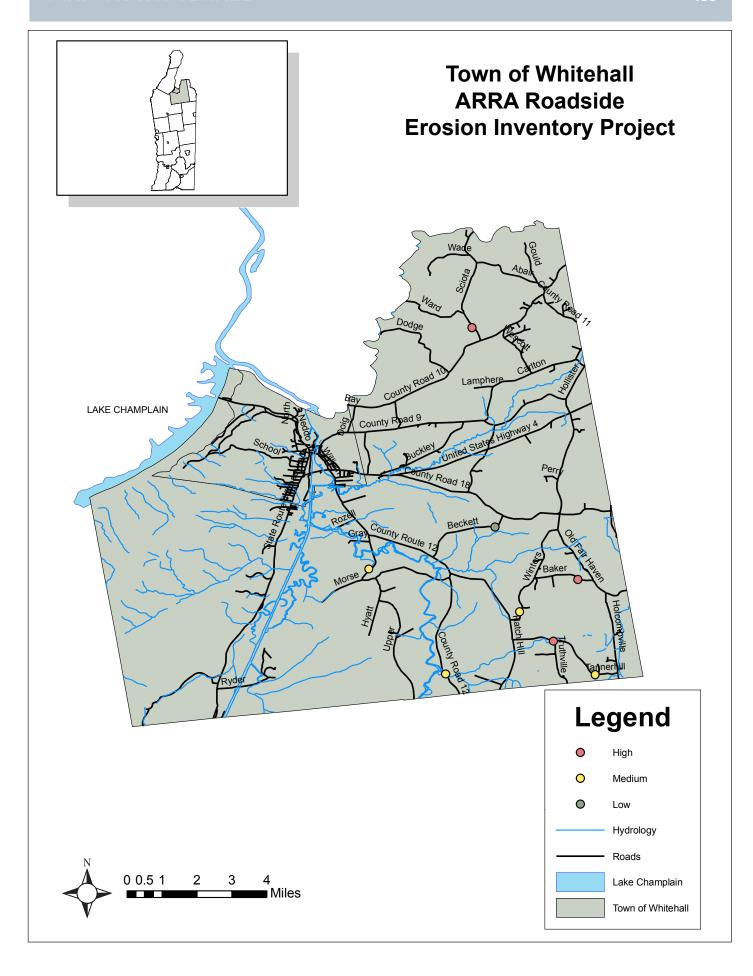
- High
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- Roads

Hydrology

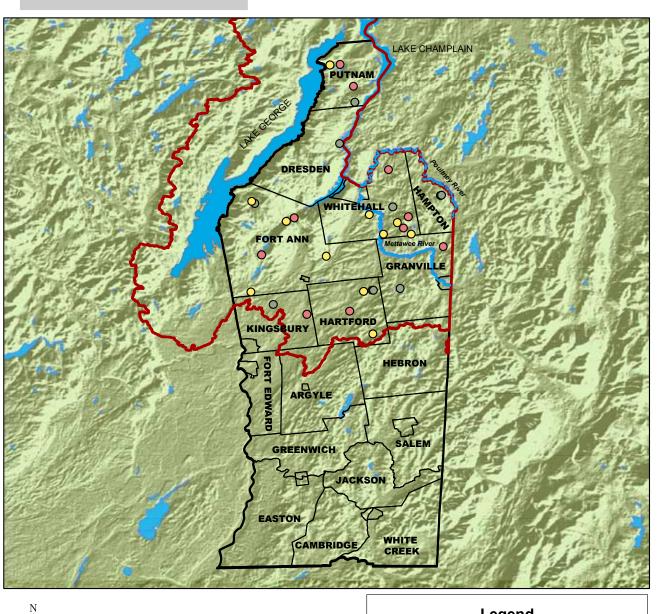
Town of Kingsbury

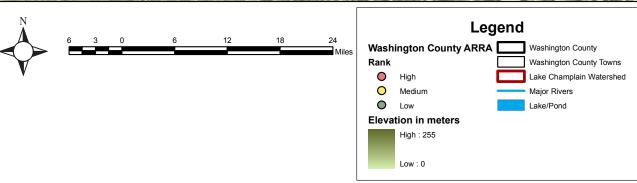






## American Recovery and Reinvestment Act Roadside Erosion Inventory Project Washington County, New York





# **EDUCATION**

# NORTH COUNTRY STORMWATER TRADESHOW AND CONFERENCE



Although a substantial amount of funding is needed for the on-the-ground remediation of the sites found within the Champlain Basin, education also plays an important part of managing all types of pollution, including roadside erosion. If local professionals and municipal and state employees are given the knowledge to prevent erosion at the onset of a project, then the time and money needed to remediate sites will decrease. This is why the Regional Planning Board, CWICNY and the County SWCD's are committed to providing education on the most modern techniques and products in the erosion and sediment control field.

TRADESHOW AGENDA				
2009				
Opening Remarks	Assemblywoman Teresa Sayward			
The Continuing Struggle for Stormwater Compliance, What's Ahead for the NYS Stormwater Program and Misconceptions of Soils in Stormwater	Don Lake, PE			
BMP Solutions for Disturbed Areas	Steve Zwilling, IFCA			
Flood Plain Management	William Nechamen, NYS Department of Environmental Conservation			
Site Planning for Wastewater and Stormwater Management for Residential Construction	Miriam McGiver, PE, NYS Department of State			
Green Roof Case Study, Albany, NY	Scott Townsend, 3T Architects			
EM River Model Demo	Staci Pomeroy, VT Agency of Natural Resources			
2010				
Open Remarks	Bill Wellman, Champlain Chapter, Trout Unlimited			
UNH Stormwater Overview, BMP Treatment Performance and Cold Climate Practices	Dr. Tom Ballestero, PE, University of New Hampshire Stormwater Center			
Design Handbook Updates and Infiltration BMP Sizing and Design: Handling Climate Change Precipitation	Don Lake, PE			
Porous Asphalt Case Study	Daniel Hershberg, PE, LS			
2011				
Opening Remarks	Jim Tierney, NYS DEC Division of Water Assistant Commissioner			
Green Infrastructure and Low Impact Development	John Dunkle, PE CPESC, Dunn & Sgromo Engineers			
Detection and Elimination of Illicit Discharges to Storm Sewers	Andrew Sansone, CPSWQ, Monroe Co. Environmental Services			
Phosphorus Treatment Advanced Mechanism and Design	Scott Perry, CPSWQ, Imbrium Systems			
Local Stormwater Panel - Discussion of Regulatory Updates and Local Issues, Focused on the New DEC Design Manual, Chapter 5, Green Infrastructure	Carol Lamb Lafay, PE NYS Department of Environmental Conservation Suzanna Randall, Environmental Facilities Corp. Tom Baird, PE, Barton and Loguidice			

The LCLGRPB, CWICNY and the five county SWCD's included several educational components into the ARRA Program, including CWICNY's Annual North Country Stormwater Tradeshow and Conference (Stormwater Tradeshow) and several County Erosion and Sediment Control trainings.

The North Country Stormwater Tradeshow and Conference is an annual event that is held to educate local professionals, municipal employees and contractors on the most up-to-date stormwater practices and state-of-the-art stormwater technologies and services. From 2009 to 2011, over 300 participants attended the conference to hear from leaders in the stormwater management sector including; Don Lake, P.E., New York State's elite Erosion and Sediment Control specialist; Dr. Tom Ballestero, PE, Lead Scientist at the University of New Hampshire Stormwater Center; and John Dunkle, PE, CPESC, CPSWQ of Dunn and Sgromo Engineers and SUNY ESF. Topics throughout the years included the future of the NYS Stormwater Program, flood plain management, cold climate best management practices and performance, low impact development, advanced mechanisms and designs for phosphorus treatment, green roofs and pervious asphalt.

Also included in the Stormwater Tradeshow are numerous vendors showcasing new products and services for the region. Yearly participants include Excav Services, Hydro International, EJ Prescott, Inc.,

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Stormwater Tradeshow presenters. Photo courtesy of CWICNY.

ACF Environmental, American Excelsior Company, Imbrium Services, CT Male and Terra Hill Concrete Products. Products presented include stormwater infiltration basins, erosion control fabrics, pervious pavement, sediment and phosphorus treatment systems and an array of GPS products and software.

Further educational opportunities were afforded for local contractors by the individual county SWCDs. Several 4-Hour Erosion and Sediment Control trainings were held throughout the watershed to educate contractors as a requirement under the NYS Department of Environmental Conservation's Stormwater Permit. This permit requires that all construction site contractors and subcontractors have at least one trained individual from their company at their construction sites on a daily basis. This individual is responsible for the implementation of proper erosion control and stormwater management techniques.

For these trainings, the District staff utilize the presentation developed by the Department of Environmental Conservation that highlights the state's stormwater program and its requirements. During this presentation attendees are exposed to the permit process, the do's and don'ts of the process and various erosion, sediment and stormwater control techniques. In the past three years, over 1000 individuals have been educated on proper erosion and sediment control techniques.

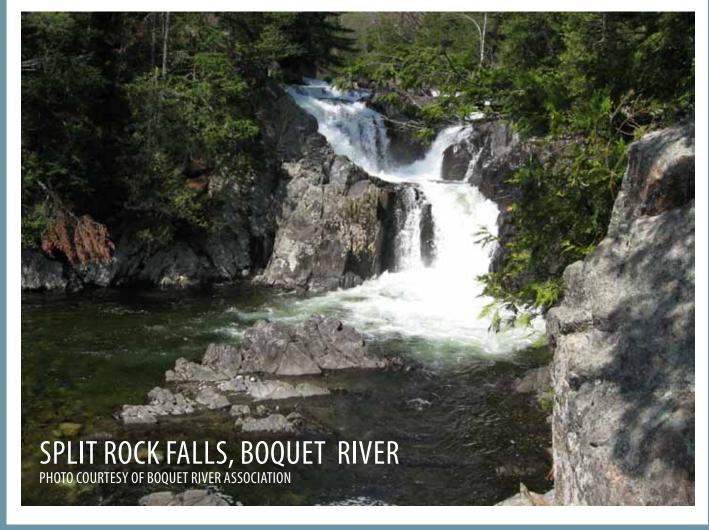
# PROJECT CONCLUSION

# ROADSIDE EROSION ASSESSMENT AND INVENTORY

The Adirondack Park and Lake Champlain Basin have always been revered for their beautiful, natural landscapes and sparkling waters. A staple of the region's economy is based around tourism and recreation, which is directly connected to the quality of water in the areas many lakes and rivers. This, coupled with the need to sustain clean, natural ecosystems in the watershed, is why there has been so much time, effort and money put into water quality planning in the Champlain Watershed. This report outlines the need for erosion and sedimentation control within the region, as well as provides a path for remediation and a model for erosion control planning for other areas in the

basin. This is but one small factor in the protection of water quality in the Champlain Basin, but is an important element in maintaining the vitality of the region.

Work to this magnitude can not be performed by one entity, which is why the LCLGRPB has established strong connections with CWICNY and the County SWCD's, and hope this plan will foster further partnerships with state, county and local entities. Together, we can secure future funding for planning and implementation initiatives based around the importance of water quality in our region.



# NOTES