

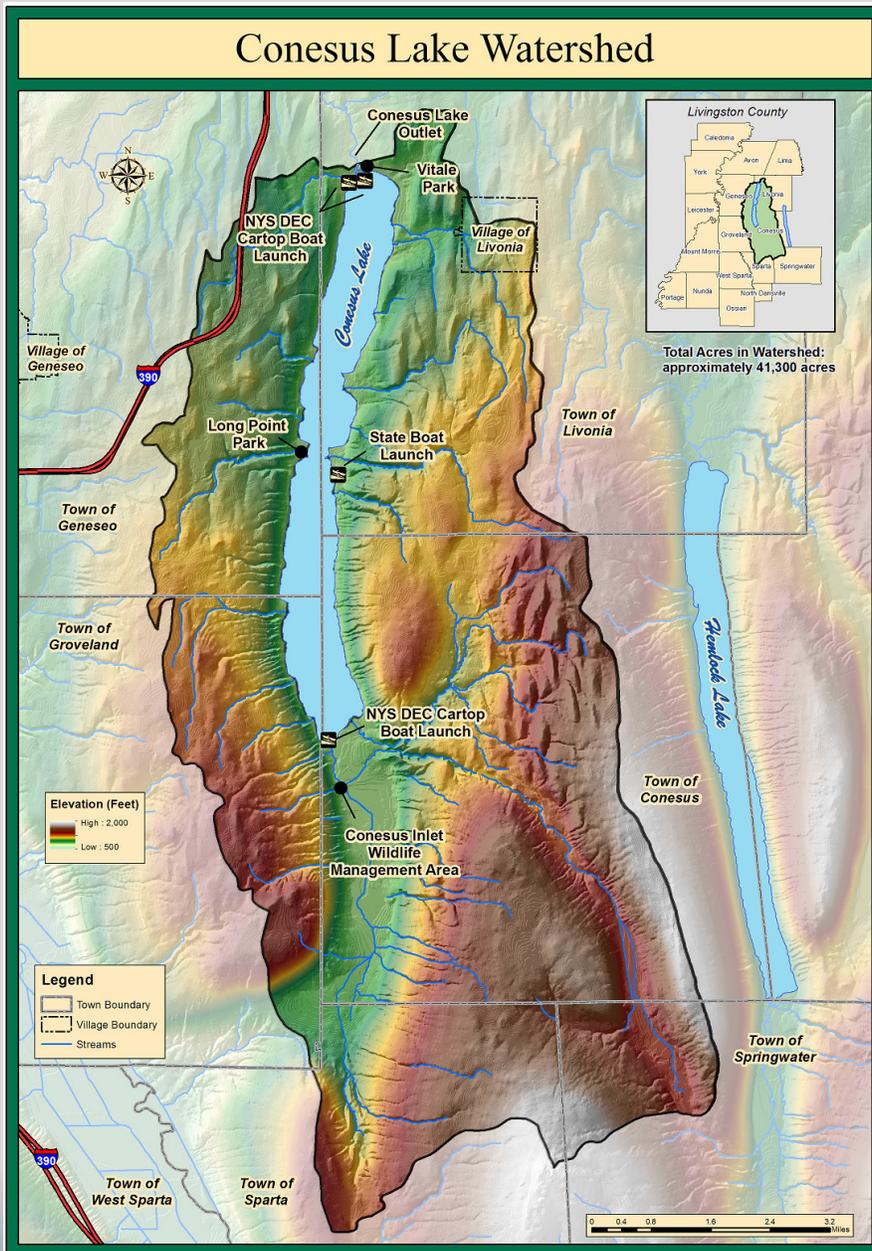
# Conesus Lake Watershed

## Stormwater Toolkit Fact Sheets



*This publication was funded by the Finger Lakes - Lake Ontario Watershed Protection Alliance through an appropriation from the New York State Environmental Protection Fund.*

## Conesus Lake Watershed



**Our actions on the land in and around Conesus Lake directly affect our natural resources. We can work together using land use best management practices (BMPs) to support the lands and water that we appreciate and rely upon.** The Conesus Lake Watershed Stormwater Toolkit provides important information to help facilitate the use of BMPs and adherence to existing regulations for a variety of land use activities including residential and commercial development, agriculture, silviculture, infrastructure and utility projects, etc. The full Toolkit can be accessed at <http://www.livingstoncounty.us/conesus.htm>.

**The Conesus Lake watershed encompasses 70 square miles and includes all or part of seven municipalities within Livingston County. Policies at local, state, and federal levels have been adopted to protect water quality, limit erosion, conserve wildlife habitat, and preserve the beauty and quality of life in our region.** The following information and fact sheets summarize some of the most common issues, BMPs, and regulatory requirements associated with land use in the watershed. These documents supplement the full Toolkit and are intended to help simplify and clarify BMPs and permit processes and direct people to the appropriate agencies and offices prior to project implementation.

# Quick Reference Guide

## Do You Need a Permit?

### Will your activity disturb over 500 square feet?

#### You may need a:

##### Municipal Erosion and Sediment Control Permit

Contact: - Town Code Enforcement Officer  
Conesus, Geneseo, Groveland,  
Livonia  
(see contact info below)

### Is your activity within or adjacent to a wetland?

#### You may need a:

##### NYSDEC/USACE Joint Permit

Contact: - NYSDEC, Region 8 Permit  
Administrator - (585) 226-5400  
- USACE, Buffalo District Office,  
Regulatory Branch - (716) 879-4330

### Is your activity within a floodplain?

#### You may need a:

##### Municipal Floodplain Development Permit

Contact: - Town Code Enforcement Officer  
(see contact info below)

#### Additional References:

Do I need a NYSDEC permit:

<http://www.dec.ny.gov/permits/6335.html>

NYSDEC Permit Application:

[http://www.dec.ny.gov/docs/pemits\\_ej\\_operations\\_pdf/jointapp.pdf](http://www.dec.ny.gov/docs/pemits_ej_operations_pdf/jointapp.pdf)

#### Town Code Enforcement Officers:

- Conesus (585) 346-3130
- Livonia (585) 346-2098
- Geneseo (585) 991-5008
- Sparta (607) 329-7842
- Groveland (585) 243-1750
- Springwater (585) 447-0249

### Will your activity disturb one acre or more?

#### You may need a:

- SPDES General Permit for Stormwater Discharges
- Municipal Erosion and Sediment Control Permit

Contact: - Town Code Enforcement Officer  
Conesus, Geneso, Groveland, Livonia  
(see contact info below)  
- NYSDEC, Region 8 Permit  
Administrator - (585) 226-5400

### Is your activity within or adjacent to a lake or stream?

#### You may need a:

##### NYSDEC/USACE Joint Permit

Contact: - NYSDEC, Region 8 Permit  
Administrator - (585) 226-5400  
- USACE, Buffalo District Office,  
Regulatory Branch - (716) 879-4330

### Will your activity result in impervious surfaces?

#### You may need a:

##### SPDES General Permit for Stormwater Discharges

Contact: - NYSDEC, Region 8 Permit  
Administrator - (585) 226-5400



# Wetlands

## Apply for a NYSDEC/USACE Joint Permit for activities within and adjacent to wetlands. Wetlands are protected under the State Freshwater Wetland Act and Section 404 of the Clean Water Act.

Wetlands provide important functions on the landscape including filtering sediments, nutrients, and toxins from floodwater; floodwater retention; groundwater recharge; wildlife habitat; outdoor recreation opportunities and scenic resources. A permit may be needed if wetlands or adjacent areas are temporarily or permanently disturbed. Examples of disturbance include:

- Filling or placing materials into a wetland
- Dredging or removing soil from a wetland
- Draining water from a wetland
- Constructing driveways, boardwalks, or ponds through a wetland

**Wetland impact permits require maximum avoidance and minimization of impacts to wetlands and may also require a mitigation plan.**

The USACE and NYSDEC have a Joint Permit Application process. A first step is to identify the extent of wetland on a property and if the wetland is regulated by NYSDEC and/or USACE. When a federal permit is required, NYSDEC will need to issue a Water Quality Certification. If the wetland is also regulated by NYSDEC (typically wetlands 12.4 acres in size or greater), **a state permit is required for activities in the wetland and in 100' around the wetland.**

### Points of Contact:

- NYSDEC Region 8 - Regional Permit Administrator  
(585) 226-5400
- USACE Buffalo District Office - Regulatory Branch  
(716) 879-4330

**What is a wetland?** A wetland is an area that stays wet long enough during the growing season to support water-loving plants and develop hydric soils. There are many types of wetlands with many names including marsh, swamp, and wet meadow.

**It is not always easy to know if you are working in a wetland or where it begins and ends. When in doubt contact agencies at the numbers below. Avoid project delays and heavy fines!**



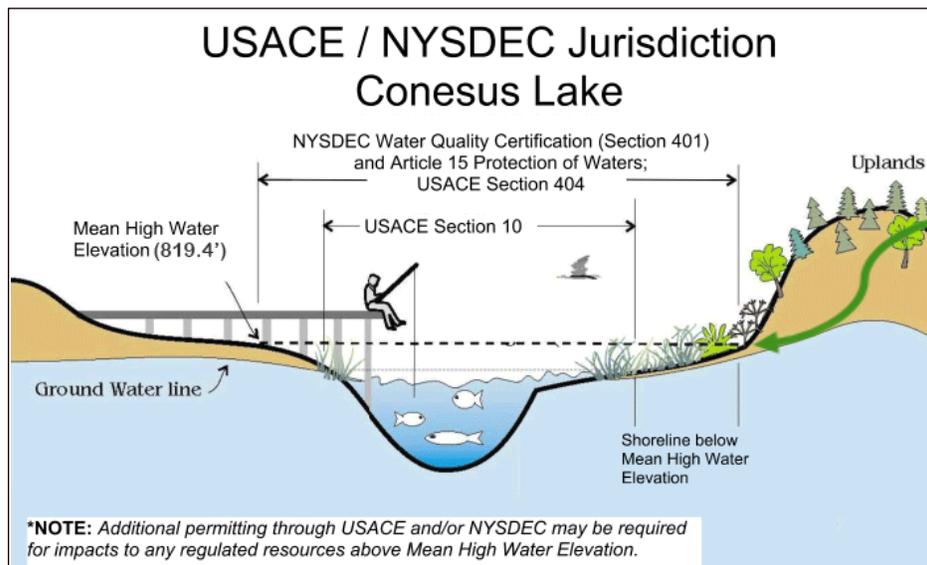
### References and Resources:

- Joint Permit Application Form:  
[http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/jointapp.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/jointapp.pdf)
- Instructions for completing Joint Permit Application:  
[http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/jntappinstruc.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/jntappinstruc.pdf)
- Do I need a NYSDEC Freshwater Wetland Permit?:  
<http://www.dec.ny.gov/permits/6279.html>



# Conesus Lake and Tributary Streams

Apply for a NYSDEC/USACE Joint Permit for activities that occur within or along the shorelines of Conesus Lake and its navigable tributary, and streams below the Ordinary High Water Mark (OHWM).



For tributary streams, the OHWM is determined in the field during project design and permit application. For Conesus Lake, the OHWM is generally the Mean High Water Elevation which is 819.4' above sea level. Note: the OHWM may be modified by other factors; regulatory should be contacted.

Any project that includes temporary or permanent disturbance to bed, bank, or shoreline of Conesus Lake and its tributaries below the OHWM requires a permit. That includes:

- Dredging or sediment/gravel bar removal
- Installation or restoration of docks, decks, or platforms
- Breakwaters, breakwalls, riprap, sheet-piling, and other in water structures
- Installation of mooring devices
- Any other placement of fill below the OHWM

## Points of Contact:

- NYSDEC Region 8 - Regional Permit Administrator (585) 226-5400
- USACE Buffalo District Office - Regulatory Branch (716) 879-4330

## References and Resources:

- Joint Permit Application Form: [http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/jointapp.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/jointapp.pdf)
- NYSDEC Protection of Waters Program: <http://www.dec.ny.gov/permits/6042.html>
- Do I need a NYSDEC Protection of Waters Permit?: <http://www.dec.ny.gov/permits/6335.html>



# Floodplains

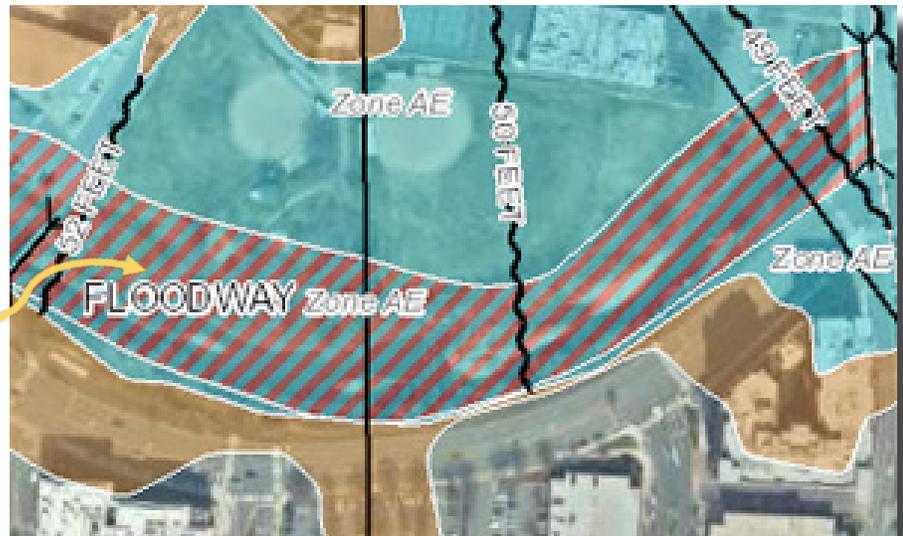
**A local permit is required for all development within Special Flood Hazard Areas shown on Flood Insurance Rate Maps. This requirement allows all residents to be eligible for flood insurance wherever required. It also helps ensure that new developments are not at risk of flood damage and protects other properties from increased flood hazards.**

**What is a floodplain?** A floodplain is a low-lying area adjacent to a waterway generally defined by its frequency of flooding (e.g. 100-year floodplain has a one percent chance of flooding during any given year).

**Special Flood Hazard Areas** can be identified on Flood Insurance Rate Maps located online at <https://msc.fema.gov/portal>.

All municipalities in the Conesus Lake Watershed require a floodplain permit for development in Special Flood Hazard Areas. Other state and federal permits may also apply. Activities that require a permit include any project that involves man-made change to improved or unimproved real estate such as:

- Construction or modification to structures
- Excavation
- Filling
- Modification of existing drainage patterns
- Driving of piles
- Dredging
- Land clearing
- Grading
- Permanent storage of materials or equipment



## Development in a Floodplain

- **Increases flood hazards**
- **Causes greater flooding downstream**
- **Results in greater stormwater and sediment inputs to water**
- **Increases erosion and loss of natural vegetation**
- **Results in damage and loss of property**



## Points of Contact:

- Municipal Code Enforcement Officer/  
Floodplain Administrator

## References:

Additional information on the National Flood Insurance Program can be found by visiting [www.fema.gov/business/nfip](http://www.fema.gov/business/nfip).



# Soil Erosion and Sedimentation Control

**Help protect water quality and the health and safety of a community by using best management practices (BMPs) to prevent uncontrolled drainage and runoff associated with land development.**

If disturbing soils, removing existing vegetation, or changing topography, use best management practices. These may include a gravel construction entrance, properly installed silt fence, maintenance of an undisturbed buffer along ditches and streams, and reestablishment of ground cover as soon as possible after development.

**It is the cumulative impact of many construction projects on the landscape that can negatively affect our waterways. Erosion and sediment control are important for every project, big or small!**

**Construction projects may require a permit.**

**Over 500 SF of disturbance:** Apply for a municipal Erosion and Sediment Control (ESC) Permit (Towns of Conesus, Geneseo, and Groveland, or consult the Town of Livonia Code Officer). A permit are required **before** digging.

**Over 10,000 SF of disturbance:** Develop an Erosion Control Plan for municipal approval and ESC Permit (Towns of Conesus, Geneseo, and Groveland, or consult the Town of Livonia Code Officer). All **permits** and **approved** Erosion Control Plan are required **before** digging.

**Over 1 acre of disturbance:** Obtain coverage under NYS Department of Environmental Conservation SPDES (State Pollutant Discharge Elimination System) General Permit for Stormwater Discharges are from Construction Activity - **before** digging. See NYSDEC Construction Stormwater Toolbox at: <https://www.dec.ny.gov/chemical/8694.html>

**The goal of BMPs is to prevent soil from leaving a property and entering waterways.**



**Erosion and Sediment Control Actions Include:**

- Construction of a gravel construction entrance
- Installation of silt fence at lower edge of disturbance
- Establishment of ground cover
- Avoidance of areas near ditches, streams, and wetlands
- Assessing construction sites at the end of each day
- Complete projects in a timely manner



# DO THIS

[Effective Installation]



## Gravel Drive

- Create a gravel construction entrance that is at least 6in deep and 12ft wide.
- Use loose, big stone (2-3in) to scrape and collect mud from construction vehicles and keep adjoining roadways clean.



## Silt Fence

- A silt fence prevents erosion because it allows water to filter through but not soil.
- Effective installation includes placing the fence in the proper location, partially burying (trenching), and staking for adequate reinforcement.



## Ground Cover

- Seeding disturbed areas after construction is complete will reduce runoff and erosion.
- Any disturbed areas that are at final grade or will remain idle for an extended period of time should be seeded and mulched within days of completion.



## Buffers

- Sites near water (ditches, streams, wetlands, and lakes) require extra protection from erosion and sediment control.
- Maintaining vegetated buffers that are as wide as the project will protect water quality by filtering runoff.

# NOT THIS

[Ineffective Installation]



## Gravel Drive

- A poorly constructed gravel drive is less than 6in deep and uses small and rounded stones.
- Sediment tracked into roadways is a potential safety issue and results in pollution of our waterways.



## Silt Fence

- **Ineffective** installation of a silt fence or poor placement will result in erosion and runoff into waterways.
- Common mistakes include installation of a silt fence without proper trenching and staking, and placement in an area of concentrated flow.



## Ground Cover

- Bare ground is highly susceptible to erosion during rain events.
- Establishing ground cover by seeding and mulching immediately after construction will largely eliminate erosion.
- **Don't skip the mulch.**



## Buffers

- Disturbance adjacent to water may result in negative impacts to water quality.
- Disturbance may also be a violation of local, state, and federal law.
- Maintaining a vegetative buffer zone will protect water quality.

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# Agriculture Best Management Practices

Protecting the beauty and health of our landscape also protects the beauty and water quality of our Lake. Best management practices (BMPs) provide effective ways to make the most of our natural resources while minimizing unintended effects on our lands and waters.

## Agriculture Best Management Practices for Water Quality



No-till farming

- **Conservation Tillage (No-till)** - leaving plant material from past harvest on the soil will keep nutrients and pesticides on the field, reduce runoff and erosion, and improve soil, water, and air quality.

- **Cover Crops** - growing annual plants when fields are fallow will control erosion, allowing uptake of excess nutrients, and weed suppression.

will protect areas vulnerable to erosion including steep slopes, swales and along waterways, and heavy use areas (livestock and equipment).

- **Critical Area Planting** - planting grass, shrubs, and trees

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- **Filter Strips** - planting strips of grass at the lower edges of fields will trap runoff containing sediment, nutrients, and pesticides before it enters waterways.



Riparian buffers

- **Fencing** - using fencing to guide animal movement out of streams or into divided pastures decreases erosion, improves water quality, and distributes nutrients.

- **Riparian Buffers** - planting and maintaining 20+ feet of vegetated buffer (grass, shrubs, trees) next to drainage ditches, streams, and rivers will help filter runoff, protect soil from erosion, improve water quality and support wildlife.

- **Grassed Waterways** - utilizing natural vegetation to conduct water downslope helps to prevent soil loss and improve water quality.

- **Water Management** - developing a watering facility to provide livestock with water from a well, spring, pond or other source is an alternative to direct access to surface water.



Grassed waterway

- **Pest Management** - keeping crop pests at manageable levels will help protect soil, water, and air.

- **Conservation Buffers** - establishing a vegetated buffer (grass, shrubs, and/or trees) between fields and waterways will protect surface waters.

- **Nutrient Management** - applying the correct amount and form of nutrients for crop yield goals will help minimize loss into surface waters and groundwater.



Stream fencing



Water management

### References and Resources:

- Livingston County Soil & Water Conservation District  
(585) 243-0043

- Natural Resources Conservation Services  
(585) 243-0030

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# Forestry Best Management Practices

Protecting the beauty and health of our landscape also protects the beauty and water quality of our Lake. Best management practices (BMPs) provide effective ways to have an economically viable timber harvest while minimizing unintended effects on our lands and waters.

## Forestry Best Management Practices for Water Quality



Stream crossing



Forestry road



Skid trail



Streamside management

- **Pre-harvest Planning** - planning in advance with the help of a forestry professional will be more economical and effective and allow proper application of BMPs to protect soil, water, and remaining timber.
- **Critical Areas** - protect water quality by avoiding critical areas which include streams, streamside management zones, floodplains, wetlands, water bodies, steep slopes (30% or greater), and unstable soils.
- **Log Landings** - locate landings at least 200 feet away from water. Use straw bales or silt fencing to minimize erosion. Buffer landings from roads and use coarse gravel to filter mud before vehicle enter public roads.
- **Forest Roads and Skid Trails** - plan location to minimize the amount of cut and fill and to minimize the number of water crossings. Avoid water bodies and/or provide buffer strips. Avoid steep slopes. Identify and utilize appropriate stabilization, drainage, and erosion control measures. Engage a forestry professional for design of forest roads.
- **Stream Crossings** - minimize stream crossings. Place unavoidable crossings where there are low, stable banks and a firm stream bottom. Install culverts or bridges during low flow and stabilize soils immediately after installation. Be sure culverts are not too small. Engage a forestry professional for design of stream crossings. Crossings may require a state or federal permit.
- **Disturbed Soils** - smooth soils and seed and mulch all disturbed areas including roads, skid trails, and landings as soon as possible to minimize erosion.
- **Wetlands** - avoid wetlands. If avoidance is not possible, use clean fill to construct roads, ensure ditches do not drain the wetland, and employ erosion control techniques such as silt fencing and straw bales. Disturbance to wetlands may require a state or federal permit.
- **Erosion and Sediment Control** - apply erosion control techniques including water diversion features (water bars, deflectors, turn up, diversion ditch), silt fence or straw bales to protect waterbodies, filter strips, soil stabilization and gravel at culvert intake and outfalls.
- **Permits** - several state and federal regulations are in place to protect wetlands, streams, and water quality during timber harvest. Contact regulatory staff to determine if your harvest plan requires a permit.

### References and Resources:

- NYS Forestry BMPs for Water Quality:  
[https://www.dec.ny.gov/docs/lands\\_forests\\_pdf/dlfbmpguide.pdf](https://www.dec.ny.gov/docs/lands_forests_pdf/dlfbmpguide.pdf)

- Do I need a NYSDEC Protection of Waters Permit?:  
<http://www.dec.ny.gov/permits/6335.html>
- Do I need a NYSDEC Freshwater Wetland Permit?:  
<http://www.dec.ny.gov/permits/6279.html>



# Contact Information

## NYS Department of

### Environmental Conservation

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

## U.S. Army Corps of Engineers

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

## Livingston County Department of Health

Conesus Lake Watershed Inspector  
Phone (585) 243-7280

## Livingston County Planning Department

Conesus Lake Watershed Manager  
Phone (585) 243-7550

## Livingston County

### Soil & Water Conservation District

District Manager  
Phone (585) 243-0043

## Natural Resource Conservation Services

District Manager  
Phone (585) 243-0030

## Towns and Villages

### Municipal Code Enforcement

Town of Conesus - (585) 346-3130  
Town of Geneseo - (585) 991-5008  
Town of Groveland - (585) 243-1750  
Town & Village of Livonia - (585) 346-2098  
Town of Sparta - (607) 329-7842  
Town of Springwater - (585) 447-0249



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