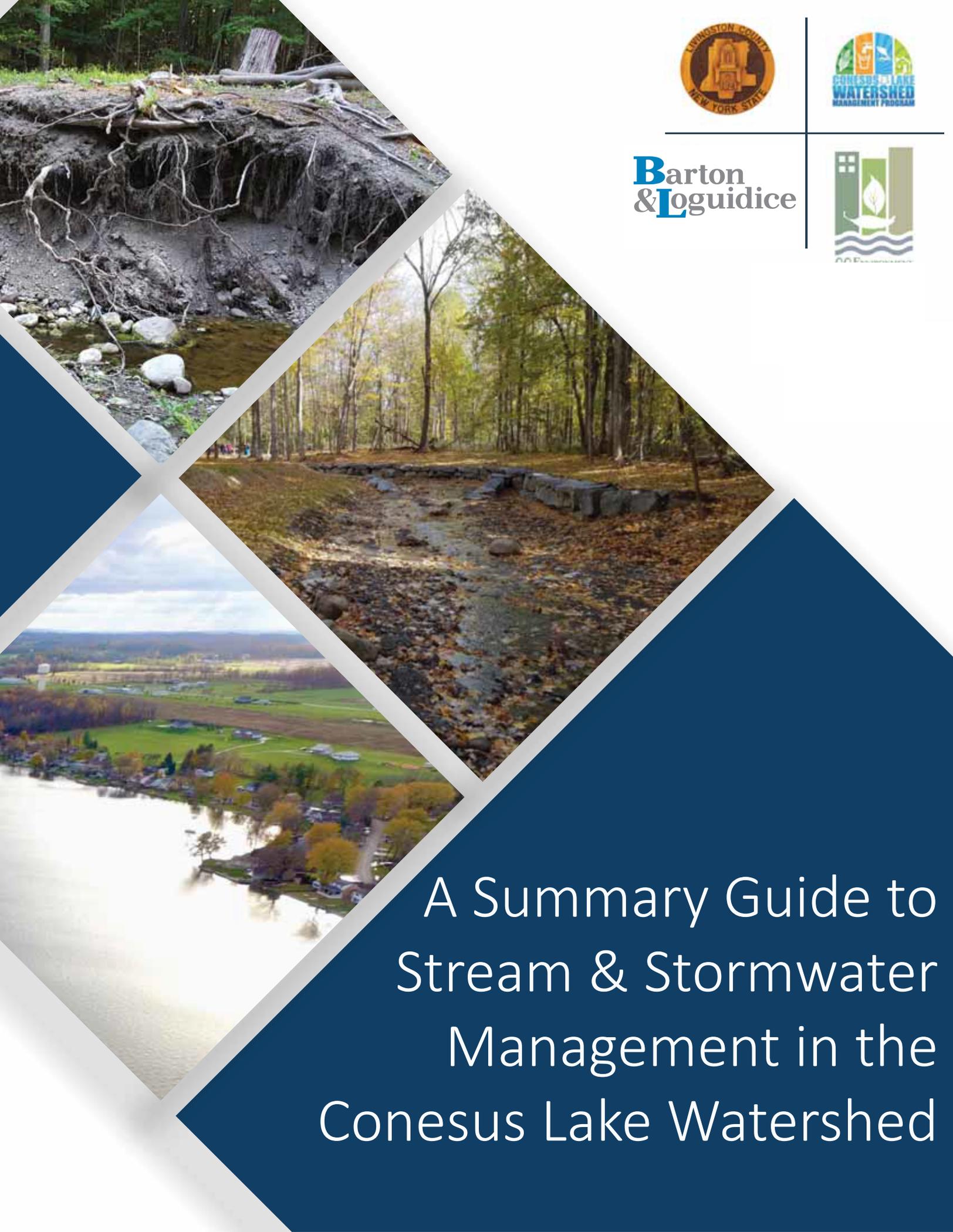




**Barton  
& Loguidice**



# A Summary Guide to Stream & Stormwater Management in the Conesus Lake Watershed



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## INTRODUCTION

Conesus Lake and its tributary streams represent a valuable social, environmental, and economic asset to the local community. While living in close proximity to these resources offers a wide range of benefits to residents of the Watershed, the corresponding land development and infrastructure (and the maintenance activities necessary to sustain them) often present challenges to managing and reducing the impacts of stormwater- and stream-related issues that result.

This document provides an overview of some common stormwater- and stream-related issues affecting local residents and municipalities. The general information given here is intended to provide background to some potential causes contributing to problems, as well as some perspective as to how various issues might be addressed in a sustainable way. Regulatory requirements are outlined, to guide landowners and decision-makers on how to proceed in compliance with governing local, State, and Federal laws and permitting requirements. Additional detail is provided in a comprehensive Reference Document available on the County's website at <https://www.livingstoncounty.us/conesus.htm>

Surely, there is no "cookie-cutter" solution to every problem. This guide is not intended to be an endpoint, but a resource to support landowners and decision-makers in advancing sound and beneficial stream- and stormwater-management in the Conesus Lake Watershed. Point-of-contact information is provided to offer assistance in addressing each issue as it arises, on a case-by-case basis.





## COMMON ISSUES

### Sediment Deposition at the Mouth of Streams

Sediment deposition at the mouth of creeks is a natural process. Over time, natural erosion of streambeds and banks upstream contributes to sediment carried to the mouth of the stream, where interaction with non-flowing waters of the Lake and a reduction in stream gradient (slope) causes deposition to occur. If unencumbered by the development activities of man, this natural deposition process contributes to the formation of wetlands and deltas. Where streams have been constricted, confined and channelized by people, sediment deposition is accelerated and worsened, requiring the need for more frequent maintenance.

#### Some Contributing Causes

1. Downstream portions of tributary stream systems (closest to the mouth) occupy areas naturally prone to sediment deposition (known as alluvial fans). These are natural areas for sediment storage.
2. Modification, encroachment, and channelization of stream channels (particularly near the mouth) can alter the stream's ability to effectively move sediment, leading to increased deposition.
3. Natural erosion of the steeper upstream portions of the stream's drainage area contribute additional sediment to the mouths of streams.
4. Land development activities in the watershed contribute to the rate and severity of the erosion/ sediment delivery process.
5. Increased impervious cover (roofs, pavement, etc.) in the watershed increases the rate and volume of runoff going into the streams, contributing to more streambank erosion and more sediment delivered downstream.



- a. Over-aggressive dredging at the mouth of streams contributes to accelerated return of gravel bars. Extent and dimensions of dredged area must be compatible with stable stream channel form in order to reduce the rate of re-deposition.





### Beneficial Practices/Solutions

Sediment deposition at the mouth cannot be stopped (it is a naturally-driven process), only slowed to something approximating a more natural rate.

1. Because streams adjust to human intervention and disturbance, localized dredging to remove sediment from mouths of streams should be as minimal as possible to prevent undesirable consequences, including accelerated re-deposition, as dictated by US Army Corps of Engineers (USACE) guidance.
  - a. Proper dredging should consider appropriate base elevation of streambed to promote long-term maintenance of "post-dredging" streambed elevation.
  - b. Avoid over deepening excavations in an attempt to provide more sediment capacity or achieve water depths incompatible with stable streambed profile.
  - c. Consult technical expertise available to provide guidance on dredging activities and extent. See contact information provided below.

### Regulatory/Permitting Considerations

State and Federal law regulates disturbances to streams and the Lake, such as those associated with dredging and sediment removal. Refer to the Regulatory section of this document for more information.

NOTE: If required for any given project disturbing the lake, lakeshore, streambeds and/or streambanks, all regulatory permits including New York State Department of Environmental Conservation (NYSDEC) and United State Army Corps of Engineers (USACE) must be secured prior to proceeding with work. This includes projects on Private property.

1. Disturbance to the shoreline or bottom of the lake or stream mouth (such as dredging of sediment) below mean high water mark elevation will require a NYSDEC Article 15 permit.
  - a. Depending on the length of the proposed dredging, the work may require a Nationwide Permit from USACE, as well as a Water Quality Certification through NYSDEC.
  - b. NWP 19 (USACE Federal permit) establishes limits and thresholds for extent of dredging allowable, and may be applicable to some minor dredging projects.
  - c. Primary points-of-contact:
    - o NYSDEC Region 8 - Regional Permit Administrator  
Phone (585) 226-5400; Fax (585) 226-2830
    - o USACE Buffalo District Office - Regulatory Branch  
Phone (716) 879-4330





## Streambank Erosion and Hillslope Failure

Erosion of streambeds and streambanks is a naturally-occurring process that influences the function and evolution of stream channels, and their role in shaping the landscape over time. Unfortunately, land development and maintenance activities alter the influencing factors that drive these natural processes, destabilizing stream channels and, in many instances, contributing directly to increase rate, severity, and extent of streambank erosion.

As tributary streams flow off the escarpment (high ground) surrounding Conesus Lake, abrupt reductions in landscape slope can precipitate areas of elevated sediment deposition. Because streams often adjust to these localized sediment deposition features by shifting laterally, bank erosion increases in these locations. In places where the stream becomes pushed up against the hillslope, continued erosion at the toe (base) of the slope can eventually lead to hillslope failure.

### Some Contributing Causes

1. Streams naturally adjust in response to changes in their form imposed by human activities, as well as to changes in the rate and volume of water and/or sediment contributed to the stream network.
2. In instances where excessive amounts of sediment enter the stream due to increased bed scour or bank erosion, stream channels may adjust by shifting laterally (by moving side to side).
  - a. Lateral adjustment is expressed through increased streambank erosion, including hillslope failure where the stream becomes pinned against the toe (base) of the eroding slope.



3. Development activities across the watershed increase the rate and extent of the bank erosion/sediment delivery process by increasing impervious cover (such as pavement, sidewalks, rooftops, etc...), or removing vegetation critical to slowing down and reducing the amount of water reaching stream channels as stormwater runoff.





- a. Direct human impacts to stream channels include:
  - i. Residential dumping of debris/materials into the channel.
  - ii. Lateral encroachment of streams and their floodplains, such as placement of fill (any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody) in floodplains to accommodate near-stream construction (berms or levees, for example.)
  - iii. Lateral confinement through placement of vertical structures on both sides of stream, such as riprap, concrete walls, timber retaining walls, metal sheet piling, bridge and culvert abutments.
  - iv. Insufficiently-informed management or maintenance practices that lack adequate consideration of stable stream process and resulting consequences/ impacts, including straightening, dredging, and channelization of stream channels.

### Beneficial Practices/Solutions

Streambank erosion is a natural process, exacerbated by human activities (both across the watershed and to stream channels and their floodplains directly) that fail to consider impacts to stream process and consequences of sediment through the entirety of the stream system/lakeshore.

Frequently, streambank erosion is a symptom of some other impact, or consequence of the cumulative effect of a range of combined impacts occurring simultaneously at the local- and watershed-scale. These might include large-scale removal of trees and vegetation (called cover-type conversion) in the watershed; increases in the amount of pavement, rooftops and other impervious surfaces; or encroachment of streams through construction in the floodplain, straightening or dredging of stream channels, or direct routing of stormwater drainage to the receiving stream network. Therefore, longer-term, sustainable solutions are holistic, addressing causes as well as symptoms.

Streambank erosion is unique from site to site. It is highly recommended that landowners and municipalities utilize the technical resources available to them through this document, to provide adequate technical consultation prior to proceeding with any streambank erosion remediation efforts.

### Regulatory/Permitting Considerations

State and Federal law regulates disturbances to streams and the Lake, such as those associated with streambank stabilization. Refer to the Regulatory section of this document on Page 12 for more information.

**NOTE:** If required for any given project disturbing the lake, lakeshore, streambeds and/or streambanks, all regulatory permits (such as through NYSDEC and USACE) must be secured prior to proceeding with work. This includes projects on Private property.

1. All waters of the state are provided a class and standard designation based on existing or expected best usage of each water or waterway segment. Classification C is for waters supporting fisheries and suitable for non - contact activities. All streams draining to Conesus Lake are Class C and non-navigable by NYSDEC definition, therefore, NYSDEC Stream





Disturbance permitting is not required for excavation/fill below Ordinary High Water Mark of the stream. It should be noted that the inlet, a small section of North McMillan Creek and the mouths of streams up to the mean high water interval are navigable, and are subject to Article 15 permitting.

2. All streams and their tributaries draining to Conesus Lake are categorized as "Waters of the U.S." and require federal authorization through USACE prior to proceeding with work. Authorization may be by waiver or by permit (typically Nationwide Permit (NWP)), depending on the extent and character of work.
  - a. Consultation with USACE is required to determine permitting requirements on a project-by-project basis.
  - b. If a USACE permit is required, a Water Quality Certification from NYSDEC is required as well.
3. Primary points-of-contact
  - o USACE Buffalo District Office - Regulatory Branch  
Phone (716) 879-4330
  - o (for Water Quality Certification, if USACE permit required)  
NYSDEC Region 8 - Regional Permit Administrator  
Phone (585) 226-5400; Fax (585) 226-2830

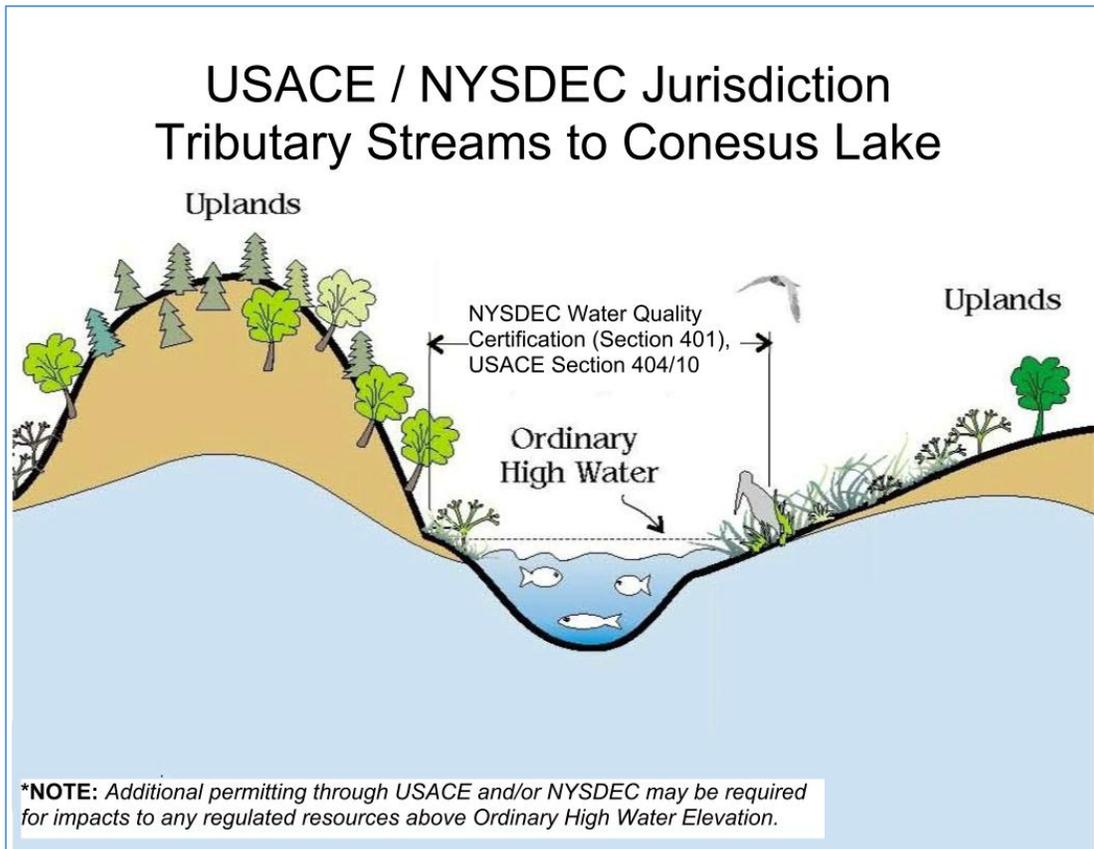


Figure 1. Graphic representation of the typical location and jurisdictional limits in reference to Ordinary High Water Elevation for tributary streams draining to Conesus Lake, NY.





## Bridge/Culvert Obstruction

Bridges and culverts on publically-owned roads fall under the jurisdiction of State, County, and Municipal Highway Departments. Issues associated with obstruction of bridges and culverts can lead to not only structural failure of the road crossing, but increased flooding, streambank erosion, and other issues.

### Some Contributing Causes

1. Accelerated bank erosion, attributable to causes described in the section above, can lead to undermining and collapse of standing trees along streambank.
2. Channel modifications, as well as encroachment and confinement of the stream channel and floodplain can lead to higher flow velocities and flood depths, overwhelming the amount of water a bridge or culvert is able to convey under the road.
3. Bridge and culverts may be undersized to convey the volume of water needed. This may be due to inadequate design back when the culvert was first installed, or to an increase in runoff rate and volume, such as that attributable to land development or increase in impervious cover that may have occurred since the culvert was first designed and installed.
4. Use of streambank and floodplain areas for disposal of yard waste and other refuse makes these materials susceptible to downstream transport during a high-water event, causing a potential obstruction at the next downstream bridge or culvert.
5. Ice Jams
6. Private bridges and other obstructions (e.g. yard debris, Christmas trees, firewood, etc.).

### Beneficial Practices/Solutions

Long-term solutions to reducing the risk of obstruction at bridges should focus on the following action items:

1. Avoid storing or disposing of yard waste materials, refuse, and other objects in close proximity to streambanks and adjacent floodplains.
2. Identify areas of ongoing streambank erosion, particularly where collapse of trees into the stream is a realistic risk. Consult with technical resources identified in this document to develop streambank stabilization solutions.
3. Municipal highway departments can determine whether publically-owned culverts and bridges are properly-sized to current-day flood and sediment regimes.
4. Homeowners should seek consultation to determine necessary sizing of self-constructed culverts/bridge crossings, along with a determination of applicable permits.





## Regulatory/Permitting Considerations

State and Federal law regulates disturbances to streams and the Lake. Private landowners interested in activities that incur disturbance to streams and/or the Lake in proximity to culverts and bridges are required to consult with State and Federal agencies prior to beginning work. Refer to the Regulatory section of this document for more information.

NOTE: If required for any given project disturbing the lake, lakeshore, streambeds and/or streambanks, all regulatory permits (such as through NYSDEC and USACE) must be secured prior to proceeding with work. This includes projects on Private property.

1. All streams draining to Conesus Lake are Class C and non-navigable by NYSDEC definition. NYSDEC Stream Disturbance permitting is not required for excavation/fill below Ordinary High Water Mark associated with bridge and culvert maintenance. It should be noted that the inlet, a small section of North McMillan Creek and the mouths of streams up to the mean high water interval are navigable, and are subject to Article 15 permitting.
2. All streams and their tributaries draining to Conesus Lake are categorized as “Waters of the U.S. (WOTUS)” and require federal authorization through USACE prior to proceeding with excavation/fill below Ordinary High Water Mark associated with bridge and culvert maintenance
  - a. USACE authorizations are required prior to proceeding with bridge/culvert replacement or maintenance work that includes cut or fill below Ordinary High Water Mark.
    - i. Some municipal entities (such as Livingston County Highway Department) hold open-ended USACE permits/NYSDEC Water Quality Certification to allow for routine maintenance within defined thresholds of disturbance (length of stream, depth of excavation, finished elevation and grade, etc.).
  - b. Authorization for bridge/culvert maintenance projects not covered by standing maintenance permits are typically covered by NWP #3 and Water Quality Certification (from NYSDEC).
    - i. Authorization may be by waiver or by permit (typically NWP), depending on the extent and character of work.
    - ii. Consultation with USACE is required to determine permitting requirements on a project-by-project basis.
  - c. If a USACE permit is required, a Water Quality Certification from NYSDEC is required as well.
3. Primary points-of-contact
  - o New York State Department of Transportation (NYSDOT)  
Geneseo-Lakeville  
(585) 346-3036
  - o Livingston County Highway Department  
Superintendent of Highways  
(585) 243-6700 or (585) 335-1729





- Town of Conesus Highway Department  
Superintendent  
(585) 346-5570
- Town of Geneseo Highway Department  
Superintendent  
(585) 243-1544
- Town of Groveland Highway Department  
Superintendent  
(585) 243-2970
- Town of Livonia Highway Department  
Superintendent  
(585) 346-3580
- Village of Livonia Highway Department  
Foreman  
(585) 346-2010
- Town of Sparta Highway Department  
Foreman  
(585) 335-6703
- USACE Buffalo District Office - Regulatory Branch  
Phone (716) 879-4330
- (for Water Quality Certification, if USACE permit required)  
NYSDEC Region 8 - Regional Permit Administrator  
Phone (585) 226-5400; Fax (585) 226-2830





## Flooding

Flooding can have significant impacts to residents who live in streamside areas, carrying with it a range of hazards that can pose risk to lives, property, and critical infrastructure such as roads, bridges, and utilities. Unfortunately, human activities within the watershed that change the way in which the landscape absorbs and drains stormwater runoff can have a direct impact on the frequency, extent, and severity of flooding. In the Conesus Lake Watershed, municipal laws are in place to minimize the risk that certain types of development might incur to residents and their properties when a flood occurs. It is the responsibility of each municipality to ensure, for the protection and welfare of its residents, that existing regulations in place are understood and enforced when considering requests for zoning variances or reviewing site development plans that might directly or indirectly subject the community to increased flood risks.



### Some Contributing Causes

1. Increased frequency of intense storm events.
2. Increases in impervious cover within the watershed.
3. Modification of natural drainage systems and patterns intended to force water into stream channels more quickly, negating the natural ability of the landscape to otherwise absorb and retain stormwater runoff.
4. Inadequately-sized or obstructed bridges and culverts at road crossings.
5. Removal of vegetation, especially in areas adjacent to the stream corridor (called “riparian buffers”).
6. Straightening and dredging of stream channels.





## Beneficial Practices/Solutions

Long-term solutions to reducing the risks associated with flooding include:

1. Assure adequate regulation of development within floodplains.
2. Preserve and enhance riparian buffers along streams.
3. Promote green infrastructure initiatives that restore and enhance the ability of the landscape to effectively retain and absorb stormwater. Examples include rain barrels, raingardens and bioretention swales.
4. Utilize environmentally-sensitive roadway drainage strategies, such as more frequent out-letting and sheet flow of roadside ditches. Maintaining vegetation in ditches can be an effective way to slow the volume and velocity of stormwater reaching stream channels from the roadway.

## FEMA PROGRAMS

### THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

For a community to participate in the National Flood Insurance Program, it must adopt and enforce floodplain management regulations that meet or exceed the minimum NFIP standards and requirements.

1. All municipalities within the Conesus Lake Watershed have adopted regulations in compliance with minimal NFIP requirements. This allows all residents within the watershed to be eligible for Flood Insurance, wherever required.
2. As part of this compliance, all municipalities are required to administer a local (municipal) permit for all development activities within the Special Flood Hazard Area (SFHA) depicted on the Flood Insurance Rate Map (FIRM). As a landowner, any development proposed within the SFHA will require a municipal floodplain development permit, in addition to all other State and Federal permit requirements.
  - a. Some activities requiring a floodplain permit include (refer to municipal CEO contact information):
    - i. Construction of new structures
    - ii. Modifications or improvements to existing structures
    - iii. Excavation
    - iv. Filling
    - v. Modification of existing drainage patterns/systems
    - vi. Driving of piles
    - vii. Dredging
    - viii. Land clearing/cover type conversion (woods to lawn, for example)
    - ix. Grading





- x. Permanent storage of materials and/or equipment
3. Additionally, compliance with NFIP minimum standards requires that municipalities verify the following before any development activity in the SFHA can be approved:
- a. Development must not increase the flood hazard (i.e. flood water elevation or depth) on other properties.
  - b. New, substantially improved or substantially downgraded structures must be protected from damage by the base flood (i.e. 100-yr flood).
    - i. Municipalities typically require verification of First Floor Elevation (FFE) higher than base flood elevation through “Elevation Certificate” for all new construction or substantial improvement to structures in the floodplain.
    - ii. Elevation Certificate is provided by a survey of the FFE by a licensed surveyor, verifying this elevation is above the Base Flood Elevation (BFE, or 100-year flood elevation) shown on the Flood Insurance Rate Map (FIRM).
  - c. In the case of subdivisions, municipalities must not only comply with standards related to flood elevations, encroachments and development, but must also ensure structures themselves are resistant to flood damage.
  - d. Municipalities must require that within flood-prone areas, new and replacement water supply systems are designed to minimize or eliminate infiltration of flood waters into the systems.

### Challenges to FEMA flood mapping

The public has a right to challenge whether all or portion of their property lies within the mapped SFHA, in the following instances (refer to Reference Document for additional information):

- 1. It is believed that the mapped SFHA may include portions of the property known as “inadvertent inclusions” that are in fact at or above BFE.
  - a. Map change through a Letter of Map Amendment (LOMA).
  - b. Placement of fill on the property subsequent to conducting the flood study is believed to result in areas now being at or above BFE, that were below BFE at the time the flood study was conducted.
    - i. Map change through a Letter of Map Revision Based on Fill (LOMR-F).
  - c. See <https://www.fema.gov/letter-map-amendment-letter-map-revision-based-fill-process> for more information on the map revision process.





## Ice Jams

Ice jams can cause significant localized flooding and dangers to public health and infrastructure. Ice jams occur when large chunks of ice break up, often during a winter thaw or heavy rain storm, and float downstream. The chunks of ice often accumulate near obstructions (bridges, culverts) or where a channel narrows or bends. The ice jams often dam up and lead to overtopping of the channel causing flooding around public roads and residential homes. Ice jams can have significant flood impacts to residents who live in near obstructions or along narrow portions of a channel. Removal of ice jams requires important safety considerations.

### Some Contributing Causes

1. Increased frequency of intense storm events including thaw and heavy rainfall during winter and early spring months.
2. Channel modifications, as well as encroachment and confinement of the stream channel and floodplain.
3. Inadequately-sized or obstructed bridges and culverts at road crossings.
4. Use of streambank and floodplain areas for disposal of yard waste and other refuse that restricts channel flow
5. Private bridges and other obstructions (e.g. yard debris, Christmas trees, firewood, etc.).

### Beneficial Practices/Solutions

Long-term solutions to reducing the risks associated with ice jams include (excerpts from <http://necsec.org/ice-jams/>):

1. Assure adequate regulation of development within floodplains.
2. Developing and conducting public information campaigns on hazard mitigation.
3. Avoid storing or disposing of yard waste materials, refuse, and other objects in close proximity to streambanks and adjacent floodplains.
4. Municipal highway departments can determine whether publically-owned culverts and bridges are properly-sized to current-day flood regimes.
5. Homeowners should seek consultation to determine necessary sizing of self-constructed culverts/bridge crossings, along with a determination of applicable permits.

### Regulatory/Permitting Considerations

Private landowners conducting ice jam removals should consult with State and Federal agencies prior to beginning work. Refer to the Regulatory section of this document for more information.

**NOTE:** Removal of ice jams can be extremely dangerous and may require specialized equipment. The following points-of-contact should be consulted prior to ice jam removals. Additional technical information is available from the USACE, including their "Ice Engineering" guidance available at:





[http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_1110-2-1612.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_1110-2-1612.pdf)

1. Primary points-of-contact

- New York State Department of Transportation (NYSDOT)  
Geneseo-Lakeville  
(585) 346-3036
- Livingston County Highway Department  
Superintendent of Highways  
(585) 243-6700 or (585) 335-1729
- Town of Conesus Highway Department  
Superintendent  
(585) 346-5570
- Town of Geneseo Highway Department  
Superintendent  
(585) 243-1544
- Town of Groveland Highway Department  
Superintendent  
(585) 243-2970
- Town of Livonia Highway Department  
Superintendent  
(585) 346-3580
- Village of Livonia Highway Department  
Foreman  
(585) 346-2010
- Town of Sparta Highway Department  
Foreman  
(585) 335-6703
- USACE Buffalo District Office - Regulatory Branch  
Phone (716) 879-4330
- (for Water Quality Certification, if USACE permit required)  
NYSDEC Region 8 - Regional Permit Administrator  
Phone (585) 226-5400; Fax (585) 226-2830





## REGULATORY STANDARDS

State and Federal law governs the types and extent of disturbances allowable to the lake, lakeshore, streams and/or streambanks draining to Conesus Lake. In New York, the Joint Permit Application (JPA) Form provides a mechanism for applicants to apply for required State and Federal permits for any project that impacts streams, waterways, waterbodies, wetlands, shorelines, streambanks, sources of water, and endangered and threatened species.

The JPA is a *joint application* for one or more required permits, not a *joint permit*. Each permit required for a given project is issued independently of the others by the agency administering that permit. The primary benefit of the JPA process, both to the applicant and the regulatory reviewer/permit issuer, lies in the elimination of redundant information typically necessary to satisfy each of the permits required for a given project. Each piece of pertinent and required information is provided once in the JPA, instead of reproduced multiple times for each permit (as if applied for independently).

The following provides a model of how the JPA process is specifically applied in the Conesus Lake Watershed. Because no two projects, their scopes of work and corresponding impacts are exactly similar, this synopsis relies on some generalized scenarios. A critical and beneficial step to determining how the JPA process might apply to any given specific project is covered below in discussion of the Pre-application Meeting.

### *Pre-application Meeting*

Once the intent and general approach of a project that will result in disturbance to the lake, lakeshore, streams and/or streambanks are determined, a pre-application meeting should be held with representatives of USACE and NYSDEC. This is a free service offered by state and federal government to landowners and municipal representatives to streamline and simplify the permit application, review, and issuance processes for both the applicant and the regulatory agencies.

The pre-application serves a number of benefits that are highly beneficial to the permittee/project owner. These include:

1. Opportunity to present the project intent and conceptual approach at the outset to the individuals that are directly responsible for reviewing the JPA, and ultimately for issuing the various permits required.
2. Opportunity to determine firsthand from the permit administrator what disturbance thresholds are permissible.
3. Opportunity to review with the permit administrator the project need, measures considered to avoid or minimize impacts, and the types and quality of jurisdictional resources to be impacted by the project.
4. Opportunity for the permit administrator to determine, through firsthand review of the project limits, setting and potential impacts, which permit(s) are required to appropriately authorize the work.
5. Opportunity to identify any specific elements, measures, or information the permit administrator needs to see included in the project design plans and/or permit application materials.
6. Opportunity to review potential permit review periods and estimate permitting timelines.





To promote continuity between state/federal and local permitting, it is recommended that the CEO also be in attendance at the pre-application meeting. A pre-application meeting should always be held at the project site, if practicable. The meeting should be held once sufficient information about the project has been gathered and put on paper to adequately identify the project type, extent, scope and potential stream and lake-related impacts.

To schedule NYSDEC & USACE attendance at pre-application meeting, contact the NYSDEC permit administrator and USACE Buffalo District Regulatory Branch. If an in-person pre-application meeting is not possible within given time constraints, request a pre-application conference call and provide project materials in advance via email.

*Consult Conesus Lake Watershed Rules and Regulations, along with local requirements.*

*For activities in and along Tributary Streams draining to Conesus Lake (and the contributing watershed area):*

In portions of streams above the mean high water elevation of the Lake, NYSDEC Article 15 permits are not required for activities in those streams in regard to:

1. Stream Disturbance (of the streambed or banks).
2. Excavation and Fill in Navigable Waters.

Activities at/near the mouths of the tributaries that include excavation, placement of fill, and/or disturbance of the streambed or streambanks below the mean high water elevation of the Lake require a NYSDEC Article 15 Protection of Waters permit.

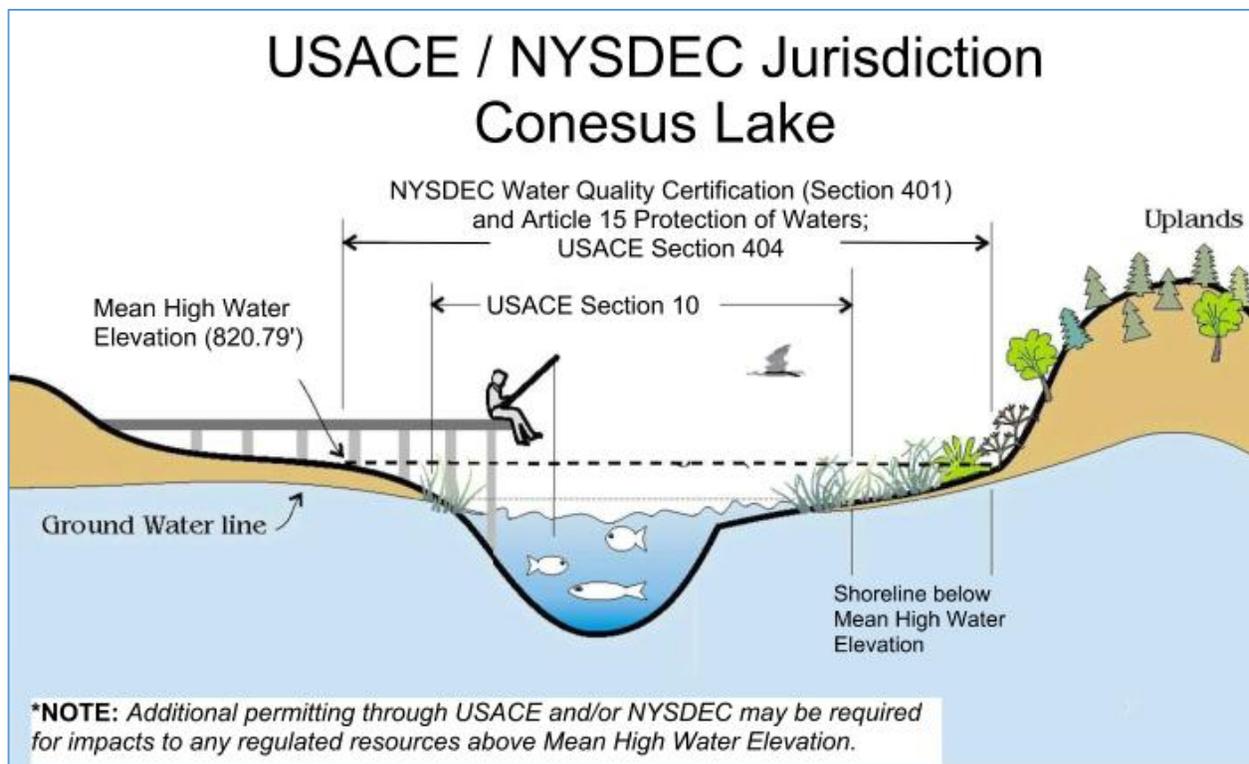


Figure 2. Graphic representation of jurisdictional limits in reference to Mean High Water Elevation for Conesus Lake, NY.





Disturbance to state-regulated wetlands and their protected buffers require a NYSDEC Article 24 Freshwater Wetlands permit. State regulated wetlands are typically wetlands 12.4 acres in size or greater and include a 100' protected adjacent area (buffer) outside of the wetland boundary.

Projects resulting in excavation or fill within Waters of the US (WOTUS) below the Ordinary High Water Mark (OHWM) are subject to jurisdiction of USACE. The ordinary high water mark is a line on the shore established by fluctuations of water level and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas. This pertains to any portion of tributary streams draining to Conesus Lake or any wetlands (regardless of their size)

1. For the JPA process, a water resources delineation may be required by a qualified professional to determine if jurisdictional wetlands (meeting the federal definition) are impacted, and to establish the amount and extent of disturbance above/below OHWM.

Based upon the site-specific information provided to them, USACE will determine whether a federal permit is required for the proposed project.

If a USACE permit is required for the project, a Water Quality Certification (Section 401 Clean Water Act) issued by NYSDEC is also required.

*For activities in or along Conesus Lake, its shoreline and mouths of tributary streams below the Mean High Water Elevation of 820.79 feet above sea level (asl):*

Conesus Lake is Class AA waterbody. As such, any of the following activities occurring below the Mean High Water Elevation require a NYSDEC Article 15 Protection of Waters permit:

1. Disturbance of the Lake bed, banks, or shoreline.
2. Excavation or Placement of Fill. \*\*
3. Docks, moorings or platforms.
4. Impoundment structures.

*\*\* Excavation includes dredging activities in the Lake proper or at the mouths of tributary streams.*

*\*\* Placement of fill includes installation of shoreline protection or structural erosion control measures such as, but not limited to, concrete walls, breakwalls, rubble, rock or riprap, sheet-piling, culverts, wooden retaining walls or log cribbing.*

Projects resulting in excavation or fill within Conesus Lake below the Mean High Water Elevation are subject to jurisdiction of USACE. Based on site-specific information provided to them, USACE will determine whether a federal permit is required for the proposed project.

If a USACE Permit is required for the project, a Water Quality Certification (Section 401 Clean Water Act) is also required.





<b>Table 1. Summary matrix of State and Federal Permit requirements for excavation or fill below OHWM/MHWM; Conesus Lake and tributary streams.</b>				
	NYSDEC Class.	Excavation or fill below OHWM/MHWM requires:		
		NYSDEC Article 15 Permit	Section 10/404 USACE NWP (or Individual Permit)	Section 401 Water Quality Certification (NYSDEC)
Conesus Lake and shoreline ( <i>below MHWM of 820.79'</i> )	AA	Yes	Yes	Yes
Tributary streams draining to Conesus Lake ( <i>portion below MHWM 820.79'</i> )	AA	Yes	Yes	Yes
Tributary streams draining to Conesus Lake ( <i>portion upstream of MHWM 820.79'</i> )	C	No	Yes	Yes

*Note: Other permits may be required for regulated activities other than excavation or fill below OHWM, including wetland disturbance, etc. Consultation with regulatory agencies to confirm permit requirements for any specific project is strongly recommended.*

### *The Application Process*

A JPA should not be compiled and submitted until sufficient detail regarding the project scope and its impacts to wetlands and water resources below Ordinary High Water Mark (for tributary streams) or Mean High Water Mark (Conesus Lake) can be quantified. Required materials to be submitted with the JPA are determined through consultation with NYSDEC and USACE at the pre-application meeting and through directions provided in the Joint Permit Application Form and Instructions for Completion.

The NYSDEC/USACE Joint Permit Application form is available online through the USACE Buffalo District at the following address:

<http://www.lrb.usace.army.mil/Portals/45/docs/regulatory/Application/jointapp.pdf?ver=2016-08-23-092332-070> – Joint Permit Application Form (Fillable PDF)

<http://www.lrb.usace.army.mil/Portals/45/docs/regulatory/Application/jntappinstruc.pdf?ver=2016-08-23-092447-553> – Instructions for completing Joint Permit Application Form

And through the NYSDEC Regional Office at the following address:

[http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/jointapp.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/jointapp.pdf) - Joint Permit Application Form (Fillable PDF)

[http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/jntappinstruc.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/jntappinstruc.pdf) - Instructions for completing Joint Permit Application Form

### *The Review Process*

Once received by the permit agencies, the JPA is reviewed first for “Administrative Completeness.” Technical review of the permit application begins once Administrative Completeness is met.

The time required by the regulatory agencies to complete technical review of the JPA package can be highly variable, and influenced by a variety of factors.





### *Issuance of Permit(s)*

Once all required information has been provided to the agencies and deemed sufficient to satisfy the regulatory thresholds and conditions of the permits being applied for, the project will be authorized through the issuance of one or more permits. Once all permits are received by the permittee, work may begin on the project. Permit conditions typically note that the work must be carried out in strict conformance to the plans and other materials submitted with the JPA.





## Federal (Presidential) Declarations

### *The Process*

State Governors and recognized Tribal Governments have the ability to request from the President of the United States a declaration that a major emergency exists.

After an emergency event occurs, a joint Federal, State/Tribal Preliminary Damage Assessment (PDA) of the impacted area is conducted to determine the extent of the disaster, its impact on individuals and public facilities, and the types of federal assistance that may be needed.

### *Disaster Declarations*

There are two types of Presidential Disaster Declarations.

#### 1. Emergency Declarations

##### a. Assistance Available Under Emergency Declarations:

##### i. Public Assistance (PA)

(1) Only debris removal and emergency protective measures may be authorized under an emergency declaration.

##### ii. Individual Assistance (IA)

(1) Housing, food, and basic care provisions are provided.

#### 2. Major Disaster Declarations

##### a. For any natural event, including hurricane, tornado, storm, high water, wind-driven water, or flood that the President determines is beyond the combined capabilities of state and local governments to respond.

i. Provides a wide range of federal assistance programs for individuals and public infrastructure.

ii. Funds both emergency and permanent work.

##### b. Assistance Available Under Major Disaster Declarations:

##### i. Individual Assistance

(1) Individuals and Households Program

(2) Crisis Counseling Program

(3) Disaster Case Management

(4) Disaster Unemployment Assistance

(5) Disaster Legal Services

(6) Disaster Supplemental Nutrition Assistance Program



- 
- ii. Public Assistance
    - (1) Debris removal
    - (2) Emergency protective measures
    - (3) Roads and bridges
    - (4) Water control facilities
    - (5) Buildings and equipment
    - (6) Utilities
    - (7) Parks, recreational and other facilities
  - iii. Federal funding support and assistance through the Hazard Mitigation Assistance (HMA) program is triggered by Major Disaster Declarations

#### NY STATE DECLARATION OF EMERGENCY

New York Environmental Conservation Law ECL 70-0116 (as implemented by 6 NYC RR 621.12) allows NYSDEC to make a declaration of emergency following natural disasters or extraordinary weather events.

In the case of a Declaration of Emergency, NYSDEC is empowered to issue emergency authorization for maintenance, protection, repair or restoration activities normally requiring a permit.

1. A written statement of necessity and a finding of emergency is required from NYSDEC in order for emergency permits to be implemented.
2. See *Emergency Permits* below for more information on how NYSDEC emergency permits may relate to activities in the Conesus Lake watershed.

#### *Additional Resources*

<https://www.ecfr.gov/cgi-bin/text-idx?SID=5a67508b6441bcdafc43c537b610741c&mc=true&node=sp44.1.206.b&rgn=div6> – FEMA codification of the Presidential Disaster Declaration Process

<https://www.fema.gov/disaster-declaration-process> - Overview of Presidential Disaster Declarations



## Federal (USACE) Emergency Permits

USACE is empowered to issue Regional and/or Emergency Permits authorizing activities regulated under Section 10 (Rivers & Harbors Act) and Section 404 (Clean Water Act).

Currently, one active Emergency Permit is in place with applicability to the Conesus Lake Watershed

1. Regional Permit 99-000-1 – for excavation and discharge of fill to Waters of the US
  - a. THIS USACE EMERGENCY PERMIT IS NOT CONTINUOUSLY VALID. IT IS ONLY VALID WHEN ACTIVATED BY THE DISTRICT COMMANDER IN RESPONSE TO A SEVERE STORM EVENT, AND ONLY IN THE AREAS FOR THE PERIOD OF TIME INDICATED WHEN ACTIVATED. THE USACE HAS 45 DISTRICTS, EACH WITH ITS OWN COMMANDER.
  - b. Limited to remediation of sites damaged by a severe storm event, not the impacts of natural erosion or sediment deposition over time.
  - c. When activated, this USACE Emergency Permit does not preclude the need to secure any other local, state, or federal permits required to undertake the activities covered by this USACE Emergency Permit.

### *Applicability to the Conesus Lake Watershed (if USACE Emergency Permit is activated)*

1. USACE Emergency Permit only applies to excavation or fill below OHWM along the tributary stream or Conesus Lake.
2. For emergency activities permitted by this Emergency Permit along portions of tributary streams upstream of the mouth (i.e., above the Mean High Water Mark of Conesus Lake (820.79 feet asl)), no additional NYSDEC consultation is required because:
  - a. Section 401 Water Quality Certification has been granted by NYSDEC for this Emergency Permit; and
  - b. All tributaries draining to Conesus Lake are Class C and non-navigable, so are not covered under Article 15 Protection of Waters permit. It should be noted that the inlet, a small section of North McMillan Creek and the mouths of streams up to the mean high water interval are navigable, and are subject to Article 15 permitting.
3. For emergency activities permitted by this Emergency Permit along Conesus Lake and the mouths of tributary streams below the Lake's Mean High Water Mark of 820.79 feet asl, additional NYSDEC consultation/permitting may be necessary because:
  - a. Conesus Lake is Class AA waterbody and navigable, and as such is covered by NYSDEC Article 15 Protection of Waters Permit.





## New York State (NYSDEC) Emergency Permits

### Emergency Authorizations

The NY State Uniform Procedures Act empowers NYSDEC to expedite review and approval of emergency permits for regulated activities disturbing Conesus Lake and its tributary streams in emergency situations.

Emergency Authorization (permits) are issued on a case-by-case basis for emergency situations that immediately threaten life, health, property, general welfare or natural resources, and require a prompt response.

*To request an Emergency Authorization*, notify the NYSDEC Region 8 – Regional Permit Administrator (contact provided in Section A2 of this document) and provide the following:

1. A description of the proposed action;
2. A location map and plan of the proposed action;
3. Reasons why the situation is an emergency based on the immediate protection of life, health, general welfare, property or natural resources;
4. Actions to be taken to minimize environmental impacts; and
5. Any additional information requested by the Department.

### Storm Recovery Permits

In the event of a natural disaster, weather-related event or other emergency that affects all or part of New York State, NYSDEC is empowered to issue a General Permit for Storm-Recovery Activities.

General Storm Recovery Permits typically provide short-term coverage for recovery-related efforts limited to the geographic areas affected.

### *Additional Resources*

[http://www.lrb.usace.army.mil/Portals/45/docs/regulatory/RegionalPermits/99-000-1\\_2017/RP99-000-1\\_extended2017.pdf?ver=2017-01-10-102440-347](http://www.lrb.usace.army.mil/Portals/45/docs/regulatory/RegionalPermits/99-000-1_2017/RP99-000-1_extended2017.pdf?ver=2017-01-10-102440-347) – USACE (Buffalo District) Regional Permit 99-000-1 (includes coverages and conditions for use).

<http://www.dec.ny.gov/permits/96337.html> - NYSDEC Emergency Authorizations

<http://www.dec.ny.gov/permits/89343.html> - NYSDEC Storm Recovery Permits





## Municipalities

### Erosion and Sedimentation Control Law

Through the Erosion and Sedimentation Control Law (Towns of Conesus, Geneseo and Groveland), municipal Code Enforcement Officers (CEOs) provide the following:

1. Site inspections to ensure compliance with municipal stormwater-related regulations/ordinances.
2. Landowner/developer compliance with floodplain encroachment/development.
3. Outreach to the general public regarding prevailing municipal codes and applicable state/federal guidance governing floodplain development, land disturbance, stormwater management and permitting requirements.
4. Erosion and Sediment Control Plan/Permit
  - a. Erosion and Sediment Control Permit is required for all projects disturbing greater than 500 square feet of land.
  - b. Erosion and Sediment Control Plan is required for projects exceeding 5,000 square feet of land disturbance. Refer to the Erosion and Sediment Control Laws for exemptions.
  - c. Evaluates impacts of project upon flood elevations, floodplain encroachments and developments.
  - d. Ensures adequate erosion & sedimentation control BMPs are included as needed in projects. Performance standards apply to all land disturbing activities described in the Erosion and Sediment Control Law, including exemptions.





## Ordinary High Water (Mean High Water)

In the Conesus Lake Watershed, jurisdiction of the US Army Corps of Engineers (USACE) and New York State Department of Environmental Conservation (NYSDEC) to regulate disturbance activities to Conesus Lake and its tributary streams is determined by Ordinary High Water Mark. Legally, USACE regulations define the term “ordinary high water mark” for purposes of the Clean Water Act (CWA) lateral jurisdiction per 33 CFR 328.3(e), which states:

*“The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”*

In essence, the regulatory boundary for USACE and NYSDEC matches the routine (mean, or average) high water elevation along a waterbody.

Mean high water elevation for Conesus Lake is 820.79' above sea level (asl).

For streams tributary to Conesus Lake, the ordinary high water elevation is determined by physical field indicators of routine high water fluctuation and floodplain (overbank) flooding along the course of the stream. For this reason, ordinary high water elevation must be determined in the field on a site-by-site basis. The ordinary high water mark along a stream corresponds to the elevation at which the active stream channel transitions to its adjacent floodplain, commonly matching the bankfull elevation.

## New York State Department of Environmental Conservation (NYSDEC)

### Title 5 of Article 15 of the Environmental Conservation Law

The following projects/activities require NYSDEC Article 15 Protection of Waters Permit:

1. Any project disturbing the bed, bank, or shoreline of a waterbody with a classification of AA.
  - a. Disturbance activities may still require other permits to authorize work above Ordinary High Water Mark (OHWM), such as:
    - i. Local floodplain or Erosion Control Permits.
    - ii. SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002).
    - iii. Article 24 Permit for disturbance to Freshwater Wetlands.
    - iv. Conesus Lake is Classification AA – any disturbance to bed or banks (shoreline) requires a NYSDEC Article 15 permit. See item 3 below for some examples of regulated disturbance activities.
2. Any project that includes fill or excavation in a Navigable Waters of the State below the Mean High Water Mark elevation





- a. All streams within the Conesus Lake Watershed fail to meet the NYSDEC regulatory definition of “Navigable Waterways of the State”, and are categorized as “non-navigable”
  - i. Disturbance activities may still require other permits to authorize work above or below Mean High Water Mark
    - (1) Conesus Lake is a navigable waterway. Excavation or fill below the Mean High Water Mark elevation requires a Protection of Waters Permit. It should be noted that the inlet, a small section of North McMillan Creek and the mouths of streams up to the mean high water interval are navigable, and are subject to Article 15 permitting.
3. In addition to the above, any of the following activities require an Article 15 Permit for regulated waters (Conesus Lake):
  - a. Dredging or sediment/gravel bar removal;
  - b. installation of a floating dock or dock constructed on piles;
  - c. establishment of a marina consisting of multiple docks and ramps;
  - d. breakwaters, breakwalls, riprap, sheet-piling and other in-water structures;
  - e. installation of a platform to accommodate a use or activity on or above the water (i.e., deck, boathouse);
  - f. restoring or rebuilding an existing dock, pier, or wharf;
  - g. substantially changing the use of an existing dock or platform;
  - h. the installation of mooring devices; and
  - i. any other placement of fill along the shoreline or in the Lake proper below Mean High Water Elevation, including soil, structural or bioengineering materials to support naturalized shoreline stabilization.
    - i. Planting and revegetation of shorelines alone (i.e. installation of plants into the existing bank/shoreline) does not constitute placement of fill and does not require permitting through NYSDEC or USACE. However, any placement of soil, wood or other fill material to support those plantings below Mean High Water Elevation constitutes placement of fill, and NYSDEC/USACE permitting is required prior to disturbance or placement of the fill.
    - ii. Although these activities may be covered under USACE NWP 54 (See USACE section below), NYSDEC Article 15 permitting will still be required.
4. The most common activities which are exempt from the requirement to obtain an Article 15 Permit for a Dock and Mooring Facility are:
  - a. Constructing, reconstructing or repairing docks or platforms, and installing moorings in, on or above navigable waters lying above underwater lands owned by the State of New





York for which a lease or other approval authorizing use or occupancy of such lands has been obtained from the New York State Office of General Services.

- b. Constructing, reconstructing or repairing a docking facility for five or fewer boats and encompassing within its perimeter an area less than 4,000 square feet.
- c. Establishing a mooring area for fewer than ten boats.
- d. Temporary anchoring where a boat is not attached to an in-place or fixed mooring device.
- e. The seasonal replacement or reinstallation of floating docks and other structures, exceeding the thresholds for regulated activities, which legally existed prior to May 4, 1993 or for which a permit was previously obtained.
- f. The relocation, replacement, or rearrangement of floating structures such as docks, ramps, walkways and anchoring devices within an approved perimeter.
- g. The ordinary maintenance and repair of structures such as repainting, re-driving piles or replacing boards in docks. Ordinary maintenance and repair does not include substantial reconstruction or restoration involving 50 percent or more of an existing structure.

NOTE: The exempt activities listed only represent exemptions for this section of the Protection of Waters Permit Program. Other DEC permits under other sections of the Protection of Waters Permit Program or under other Articles of the Environmental Conservation Law may be required.

### Other NYSDEC Permits and Reviews

Within the Conesus Lake Watershed, other activities affecting the Lake and its tributaries may require other NYSDEC permits. These may include, but are not limited to:

1. Disturbance to regulated wetlands and their protected buffers (Article 24). State regulated wetlands are typically 12.4 acres in size or greater and include a 100' protected adjacent area.
2. Development projects with more than 1 acre of land disturbance (SPDES General Permit). Note that development of less than one-acre of land is still subject to the Clean Water Act and applicable Local Laws, including the Erosion and Sediment Control Laws.
3. Projects requiring a USACE permit for disturbance or placement of fill into the Lake or its tributary streams (see criteria provided in USACE section, below) also require a Section 401 Water Quality Certification to be issued by NYSDEC.

Note that the following activities are NOT authorized by the SPDES General Permit and would either require an Individual Permit, or not be permissible:

1. Construction activities for residential, commercial and institutional projects:
  - a. Where the discharges from the construction activities are tributary to waters of the state classified as AA or AA-s (Conesus Lake is classified AA); and
  - b. Which disturb one or more acres of land with no existing impervious cover; and





- c. Which disturb one or more acre of land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey. The Soil Slope Phase is referenced by the last capital letter in soil map unit (i.e. CrE).

Additional SPDES permitting requirements are also required for direct discharges (see definition in the Glossary) to 303 (d) waters including direct stormwater discharges to Conesus Lake. These requirements also pertain to additional waterbodies within Livingston County that are not within the Conesus Lake watershed including Jaycox Creek and tributaries, Mill Creek and minor tributaries, Bradner Creek and tributaries and Christie Creek and tributaries.

The application of soil stabilization measures must be initiated by the end of the next business day and completed within seven days from the date the current soil disturbance activity ceased.

2. The qualified inspector shall conduct at least two site inspections every seven calendar days. The two inspections shall be separated by a minimum of two full calendar days.
3. Development of a SWPPP that includes post-construction stormwater management practices developed in accordance with the New York State Stormwater Management Design Manual is required for soil disturbances of one or more acres of land for:
  - a. Single family homes and
  - b. Single family residential subdivisions.

## NYSDEC Point of Contact

For any project potentially impacting streams, streambanks, wetlands, or Conesus Lake, refer to resources listed below for more information. Primary point-of contact is:

NYSDEC Region 8 - Regional Permit Administrator  
Phone (585) 226-5400; Fax (585) 226-2830

## References and Resources

[http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/jointapp.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/jointapp.pdf) - Application Form

<http://www.dec.ny.gov/permits/6042.html> - NYSDEC Protection of Waters Program

<http://www.dec.ny.gov/permits/6335.html> - Do I need a NYSDEC Protection of Waters Permit?

<http://www.dec.ny.gov/permits/6058.html> - NYSDEC Freshwater Wetlands Permits

<http://www.dec.ny.gov/permits/6279.html> - Do I need a NYSDEC Freshwater Wetlands Permit?

<http://www.dec.ny.gov/animals/38801.html> - Environmental Resource Mapper for regulated wetlands and streams

<http://www.dec.ny.gov/permits/6546.html> - Water Quality Certifications for projects requiring a federal permit





## United States Department of the Army – Corps of Engineers (USACE)

### Section 10 of Rivers and Harbors Act/Section 404 of Clean Water Act

Any activity that includes excavation or fill within any “Waters of the United States” (basic definition below) requires Federal authorization, administered by the US Army Corps of Engineers.

In very general terms, Waters of the U.S. (WOTUS) include all navigable lakes and rivers with eventual connectivity to the sea and the upstream waters that drain to them.

Because Conesus Lake drains to the Genesee River, then Lake Ontario and the St. Lawrence River to the ocean, Conesus Lake is a WOTUS.

Any waterbody with connectivity to Conesus Lake by surface or groundwater is therefore WOTUS by the same standard. All tributaries to Conesus Lake, and (for the application of this document) all wetlands within the basin draining to Conesus Lake fall under jurisdiction of the Rivers and Harbors/Clean Water Acts.

While the definition of WOTUS has long been in flux, a current, more comprehensive definition is available online at: <https://www.epa.gov/wotus-rule/about-waters-united-states>.

Within WOTUS, federal (USACE) jurisdiction in lakes and streams extends to any portion of the streambed (or lake bed) and its banks (or shoreline) below Mean High Water (for Conesus Lake)/Ordinary High Water Mark (for tributary streams).

For Conesus Lake and any of its tributaries, activities that include excavation or placement of fill below OHWM requires authorization (by way of permit or waiver) through USACE prior to proceeding with work.

NWPs relevant to activities commonly undertaken in and around Conesus Lake may include:

1. NWP 3 – Maintenance
2. NWP 11 – Temporary Recreational Structures
3. NWP 12 – Utility Line Activities
4. NWP 13 – Bank Stabilization
5. NWP 14 – Linear Transportation Projects
6. NWP 19 – Minor Dredging
7. NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities
8. NWP 54 – Living Shorelines





## USACE Point of Contact

For the Conesus Lake Watershed, USACE authorities fall under jurisdiction of the Buffalo District.  
Primary point-of contact is:

USACE Buffalo District Office - Regulatory Branch  
Phone (716) 879-4330

## References and Resources

Joint Permit Application Form (same form used for NYSDEC permit applications):

<http://www.lrb.usace.army.mil/Portals/45/docs/regulatory/Application/jointapp.pdf?ver=2016-08-23-092332-070>

General overview of the NWP Program – <http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Nationwide-Permits/>

Summary Table of USACE NWPs and Applicability -

[http://www.usace.army.mil/Portals/2/docs/civilworks/nwp/2017/nwp2017\\_sumtable\\_Jan2017.pdf?ver=2017-01-06-091151-173](http://www.usace.army.mil/Portals/2/docs/civilworks/nwp/2017/nwp2017_sumtable_Jan2017.pdf?ver=2017-01-06-091151-173)





## PARTNERS, RESPONSIBILITIES, AND CONTACTS

### Livingston County Department of Health

The objective of the Conesus Lake Watershed Inspection Program is to help protect and enhance Conesus Lake as a potable water source. The Livingston County Department of Health oversees the Conesus Lake Watershed Inspector, who responds to concerns regarding water quality and non-point sources of pollution in the watershed and enforces the Conesus Lake Watershed Standards & Regulations.

#### Conesus Lake Watershed Inspector

The Conesus Lake Watershed Inspector has the following responsibilities:

1. Enforces the Conesus Lake Watershed Rules and Regulations.
2. Performs site visits, inspections and complaint investigations.
3. Assist the Towns of Conesus, Geneseo, Groveland, Livonia, Sparta, Springwater and the Village of Livonia with site plan reviews.
4. Provide municipal support/public outreach.

#### Point of Contact

Primary point-of contact is:

Livingston County Department of Health  
Conesus Lake Watershed Inspector  
Phone (585) 243-7280

### Livingston County Planning Department

#### Conesus Lake Watershed Manager

1. Coordinate workshops and trainings for municipal staff and volunteers in cooperation with Watershed Education Center.
2. Develop educational resources.
3. Stormwater management, and water quality/E&S control issues.
4. Provide technical support to Livingston County Planning Department staff/County Planning Board regarding site plan elements to be considered when reviewing development plans in the watershed, steep slope areas, etc. that potentially directly or indirectly impact the Lake and its watershed.
5. Provide assistance and support to Watershed Inspector and CEOs and accompany on development site visits in the watershed.





## Point of Contact – Conesus Lake Watershed Manager

Primary point-of contact is:

Livingston County Planning Department  
Conesus Lake Watershed Manager  
Phone (585) 243-7550

## Livingston County Planning Board

1. Section 239 of General Municipal Law requires municipal boards to refer certain development applications, proposed zoning changes, and comprehensive master plans to the County Planning Board for review before taking final action.
2. “239” Reviews consider the inter-community and county-wide impacts of local (municipality-based) land use changes and decisions.
3. Provides technical expertise from County Planning Department to assist municipal decision-makers (Planning Board/ZBA).

## Point of Contact – County Planning Board

Primary point-of contact is:

Livingston County Planning Department  
Phone (585) 243-7550

## Livingston County Development Review Committee

Primary objective is coordination and sharing of information related to development projects across the County. Other County agencies and local municipalities are included as project specifics warrant.

1. Coordination between County staff and municipal officials.
2. Foster better communications and coordination between County and municipal planning entities.
3. Build continuity across planning trends and objectives between the local and county-wide scales.
4. Build technical expertise at the municipal level.
5. Improve and streamline local development/variance reviews through better understanding and consideration of existing codes and ordinances guiding the decision process.

Primary point-of contact is:

Livingston County Planning Department  
Phone (585) 243-7550





## Municipalities

### Municipal Planning Board and Zoning Board of Appeals

1. Ensure that standards of existing codes and ordinances, including floodplain development, are addressed in proposed development plans.
2. Per Erosion and Sediment Control Law (Towns of Conesus, Geneseo and Groveland), consult with Conesus Lake Watershed Inspector to solicit technical review comments and recommendations on stormwater-related aspects of site development plans or variance requests prior to rendering approvals/decisions.
3. Town of Livonia Conservation Areas.

### Points of Contact - Municipalities

Primary points-of contact are:

1. Town of Conesus  
Code Enforcement Officer  
Phone (585) 346-3130
2. Town of Geneseo  
Code Enforcement Officer  
Phone (585) 991-5008
3. Town of Groveland  
Code Enforcement Officer  
Phone (585) 243-1750
4. Town & Village of Livonia  
Code Enforcement Officer  
Phone (585) 346-2098
5. Town of Sparta  
Code Enforcement Officer  
Phone (585) 335-9290





## Livingston County Soil & Water Conservation District (SWCD)

SWCD provides the following functions to support watershed/stormwater management in the Conesus Lake Watershed:

1. Provide technical support to County and municipal staff related to stream and stormwater management practices.
2. Assist Conesus Lake Watershed Inspector, Conesus Lake Watershed Manager and municipal CEOs with site visits regarding stormwater and stream management-related issues.

Primary point-of contact is:

Livingston County SWCD  
District Manager  
Phone (585) 243-0043





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## GLOSSARY

*303 (d) Water* - The New York State Section 303(d) List of Impaired/TMDL Waters identifies those waters that do not support appropriate uses and that may require development of a Total Maximum Daily Load (TMDL). The Section 303(d) List is updated every two years.

*Adjustment*- Natural, often predictable changes in physical stream channel form in response to impacts to the stable stream configuration and sediment transport regime. Because streams continuously adjust their physical characteristics over time to maintain balance between form, sediment competence and sediment load, any shift in one of these dynamic components triggers an adjustment in form to re-establish this balance. In impaired stream systems where these dynamic shifts frequently occur, adjustments are often expressed by excessive sediment deposition and lateral migration (bank erosion).

*Alluvial Fan*- Unconsolidated sediments that are deposited at the end of a river or stream, often triangular in shape, and found at the base of a topographic feature.

*ASL* – Above sea level.

*Base Flood*- The flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood." The base flood is the national standard used by the National Flood Insurance Program (NFIP) and all Federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. Base Flood Elevations (BFEs) are typically shown on Flood Insurance Rate Maps (FIRMs).

*BFE* – Base Flood Elevation. The water surface elevation corresponding to the 100yr (1% annual chance) flood, as determined by hydraulic modeling. Structures below BFE are considered "within the 100-year floodplain". Structures above BFE are considered "out of the 100-year floodplain."

*BMP*- Best Management Practices are structural, vegetative, or managerial practices used to treat, prevent or reduce water pollution, usually attributable to stormwater runoff and erosion/sedimentation controls.

*CEO* – Code Enforcement Officer. Municipal staff charged with the enforcement of local ordinances and regulations, typically including building codes, floodplain development regulations, etc.

*Clean Water Act (CWA)* The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. It is a Federal regulation, 33 U.S.C. §1251 et seq. (1972), with the objective to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.

*Confinement*- The degree to which a stream channel is laterally disconnected from its floodplain, contributing to elevated flood elevations and velocity and increased potential for bank erosion and bed degrading (scour); increased confinement exacerbates instability of stream channels and corresponding impacts and hazards.

*Culvert* - a fully enclosed drainage structure that runs under a road or portion of land. In comparison, a bridge is a structure carrying a road, path, railway, etc. across a river, road or obstacle.

*Delta*- A dynamic landform created and maintained by the deposition of large volumes of sediments by a river as its velocity slows down when it reaches a lake, sea, or estuary.



*Detention*- Temporarily holding stormwater during a runoff event to reduce peak runoff and allow suspended solids to settle.

*Development* – For the purpose of this document, refers to any modification to the natural landscape. Development includes clearing, grading, land-use conversion (such as from forest to agriculture or residential), placement of fill, paving, construction of roads, homes, buildings, structures, shoreline- or bank protection measures, etc.

*Direct Discharge (to a specific surface waterbody)* - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system (pipe or non-regulated drainage ditch) and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

*Drainage Area*- the total land surface area discharging to a given point on a stream.

*E&S Control* – Erosion and Sedimentation Control. Methods and practices intended to reduce the degree of soil erosion and delivery of sediment to water bodies adjacent to areas of land disturbance associated with development projects. Under State and local (municipal) law, development projects which exceed established thresholds for size of disturbance area must be covered under an approved Erosion and Sedimentation Control Plan or Permit prior to the start of any land disturbance activities.

*Encroachment*- Activities or construction within the floodway including fill, new construction, substantial improvements, and other development which contribute to stream channel confinement, increasing risk and severity of related impacts along the stream corridor.

*FEMA*- Federal Emergency Management Administration. Within the context of this Stormwater Toolkit document, this agency administers flood mitigation assistance programs and develops minimum rules which municipalities are required to implement and enforce through local ordinance in order to be eligible for the National Flood Insurance Program (NFIP).

*Fill material* - means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste. (33 CFR 323).

*FIRM* – Flood Insurance Rate Map. The official map of a community on which FEMA has delineated both the special hazard areas (areas at or below the Base Flood Elevation) and the risk premium zones applicable to the community.

*First-Floor Elevation (FFE)* – the lowest floor of the lowest enclosed area of a home or building, except for unfinished or flood-resistant enclosures used solely for parking of vehicles, building access, or storage. For homes and buildings with enclosed basements, FEMA considers the basement floor to be the FFE. Homes and buildings with First-Floor Elevation below the Base Flood Elevation do not comply with NFIP minimum rules, and are subject to higher flood insurance premiums than homes and buildings in the same community with FFE above BFE.

*Floodplain*- Lowlands or relatively flat areas adjoining streams and rivers subject to inundation at routine or regular basis.





*Floodway*- the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without increasing the water surface elevation (see “*Regulated Floodway*”, below).

*Green Infrastructure*- A cost-effective, resilient approach to managing wet weather impacts that provides many community benefits.

*Infiltration*- Groundwater recharge through retention of stormwater for a sufficient period of time to allow for stormwater to pass through the surface of the ground and into the groundwater aquifer.

*JPA* – Joint Permit Application

*Mean High Water Elevation/Mark (MHWM)* – In lakes and tidal-influenced waterbodies, the elevation that corresponds to the average highest annual water level for the period of record available for a given waterbody, typically recorded at a water level gage. Any project affecting excavation, fill or disturbance to the shoreline or bottom of Conesus Lake below the mean high water elevation (820.79’) requires permitting through NYSDEC and USACE prior to the start of any disturbance activities.

*Mean Low Water Elevation* - In lakes and tidal-influenced waterbodies, the elevation that corresponds to the average lowest annual water level for the period of record available for a given waterbody, typically recorded at a water level gage. Mean Low Water Elevation for Conesus Lake is 816.75’.

*Mitigation*- In terms of natural resource management, the practice of replacing lost functions and values associated with resources (wetlands, streams, etc.) negatively-impacted by development or other types of work projects. Also refers to practices intended to reduce or eliminate the negative effects of floods and other types of hazards.

*Municipality* – for this document, refers to the prevailing Town government.

*NFIP*- National Flood Insurance Program (NFIP), managed by the Federal Emergency Management Agency (FEMA), enables homeowners, business owners and renters in participating municipalities to purchase federally backed flood insurance. In order for members of the community to be eligible for the NFIP program, the governing municipality must implement and enforce a series of minimum NFIP rules developed by FEMA in their local ordinances.

*NWP* – Nationwide Permit. General permits administered through USACE authorizing specific types and extents of impacts to Waters of the US (WOTUS).

*NYSDEC*- New York State Department of Environmental Conservation

*OHWM* - Ordinary High Water Mark - bankfull elevation in streams or mean high water elevation in lakes. The ordinary high water mark is a line on the shore established by fluctuations of water level and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas.

*Planning Board*- An administrative body of local government that reviews and approves subdivision plats; reviews and approves site plans; reviews and approves special-use permits; participates in the preparation of a comprehensive plan, when directed by the local legislature; and advise the local legislature and other boards on matters affecting a community’s development.





*Reach*- Contiguous sections of a waterbody, such as a stream, with similar physical and/or hydrologic characteristics.

*Regulated Floodway* - the channel of a river or stream and the adjacent land areas, as designated by a municipality through local floodplain ordinance, which must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. To be eligible for NFIP coverage, municipalities must regulate development in the regulated floodway to ensure that there are no increases in upstream flood elevations. For streams and other watercourses where FEMA has provided Base Flood Elevations (BFEs), but no floodway has been designated, the municipality must review floodplain development on a case-by-case basis to ensure that increases in water surface elevations do not occur, or identify the need to adopt a floodway if adequate information is available.

*Retention*- Similar to detention, but holding water more permanently in a designed feature (e.g. retention pond), holding water longer and allowing more suspended solids to settle.

*Riparian Buffer*- Areas of land immediately adjacent to waterbodies (such as streams, lakes, and rivers) in permanent vegetation that help control pollutants and flooding, and promote streambank stability and reduced flood velocities.

*Sediment*- Boulder, cobble, gravel, sand, silt and other particulate materials that comprise the bed and banks of streams, mobilized and transported by flowing water during high-water events.

*SFHA (Special Flood Hazard Area)* - The land area covered by the floodwaters of the base flood ("100-year flood") is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

*Sheet Flow*- Shallow depth and low velocity movement of water spread out over a wide section of land. Sheet flow has a relatively low erosion potential.

*Sinuosity*- measurement of the degree curvature to which a stream or river meanders.

*SPDES* – State Pollution Discharge Elimination System. The SPDES program is designed to eliminate the pollution of New York waters and to maintain the highest quality of water possible consistent with public health, public enjoyment of the resource, protection and propagation of fish and wildlife and industrial development in the state. The SPDES program is implemented through a series of General and Individual permits regulating development (such as construction) and operational (such as wastewater treatment) activities representing potential point-and non-point sources of pollution to waterways.

*Steep Slope* - land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the prevailing County where the disturbance will occur.

*Stormwater*- Water from rain or melting snow that doesn't soak into the ground but runs off into waterways.

*Structure* - for flood plain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

*SWCD* – Soil and Water Conservation District, administered by each County across New York State.





*SWPPP* – Stormwater Pollution Prevention Plan. The SWPPP serves as the erosion and sedimentation control plan for larger-sized development and construction projects. Development projects incurring over 1.0 acre of land disturbance require preparation of a SWPPP as part of the mandatory SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002) administered by NYSDEC.

*USACE*- United States Army - Corps of Engineers

*Watershed*- The entire area of land whose water drains into a given point along the course of a waterway.

*Wetland* - areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. Wetlands vary significantly and may be forested, open water marsh, or wet meadow.

*WOTUS* – Waters of the United States - all navigable lakes and rivers with eventual connectivity to the sea and the upstream waters that drain to them.

*ZBA*- Zoning Board of Appeals, an administrative and quasi-judicial body that interprets the zoning ordinance, grants special-use permits, conducts site plan review, and considers appeals from decisions of the enforcement officer.

