Owasco Lake Watershed 2017 Roadside Ditch Assessment

The information included in this assessment was collected between late June and early July 2017. It reflects only a percentage of roadway ditches throughout the watershed that have been recently cleaned and have no visible management practices and/or have not been re-vegetated. The Inspection Program will continue to monitor these ditch segments for stabilization while others are being identified. Ditches that have been disturbed during 2017 and are experiencing erosion due to high water velocities and instability will also be scrutinized.

The goal of this effort is to provide awareness to each town, county, and state jurisdiction, throughout the watershed, to:

- 1. Ascertain the total linear mileage of exposed/eroding ditches,
- 2. Encourage each jurisdiction to perform good housekeeping on roadside conveyance systems, and
- 3. Reduce sediment and nutrient loads to Owasco Lake

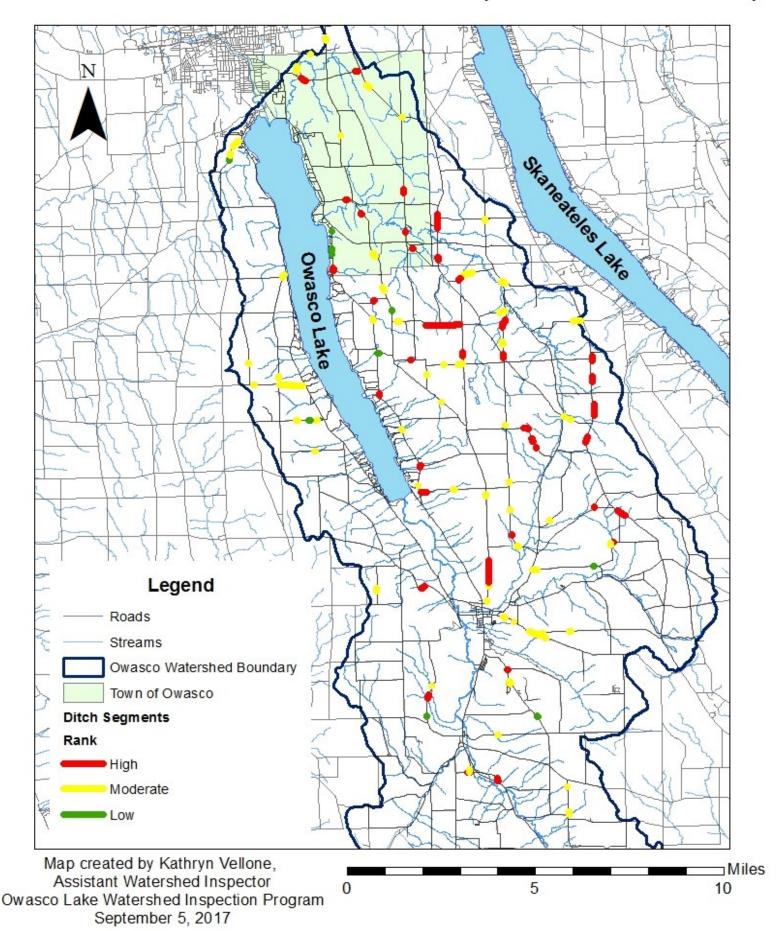
| Criteria for Ranking Sites Direct | <u>Points</u> |
|-------------------------------------|---------------|
| Connection or proximity to a stream | 10 |
| Percent Vegetation 0-25% | 15 |
| 26-50% | 10 |
| 51-75% | 5 |
| 76-100% | 1 |
| Level of erodibility High | 10 |
| Moderate | 5 |
| Low | 1 |
| Bank slope Steep Grade | 10 |
| Moderate Grade | 5 |
| Flat | 1 |
| Linear footage of ditch ≥401 ft | 15 |
| 201-400 ft | 10 |
| ≤200 ft | 5 |

| Rank | Total Points |
|----------|--------------|
| Low | ≤20 |
| Moderate | 21-39 |
| High | 40-60 |

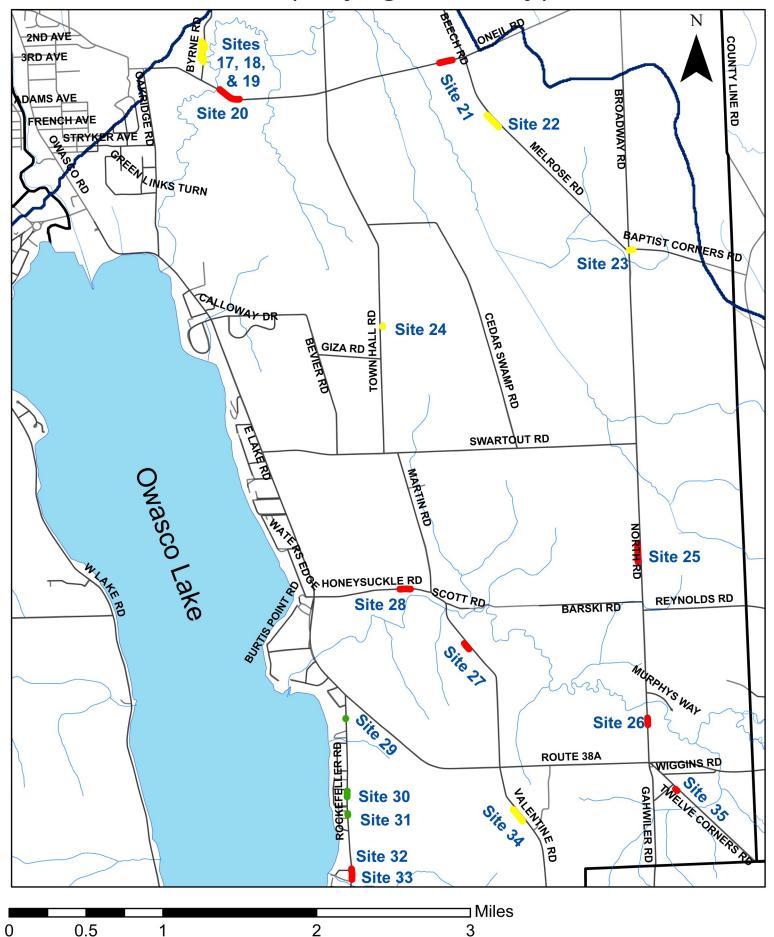


A Trimble GPS unit is used to map different features of the ditches, allowing for the Inspection Program to categorize the level of erodibility and risk of ditch failure

Road Ditch Assessment Sites in the Owasco Lake Watershed (Summer 2017)



Road Ditch Assessment Sites in Owasco (Cayuga County)





Sub-watershed: Sucker Brook **Road Name:** Byrne Road

Town: Owasco

Road Jurisdiction: Town of

Owasco

Closest Intersection: Byrne Road/

Melrose Road

Direct connection or proximity to

a stream?: Yes

Percent Vegetation & Type: 60%

Grasses

Level of Erodibility: Low

Slope of Area: Flat Length of Ditch: 100 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Moderate (Score = 22)

Estimated Cost: \$150



Map Identifier: Site 18

Sub-watershed: Sucker Brook

Road Name: Byrne Road

Town: Owasco

Road Jurisdiction: Town of

Owasco

Closest Intersection: Byrne Road/

Melrose Road

Direct connection or proximity to

a stream?: No

Percent Vegetation & Type: 70%

Grasses

Level of Erodibility: Low

Slope of Area: Moderate Grade

Length of Ditch: 600 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: Moderate (Score = 26)



Sub-watershed: Sucker Brook

Road Name: Byrne Road

Town: Owasco

Road Jurisdiction: Town of Owasco **Closest Intersection:** Byrne Road/

Melrose Road

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 60%

Grasses

Level of Erodibility: Low

Slope of Area: Moderate Grade

Length of Ditch: 100 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Moderate (Score = 26)

Estimated Cost: \$150



Map Identifier: Site 20

Sub-watershed: Sucker Brook **Road Name:** Melrose Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Melrose Road/

Byrne Road

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 50%

Grasses

Level of Erodibility: Moderate Slope of Area: Steep Grade Length of Ditch: 800 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: High (Score = 50) Estimated Cost: \$1,200

Comments: Check dams present at

site before ditch assessment



Sub-watershed: Sucker Brook **Road Name:** Melrose Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Melrose Road/

Beech Road

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 75%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 450 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: High (Score = 40) Estimated Cost: \$675

Comments: some garbage in ditch



Map Identifier: Site 22

Sub-watershed: Sucker Brook **Road Name:** Melrose Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Melrose Road/

Beech Road

Direct connection or proximity to a

stream?: No

Percent Vegetation & Type: 40%

Grasses

Level of Erodibility: Moderate

Slope of Area: Flat Length of Ditch: 600 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Moderate (Score = 31)

Estimated Cost: \$900

Comments: Garbage in ditch



Sub-watershed: Sucker Brook **Road Name:** Baptist Corners Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Baptist Corners Road/North Road

Direct connection or proximity to

a stream?: No

Percent Vegetation & Type: 10%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 150 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: Moderate (Score = 30)

Estimated Cost: \$225



Map Identifier: Site 24

Sub-watershed: Sucker Brook **Road Name:** Town Hall Road

Town: Owasco

Road Jurisdiction: Town of

Owasco

Closest Intersection: Town Hall

Road/Giza Road

Direct connection or proximity to

a stream?: No

Percent Vegetation & Type: 5%

Grasses

Level of Erodibility: Low

Slope of Area: Flat Length of Ditch: 50 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Moderate (Score = 22)



Sub-watershed: Dutch Hollow Brook

Road Name: North Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: North Road/Barski

Road

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 40% Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 600 ft

Management Recommended:

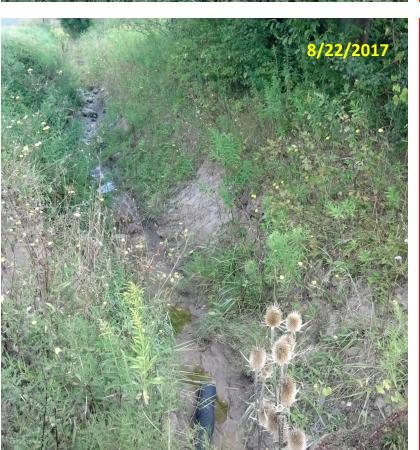
Hydroseeding

Resolvability: Simple

Rank: High (Score = 45) Estimated Cost: \$900

Comments: Garbage in ditch, culvert in

deteriorating condition



Map Identifier: Site 26

Sub-watershed: Dutch Hollow Brook

Road Name: North Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: North Road/

Murphy's Way

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 50% Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 250 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: High (Score = 40) Estimated Cost: \$375



Sub-watershed: Dutch Hollow

Brook

Road Name: Martin Road

Town: Owasco

Road Jurisdiction: Town of Owasco **Closest Intersection:** Martin Road/

Honeysuckle Road

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 30%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 250 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: High (Score = 40) Estimated Cost: \$375



Map Identifier: Site 28

Sub-watershed: Dutch Hollow

Brook

Road Name: Honeysuckle Road

Town: Owasco

Road Jurisdiction: Town of Owasco

Closest Intersection:

Honeysuckle Road/Martin Road **Direct connection or proximity to a**

stream?: Yes

Percent Vegetation & Type: 30%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 350 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: High (Score = 40) Estimated Cost: \$525



Map Identifier: Site 29
Sub-watershed: Unknown
Road Name: Rockefeller Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Rockefeller

Road/Gleason Drive

Direct connection or proximity to a

stream?: No

Percent Vegetation & Type: 50%

Grasses

Level of Erodibility: Low

Slope of Area: Flat Length of Ditch: 50 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Low (Score = 17) Estimated Cost: \$75



Map Identifier: Site 30 Sub-watershed: Unknown Road Name: Rockefeller Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Rockefeller

Road/Denman Cove

Direct connection or proximity to a

stream?: No

Percent Vegetation & Type: 80%

Grasses

Level of Erodibility: Low

Slope of Area: Moderate Grade

Length of Ditch: 200 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Low (Score = 17) Estimated Cost: \$300



Map Identifier: Site 31
Sub-watershed: Unknown
Road Name: Rockefeller Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Rockefeller

Road/Fire Lane 12A

Direct connection or proximity to a

stream?: No

Percent Vegetation & Type: 80%

Grasses

Level of Erodibility: Low

Slope of Area: Moderate Grade

Length of Ditch: 50 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Low (Score = 17) Estimated Cost: \$75



Map Identifier: Site 32
Sub-watershed: Unknown
Road Name: Rockefeller Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Rockefeller

Road/State Route 38A

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 25%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 100 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: High (Score = 40)



Map Identifier: Site 33
Sub-watershed: Unknown
Road Name: Rockefeller Road
Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Rockefeller

Road/Fire Lane 14

Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 50%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 200 ft

Management Recommended:

Hydroseeding

Resolvability: Moderate

Rank: High (Score = 40) Estimated Cost: \$300



Map Identifier: Site 34

Sub-watershed: Dutch Hollow

Brook

Road Name: Valentine Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Valentine

Road/State Route 38A

Direct connection or proximity to a

stream?: No

Percent Vegetation & Type: 40%

Grasses

Level of Erodibility: Moderate

Slope of Area: Flat Length of Ditch: 500 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: Moderate (Score = 31)



Sub-watershed: Dutch Hollow

Brook

Road Name: Twelve Corners Road

Town: Owasco

Road Jurisdiction: Cayuga County

Highway

Closest Intersection: Twelve Corners Road/State Route 38A Direct connection or proximity to a

stream?: Yes

Percent Vegetation & Type: 10%

Grasses

Level of Erodibility: Moderate **Slope of Area:** Moderate Grade

Length of Ditch: 100 ft

Management Recommended:

Hydroseeding

Resolvability: Simple

Rank: High (Score = 40) Estimated Cost: \$150

Summary

Cumulative Roadside Ditch and Total Costs Based on Road Jurisdiction:

Town of Owasco:
6 sites, 1,450 ft
\$2,175

Cayuga County Highways (Owasco):

13 sites, 4,050 ft