

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

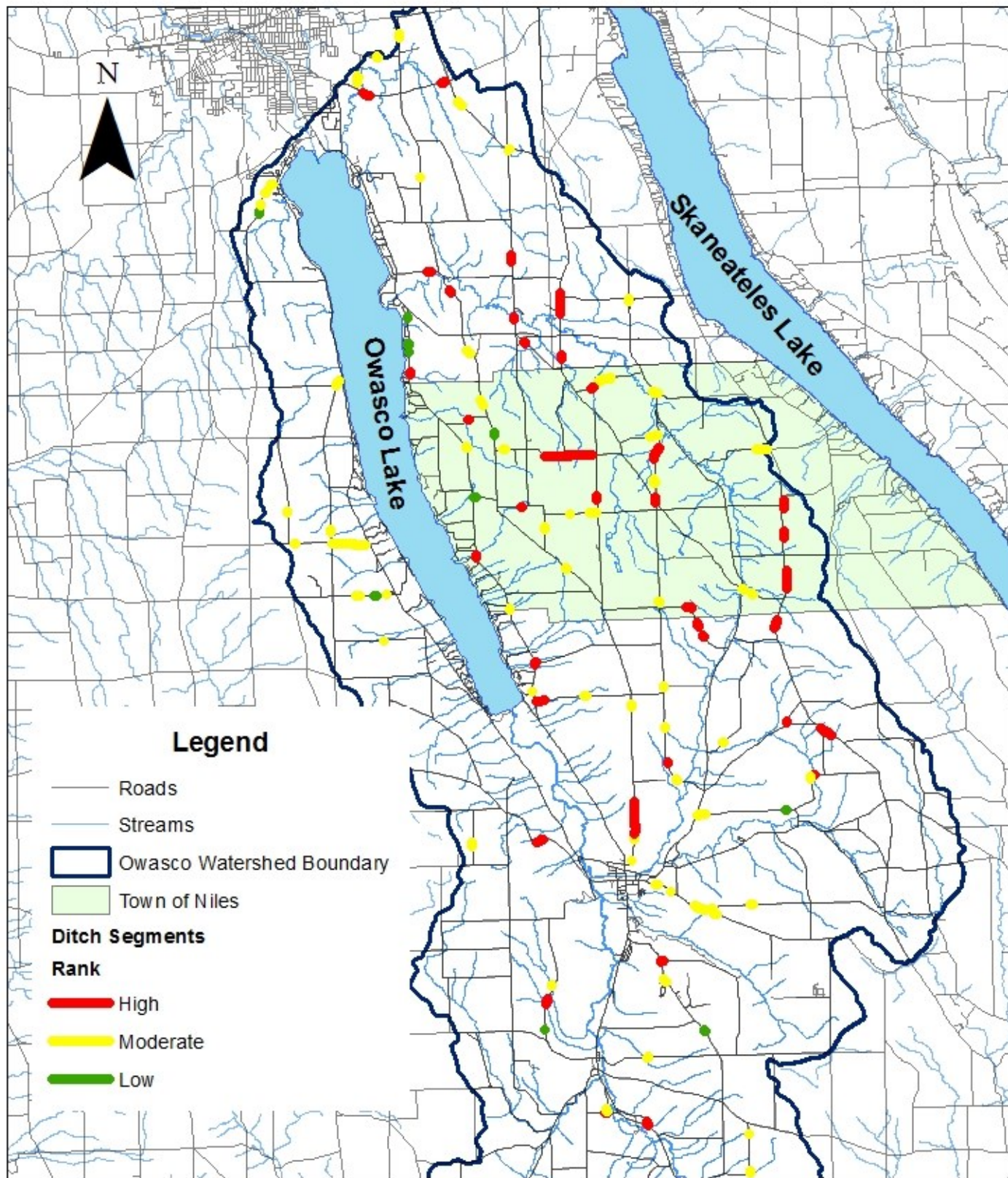
Direct Connection or proximity to a stream	10
Percent Vegetation	
0-25%	15
26-50%	10
51-75%	5
76-100%	1
Level of erodibility	
High	10
Moderate	5
Low	1
Bank slope	
Steep Grade	10
Moderate Grade	5
Flat	1
Linear footage of ditch	
≥401 ft	15
201-400 ft	10
≤200 ft	5

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



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

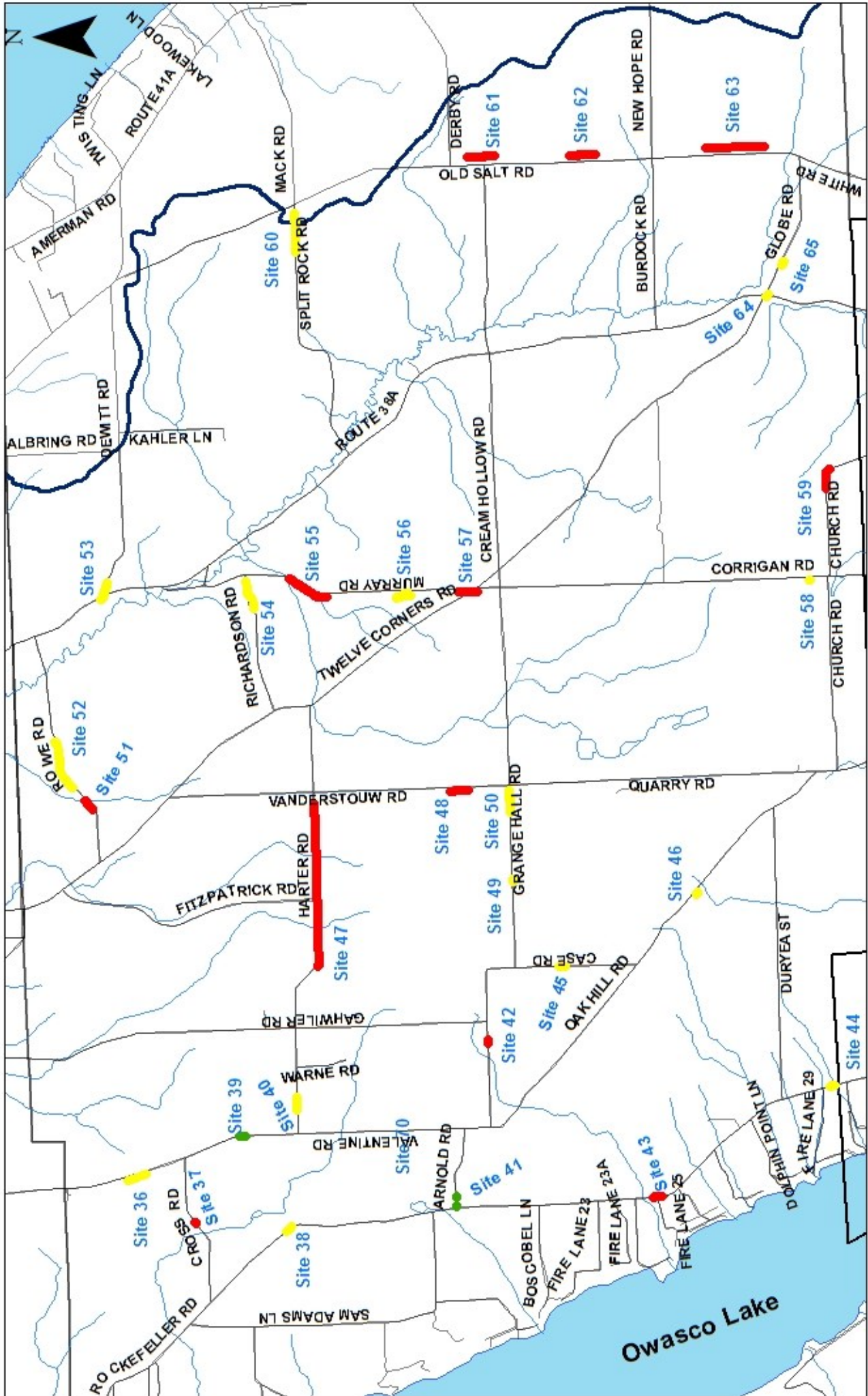
Road Ditch Assessment Sites in the Owasco Lake Watershed (Summer 2017)



Map created by Kathryn Vellone,
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Owasco Lake Watershed Inspection Program
September 5, 2017

0 5 10 Miles

Road Ditch Assessment Sites in Niles (Cayuga County)





Map Identifier: Site 52
Sub-watershed: Dutch Hollow Brook
Road Name: Rowe Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Rowe Road/ Twelve Corners Road
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 80% Grasses
Level of Erodibility: Low
Slope of Area: Moderate Grade
Length of Ditch: 1,450 ft
Management Recommended: Hydroseeding
Resolvability: Simple

Rank: Moderate (Score = 32)
Estimated Cost: \$2,175



Map Identifier: Site 53
Sub-watershed: Dutch Hollow Brook
Road Name: Dewitt Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Dewitt Road/ State Route 38A
Direct connection or proximity to a stream?: No
Percent Vegetation & Type: 50% Grasses
Level of Erodibility: Moderate
Slope of Area: Moderate Grade
Length of Ditch: 550 ft
Management Recommended: Hydroseeding
Resolvability: Moderate

Rank: Moderate (Score = 35)
Estimated Cost: \$825



Map Identifier: Site 54
Sub-watershed: Dutch Hollow Brook
Road Name: Richardson Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Richardson Road/
 Murray Road
Direct connection or proximity to a stream?: No
Percent Vegetation & Type: 50%
 Grasses
Level of Erodibility: Moderate
Slope of Area: Moderate Grade
Length of Ditch: 800 ft
Management Recommended:
 Hydroseeding
Resolvability: Simple

Rank: Moderate (Score = 35)
Estimated Cost: \$1,200
Comments: Erosion on both sides of road, split into several segments



Map Identifier: Site 55
Sub-watershed: Dutch Hollow Brook
Road Name: Murray Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Murray Road/
 Richardson Road
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 50%
 Mature Trees
Level of Erodibility: Moderate
Slope of Area: Steep Grade
Length of Ditch: 1,600 ft
Management Recommended:
 Hydroseeding
Resolvability: Moderate

Rank: High (Score = 50)
Estimated Cost: \$2,400
Comments: Located in forested area



Map Identifier: Site 56
Sub-watershed: Dutch Hollow Brook
Road Name: Murray Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Murray Road/
 Twelve Corners Road
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 80%
 Grasses
Level of Erodibility: Low
Slope of Area: Moderate Grade
Length of Ditch: 950 ft
Management Recommended:
 Hydroseeding
Resolvability: Simple

Rank: Moderate (Score = 32)
Estimated Cost: \$1,425
Comments: Gravel in some areas of
 ditch, erosion on both sides of road



Map Identifier: Site 57
Sub-watershed: Dutch Hollow Brook
Road Name: Murray Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Murray Road/
 Twelve Corners 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: 550 ft
Management Recommended:
 Hydroseeding
Resolvability: Moderate

Rank: High (Score = 40)
Estimated Cost: \$825



Map Identifier: Site 58
Sub-watershed: Decker Creek
Road Name: Corrigan Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Corrigan Road/Church Road
Direct connection or proximity to a stream?: No
Percent Vegetation & Type: 25% Grasses
Level of Erodibility: High
Slope of Area: Flat
Length of Ditch: 50 ft
Management Recommended: Rock Armor
Resolvability: Difficult

Rank: Moderate (Score = 31)
Estimated Cost: \$75



Map Identifier: Site 59
Sub-watershed: Decker Creek
Road Name: Church Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Church Road/State Route 38A
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 15% Grasses
Level of Erodibility: High
Slope of Area: Moderate Grade
Length of Ditch: 650 ft
Management Recommended: Hydroseeding
Resolvability: Moderate

Rank: High (Score = 55)
Estimated Cost: \$975



Map Identifier: Site 60
Sub-watershed: Dutch Hollow Brook
Road Name: Split Rock Road
Town: Niles
Road Jurisdiction: Town of Niles
Closest Intersection: Split Rock Road/Old Salt Road
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 80% Grasses
Level of Erodibility: Low
Slope of Area: Moderate Grade
Length of Ditch: 1,100 ft
Management Recommended: Hydroseeding
Resolvability: Simple

Rank: Moderate (Rank = 32)
Estimated Cost: \$1,650



Map Identifier: Site 61
Sub-watershed: Dutch Hollow Brook
Road Name: Old Salt Road
Town: Niles
Road Jurisdiction: Cayuga County Highway
Closest Intersection: Old Salt Road/Cream Hollow Road
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: 800 ft
Management Recommended: Hydroseeding
Resolvability: Simple

Rank: High (Score = 45)
Estimated Cost: \$1,200



Map Identifier: Site 62
Sub-watershed: Dutch Hollow Brook
Road Name: Old Salt Road
Town: Niles
Road Jurisdiction: Cayuga County Highway
Closest Intersection: Old Salt Road/ Burdock Road
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 5% Grasses
Level of Erodibility: Moderate
Slope of Area: Moderate Grade
Length of Ditch: 800 ft
Management Recommended: Hydroseeding
Resolvability: Simple

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



Map Identifier: Site 63
Sub-watershed: Dutch Hollow Brook
Road Name: Old Salt Road
Town: Niles
Road Jurisdiction: Cayuga County Highway
Closest Intersection: Old Salt Road/ Globe Road
Direct connection or proximity to a stream?: Yes
Percent Vegetation & Type: 5% Grasses
Level of Erodibility: Moderate
Slope of Area: Moderate Grade
Length of Ditch: 1,700 ft
Management Recommended: Hydroseeding
Resolvability: Simple

Rank: High (Score = 50)
Estimated Cost: \$2,550



Map Identifier: Site 64
Sub-watershed: Decker Creek
Road Name: Globe Road
Town: Niles
Road Jurisdiction: Cayuga County Highway
Closest Intersection: Globe Road/ Route 38A
Direct connection or proximity to a stream?: No
Percent Vegetation & Type: 0%
Level of Erodibility: Moderate
Slope of Area: Moderate Grade
Length of Ditch: 100 ft
Management Recommended: Hydroseeding
Resolvability: Simple

Rank: Moderate (Score = 30)
Estimated Cost: \$150
Comments: Recently cleared



Map Identifier: Site 65
Sub-watershed: Decker Creek
Road Name: Globe Road
Town: Niles
Road Jurisdiction: Cayuga County Highway
Closest Intersection: Globe Road/ Route 38A
Direct connection or proximity to a stream?: No
Percent Vegetation & Type: 50% Grasses
Level of Erodibility: Moderate
Slope of Area: Moderate Grade
Length of Ditch: 150 ft
Management Recommended: Hydroseeding
Resolvability: Moderate

Rank: Moderate (Score = 25)
Estimated Cost: \$225

Summary

Cumulative Roadside Ditch and Total Costs Based on Road Jurisdiction:

Town of Niles:

15 sites, 13,900 ft

\$20,850

Cayuga County Highways

(Niles):

15 sites, 6,000 ft