Genesee/Finger Lakes
Regional Planning Council

Controling Sediment in the Black and Oatka Creek Watersheds

Ordinances and Practices Assessment Form

Introduction

This assessment form has been developed by the Genesee/Finger Lakes Regional Planning Council in collaboration with the Black Creek Watershed Coalition and the Oatka Creek Watershed Committee in order to gain a thorough understanding of existing local laws, ordinances, and practices that impact water resources, and particularly erosion and sediment in the Black and Oatka Creek Watersheds.

Much of the funding for the Controlling Sediment in the Black and Oatka Creek Watersheds project is provided by the Great Lakes Program for Soil Erosion and Sediment Control.

Please take a moment to review the form. The form is divided into six sections based on subject area. Some of the sections are, in turn, organized into parts. See the Table of Contents on the following page for more detail.

There is a three column format throughout the entire form. Column 1 describes an action or practice that is known and understood to promote good water quality. Column 2 is to be filled in based on whether a municipality enforces any local laws, or performs any practices that implements the action described in Column 1. Column 3 is to be filled in based on the level of implementation indicated in Column 2. Column 3 can be filled in simply by indicating the number (2, 1, 0, or n/a) that corresponds to the level of implementation described below:

2 - Fully: The municipality implements the practice or its equivalent across the entire area of the municipality. The practice is a) codified in municipal code; b) included in internal operating procedure guidelines or manuals; c) included in specification manuals, or d) is part of a special municipal initiative.

1 - Partially: The municipality implements the practice or its equivalent in a specific area of the municipality or implements part of the practice or its equivalent. The practice is a) routinely followed but not codified in the Town Code; or b) routinely followed but not included in written internal operating procedure guidelines or manuals which may or may not include specifications.

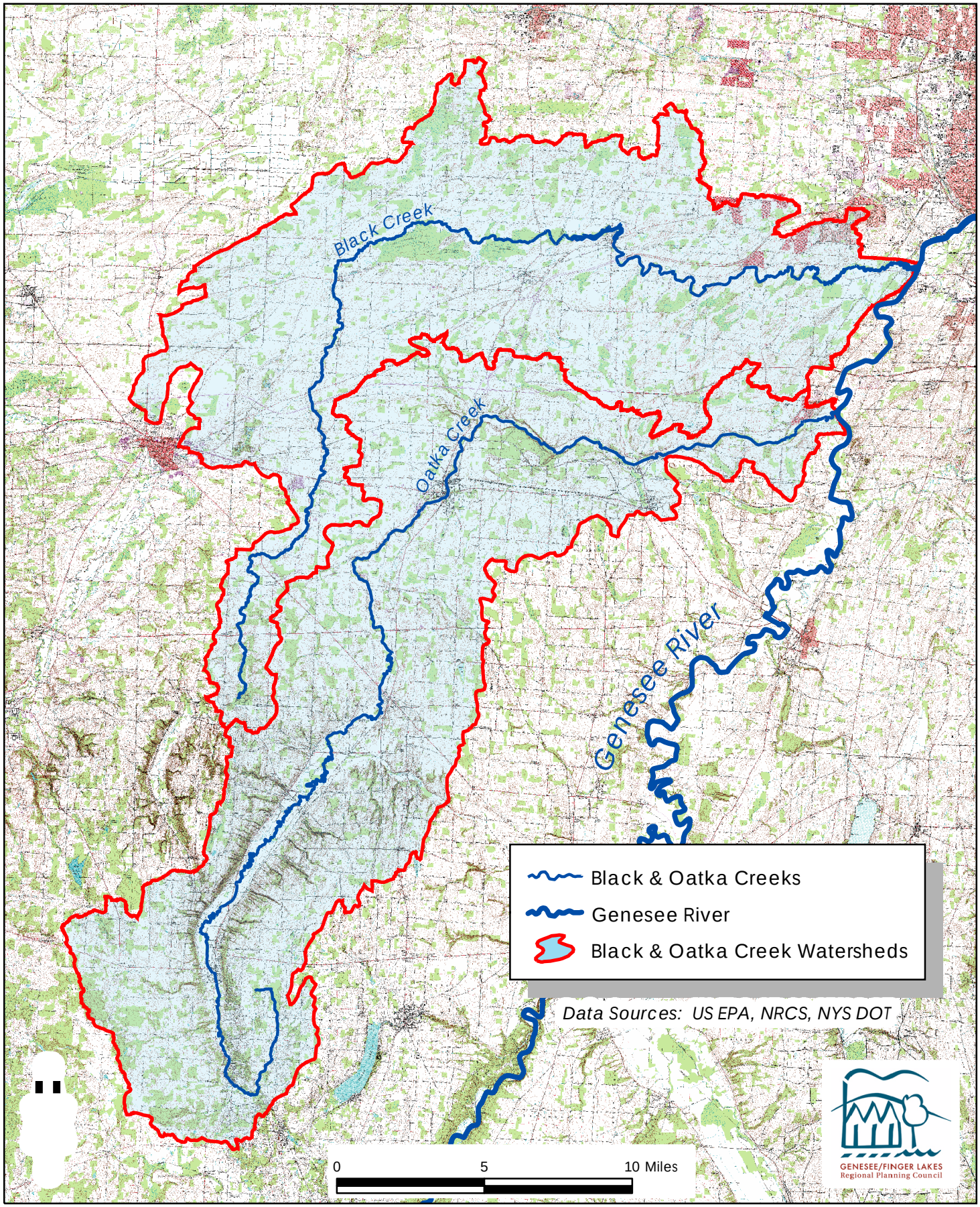
0 - Not at all: The municipality does not implement the practice or its equivalent.

Not applicable: (n/a) The practice does not appear to be relevant to the municipality.

The following charts contain many possible practices. Not every practice needs to be implemented to ensure the control of nonpoint source pollution.

Note: Where the practice is under the jurisdiction of and fully or partially implemented by another entity such as the federal or State government, the County Department of Health or a special sewer district, please indicate this.

Black & Oatka Creek Watersheds



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	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
1-01	Identify retrofit opportunities such as addition of stormwater ponds to older developments or construction of wastewater treatment systems to replace older septic systems		
1-02	Identify habitat and natural conveyance system restoration opportunities		
1-03	Establish retention/detention areas		
1-04	Acquire additional land for locating treatment facilities		
1-05	Encourage homeowners to place cornpost piles away from waterbodies and roadways		
1-06	Encourage proper use and disposal of lawn and other household chemicals		
1-07	Institute turf management practices on golf courses and parks and recreation areas		
1-08	Undertake storm drain stenciling		
1-09	Encourage volunteer programs, such as adopt-a-highways and adopt-a-stream, etc.		
1-10	Include high percentage of indigenous plants in new landscaping on privately-owned properties (excluding arboretums, horticultural gardens, and sites requiring turf grasses)		
1-11	Encourage water conservation		
1-12	Develop outreach programs targeted at specific problems related to water quality management & resource conservation		
1-13	Encourage proper control of pet wastes		
1-14	Encourage continued operation of private storm water runoff control structures		
1-15	Discourage feeding of waterfowl		

1-16	Discourage the introduction of exotic aquatic species (Eurasion water milfoil, zebra mussels, water chestnut, loosestrife, hogweed, etc		
1-17	Encourage continuted (periodic) operation and maintenance of private septic disposal systems		
1-18	Effective and consistent application and enforcement of stormwater requlations & requirements		
1-19	Require certification of existing on site septic systems for property transfers or builing expansions.		
1-20	Require entire property (existing as well as proposed) to be included in stormwater analysis/calculation.		
1-21	Use of drainage districts		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
1-22	Minimize the amount of land disturbed and the duration of disturbance		
1-23	Preserve natural features and conform substantially with the natural boundaries and alignment of waterbodies		
1-24	Retain and protect trees and other natural vegetation on and near disturbed sites		
1-25	Account for topography and soil type in efforts to minimize erosion potential		
1-26	Maintain runoff rates similar to pre-construction levels		
1-27	Minimize the creation of impervious areas [incourage permeable surface]		
1-28	Control increased runoff caused by changed surface conditions to minimize the danger of flooding, erosion, sedimentation and pollutants entering waterbodies prior to, during and after construction		
1-29	Use temporary vegetation and mulching to protect exposed and critical areas during development		
1-30	Redistribute topsoil within the boundaries of the disturbed land for seeding and planting		
1-31	Stabilize disturbed soils as soon as possible		
1-32	Minimize the use of cut and fill operations. Conform such operations to topography and soils to minimize erosion potential and adequately accommodate runoff		
1-33	Use appropriate solid and hazardous waste generation and disposal practices including source controls and recycling		

1-34	Encourage construction site management techniques which include the proper handling and disposal of pesticides and petroleum products and containers		
1-35	Ensure proper operation and maintenance of runoff management facilities		
1-36	Target training for contractors, inspectors and zoning and planning officials.		
1-37	Require tree surveys and/or cutting plans.		
1-38	Develop priority list for BMP's - use of vegetative low areas for retention/infiltration.		
1-39	Encourage cluster development/conservation subdivisions		
1-40	Require connection to and/or extension of existing water & sewer if project is within 500 feet of existing infrastructure		
1-41	Enact limits on driveway grades.		
1-42	For redevelopment, employ regulations that provide for technologically advanced (on and off) site wastewater treatment systems to optimize effeciencies and address "challenging" sites		
1-43	Implement Federal/State Stormwater (SPDES) Phase II requirements including MS4 and Construction Permits as well as Municipal and Industrial Discharge Permits		
1-44	Discourage development in flood plain and/or development below base flood elevation		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
2-01	Consider potential water quality impacts when selecting silviculture system (yarding system, site preparation, pesticides employment, etc)		
2-02	Consider harvesting practices		
2-03	Seasonal preference for logging operations		
2-04	Have specialists (geologist, soil scientist, geotechnical engineer, wildland hydrologist) review plans in high erosion hazard areas		
2-05	Preplan harvest areas, skid trails, and access so as to be on stable soils, avoiding steep gradients, multiple stream crossings, poor drainage areas, etc.		
2-06	Limit grades of access roads.		
2-07	Require stabilization of roads/drives to forestry site.		
2-08	Employ natural topography and contour for design of road network		
2-09	Require stormwater controls for increased runoff from ground cover modification		
2-10	Consider site restoration		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
2-11	Use Agricultural Environmental Management (AEM)		
2-12	Require farms seeking agricultural value assessment to participate in AEM		
2-13	Use of Comprehensive Nutrient Management Plans		
2-14	Use of agricultural protection such as Agricultural Districts, agricultural preservation ordinances and practices, right to farm laws, and Agricultural and Farmland Protection Plans		
2-15	Existing Open Space Plans		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
3-01	Develop an operation and maintenance program for existing modified streams that includes identification of opportunities and actions to restore habitat and the physical and chemical characteristics of these streams.		
3-02	Improve stream quality by controlling instream sedimentation and selectively clearing debris		
3-03	Establish or reestablish riparian buffers		
3-04	Prevent animal wastes from entering waterbodies		
3-05	Attempt vegetative stablization before undertaking structural measures		
3-06	Schedule the periodic maintenance of sedimant control measures, and inspect and repair them as needed in conformance with established schedule.		
3-07	Protect streambanks through direct nonstructural means, such as new vegetation or protection of existing vegetation; direct structural means, such as revetments and bulkheads; indirect nonstructural means, such as regulating irrigation near streambanks or rerouting overbank drainage; or indirect structural means, such as deflecting channel flow away from streambanks with dikes, board fences and gabions		
3-08	Use setbacks to minimize disturbance of land adjacent to streambanks and shorelines		
3-09	Prevent discharges to waterbodies in amounts that would adversely affect the taste, color or odor of the waters, or would impair the waters for their best usages		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
3-10	Consider wetlands and riparian areas and their non-point source (nps) control potential on a watershed scale		
3-11	Identify existing functions of those wetland and riparian areas with significant nps control potential when implementing nps management practices. Do not alter wetlands or riparian areas to improve their water quality at the expense of their other functions		
3-12	Conduct permitting, licensing, certification and nonregulatory nps pollution activities in a manner that protects wetland functions		
3-13	Special zoning considerations to protect wetland areas		
3-14	Use appropriate pretreatment practices such as vegetated systems or detention or retention basins to prevent adverse impacts to wetland functions that affect nps pollution abatement from hydrologic changes, sedimentation, or contaminants		
3-15	All projects should require wetlands cerfitication.		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-01	Required site planning and approval for docks and launches		
4-02	Use of naturally resistant non-treated wood for docks		
4-03	Docks constructed to allow for free-flow of water beneath them to prevent erosion and sedimentation along shoreline		
4-04	Limit size of docks		
4-05	Maintanence of dock - application of preservatives and paints		
4-06	Consideration of access to dock and launches to mitigate erosion		

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	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
4-07	Pesticide storage - covered, locked concrete or steel building with adequate ventilation and metal shelving, no floor drains, and berm or sill to contain spills		
4-08	Pesticide mixing and loading - use of chemical mixing center and proper operation and maintenance		
4-09	Solvents and Degreasers - separate solvent collection systems such as solvent wash baths		
4-10	Solvents and Degreasers - consideration of storage, use (contained), and disposal		
	Fertilizer Storage - covered fertilizer storage areas with curbs or berms to prevent water from entering. Secondary contaiment should be used even where not required		
4-14	Fertilizer Loading		
4-16	Disposal of grass clippings		
4-17	Used Oil, antifreeze and lead acid batteries - collection and recycling		
4-18	Gasoline, Diesel fuel - complience with DEC regulations for above-ground and below ground tanks, closing of stormwater drains in immediate vacinity of fueling point		
4-19	General Equipment Washing		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
5-01	Conduct road and bridge maintenance (de-icing material usage and storage, pot-hole repair, bridge washing, scraping and painting, etc) according to best management practices		
5-02	Conduct right-of-way activities (mowing, brush removal, pesticide and fertilizer use, etc) - according to best management practices		
5-03	Include high percentage of indigenous plants in new landscaping on public-owned properties (excluding arboretums, horticultural gardens, and site requiring turf grasses)		
5-04	Implement a regular inspection and maintenance plan of existing structures		
5-05	Develop and identify erosion/sediment control areas (examples include steep slopes, easily erodible soils, and nearby sensitive areas) and retrofit opportunities		
5-06	Require percentage of roads to be tested with non-ice and non-sand de-icing.		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
5-07	Minimize the amount of land disturbed and the duration of disturbance		
5-08	Preserve natural features and conform substantially with the natural boundaries and alignment of waterbodies		
5-09	Retain and protect trees and other natural vegetation on and near disturbed sites		
5-10	Retain additional runoff sites		
5-11	Minimize the creation of impervious areas		
5-12	Treat increased runoff caused by changed surface conditions to minimize the danger of flooding, erosion and pollutants entering waterbodies prior to, during and after construction		
5-13	Use temporary vegetation and mulching to protect exposed and critical areas during development		
5-14	Redistribute topsoil within the boundaries of the disturbed land for seeding and planting		
5-15	Stabilize disturbed soils as soon as possible		
5-16	Minimize the use of cut and fill operations. Conform such operations to topography and soils to minimize erosion potential and adequately accommodate runoff		
5-17	Control erosion and sedimentation prior to, during and after site preparation and construction		
5-18	Require long term stormwater management plan.		
5-19	Require long term sedimentation control & maintenance.		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
5-20	Target existing public holdings, such as parks, for removing unecessary impervious surfaces		
5-21	Incorporate New York State Department of Transportation design and guidance documents, standard specifications, and procedural manuals (*Highway Design Manual, Environmental Procedures Manual,* Maintenance Guidelines, etc) into local laws and operating procedures		
5-22	Ensure application of appropriate solid and hazardous waste generation and disposal practices including source controls and recycling		
5-23	Ensure proper operation and maintenance of runoff management facilities		
5-24	Participate in Cornell Local Roads Program activities and training		
5-25	Target training programs at highway officials, contractors, construction workers, inspectors, zoning and planning officials		
5-26	Target training and outreach programs about the proper handling of materials, leakage and spill prevention and spill response procedures at maintenance staff and workers		

	Best Management Practices (BMP)	Existing Means of Implementation (law, regulation, practice, etc)	Degree of Implementation
6-01	Conduct regular inspections of OWTS at a frequency adequate to determine failure and undertake required maintenance		
6-02	Institute setback guidelines		
6-03	Promulgate plumbing codes that require practices that are compatible with OWTS		
6-04	Target outreach programs at homeowners, contractors and developers		
6-05	Inspection of all OWTS at property transfer or within 1 year prior to transfer		
6-06	Require all properties within 500' of municipal service to connect.		
6-07	Set goals for effluent limits (nitrogen, phosphorous, BOD, etc)		

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Local Ordinances and Practices Assessment Form

Glossary of Terms

Agriculture Environmental Management (AEM): A voluntary, multi-agency New York State program that provides farm operators with assistance in protecting land and water resources and sustaining their agricultural markets. Usually administered through the county Soil and Water Conservation Districts

Berm: A linear mound or series of mounds of earth, planted with grass, generally paralleling the water

Best Management Practice (BMP): A practice or combination of practices determined to be the most effective and practicable (including technological, economical, and institutional considerations) means of preventing or reducing the amount of environmental damage in an area

Cluster Development: A subdivision where houses are sited on smaller parcels of land, while the additional land that would have been allocated to individual lots is retained as open space

Cut and Fill: When the terrain is not flat, it may be necessary to level spots for a proposed road. This is done by taking soil (cut) from high areas and placing it (fill) in the low areas. Cuts and fills should be balanced to minimize the need for extra material and to maximize roadbed stability.

Detention Area/Pond/Basin: A low-lying area that is designed to temporarily hold a set amount of water while slowly draining it into another location. Generally designed for purposes of flood control when large amounts of rain could cause flash flooding if allowed to flow unrestrained

Gabion: Steel wire-mesh basket to hold stones or crushed rock to protect a stream bank or bottom from erosion

Impervious/Impermeable Areas: Areas where the infiltration of water or other aqueous substances (gasoline, oil, antifreeze, etc.) into the ground is difficult or impossible; high likelihood of runoff occurring (Ex: streets, sidewalks, paved driveways and parking lots, roofs, etc.)

Non-point Source Water Pollution: Pollution coming from many diffuse sources; caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into water bodies. (by contrast, “Point Source Water Pollution” is generally discharged from an outflow or pipe and is supposed to be permitted, typically thought of as “traditional” sources of pollution such as industrial waste and sewage).

Retention Area/Pond/Basin: Area intended to capture diverted stormwater runoff from streets and gutters and hold the runoff indefinitely. Secondary benefits include pollutant removal through settling and biological uptake as well as habitat creation for various types of organisms

Return/Return Wall: A facing, usually made of stone or concrete, installed to protect an eroding shoreline from the force of water (see also *revetment*)

Revetment: Sloping surface of stone, concrete or other material used to protect an embankment, natural coast or shoreline against erosion (see also return wall)

Riparian Buffer: Zone of vegetation along a river or stream that works to trap and filter pollutants and stabilize bank sediments

Silviculture: The science, art, and practice of caring for forests with respect to human objectives

Soil Bio-engineering: Techniques used to stabilize land by using live plant materials to provide erosion control, slope and stream bank stabilization, landscape restoration, and wildlife habitat. Used alone or in conjunction with conventional engineering techniques

Wing Wall: Wall attached to the headwall of a culvert, set at an angle with the centerline, that prevents earth from spilling into a channel and improves hydraulic efficiency.

Yarding system: Method of log transport that allows for the harvesting of timber in an environmentally sound manner. A tractor with a mounted tower and winches moves through forests to preplanned locations, while a "yarding" cable is run down to an anchor tree. There are no wide landing areas to bulldoze and no excessive ground disturbances. Narrow skid trails replace the high disturbance skid roads of the past

About Genesee/Finger Lakes Regional Planning Council

Genesee/Finger Lakes Regional Planning Council (G/FLRPC) was established as a special purpose local government unit under New York State's General Municipal Law. It provides planning, economic development, and data services for its nine member counties: Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming and Yates.

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