



## Dyke Creek Watershed (0413000202)

### Water Index Number

Ont 117-184  
 Ont 117-184  
 Ont 117-184-12  
 Ont 117-184-12-P164

### Waterbody Segment

Dyke Creek, Lower, and tribs (0403-0004)  
 Dyke Creek, Upper, and tribs (0403-0071)  
 Railroad Brook, Marsh Creeks and tribs (0403-0072)  
 Andover Pond (0403-0056)

### Category

No Known Impacts  
 No Known Impacts  
 No Known Impacts  
 Impaired

# Dyke Creek, Lower, and tribs (0403-0004)

# No Known Impacts

## Waterbody Location Information

Revised: 08/01/2016

**Water Index No:** Ont 117-184  
**Hydro Unit Code:** Dyke Creek (0413000202)  
**Water Type/Size:** River/Stream 66 Miles  
**Description:** stream and tribs from mouth to Andover

**Water Class:** C(T)  
**Drainage Basin:** Genesee River  
**Reg/County:** 9/Allegany (2)

## Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Threatened	Suspected
Fish Consumption	Fully Supported	Unconfirmed

### Conditions Evaluated

Habitat/Hydrology	Unknown
Aesthetics	Unknown

### Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: - - -  
Suspected: Unknown Pollutants (biological impacts), Nutrients (phosphorus)  
Unconfirmed: - - -

### Source(s) of Pollutant(s)

Known: - - -  
Suspected: Unknown Source  
Unconfirmed: Agriculture, Onsite/Septic Systems

## Management Information

**Management Status:** No Action Needed  
**Lead Agency/Office:** ext/WQCC  
**IR/305(b) Code:** Water Attaining All Standards (IR Category 1)

## Further Details

### Overview

This portion of Dyke Creek is assessed as having no known impacts; aquatic life is thought to be threatened by unspecified pollutants. Biological sampling results show slightly to non-impacted conditions with minimal anthropogenic impacts and with a community that is most similar to natural conditions.

### Use Assessment

This portion of Dyke Creek is a Class C(T) waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing. The waterbody is also designated as a cold water (trout) fishery.

Aquatic life is evaluated as fully supported but threatened based on biological sampling conducted through the NYSDEC Water Assessment by Volunteer Monitors (WAVE) Program and previous sampling results that shows slight to non-impacted conditions. This sampling can also be used to infer that there are no significant impacts to recreational (fishing) uses. (DEC/DOW, BWAM, February 2016)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-

specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

#### Water Quality Information

A biological (macroinvertebrate) assessment of Dyke Creek in Wellsville, NY was conducted in 2015 as part of NYSDEC's citizen science stream monitoring program, WAVE. The macroinvertebrate community was found to be non-impacted and the waterbody was evaluated as fully supporting of aquatic life. This evaluation reflects an improvement from results from previous sampling at the site conducted by NYSDEC in 1999. (DEC/DOW, BWAM/WAVE, December 2014)

A biological assessment of Dyke Creek in Andover (at Route 417) was also conducted as part of the RIBS biological screening effort in 2009. These sampling results reflect slightly to non-impacted conditions and good water quality. The macroinvertebrate community shows some beginning signs of alteration, some expected sensitive species are not present and overall macroinvertebrate species richness is somewhat lower than expected, but overall there is still balanced distribution of all expected taxa. Aquatic life is fully supported and there are no other apparent water quality impacts. (DEC/DOW, BWAM/SBU, January 2015)

#### Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, the most likely source of nutrients to the waterbody is agricultural activities, though these sources should be verified. Organic inputs were identified as the likely cause of the impact in Andover. Livestock and other agricultural activity in the watershed are suspected sources of the organic and nutrient loads. Poorly operating onsite septic systems serving Andover have been previously noted. However individual system upgrades and some sewerage have resulted in water quality improvements. Any impacts to recreation should be verified. (DEC/DOW, BWAM/SBU, January 2015)

#### Management Actions

No specific management actions have been identified for the waterbody. Given the generally low level of impact, local stakeholders (SWCD/WQCC) – with input from Regional DOW staff – would be appropriate to oversee management activity.

#### Section 303(d) Listing

Lower Dyke Creek is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There appear to be no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

#### Segment Description

This segment includes the portion of the stream and all tribs from the mouth to Railroad Brook (-12) in Andover. The waters of this portion of the stream are Class C from the mouth to a point one mile upstream, and Class C(T) for the remainder of the reach. Tribs to this reach, including Trapping Brook (-1), Elm Valley Brook (-5) and Indian Creek (-9), are primarily Class C; Indian Brook is Class C(TS). Railroad Brook (-12) and Marsh Creek (-12-1) listed separately.

# Dyke Creek, Upper, and tribs (0403-0071)

# No Known Impacts

## Waterbody Location Information

Revised: 08/01/2016

**Water Index No:** Ont 117-184  
**Hydro Unit Code:** Dyke Creek (0413000202)  
**Water Type/Size:** River/Stream 39.6 Miles  
**Description:** stream and tribs above Andover

**Water Class:** C  
**Drainage Basin:** Genesee River  
**Reg/County:** 9/Allegany (2)

## Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Threatened	Suspected
Fish Consumption	Fully Supported	Unconfirmed

### Conditions Evaluated

Habitat/Hydrology	Unknown
Aesthetics	Unknown

### Type of Pollutant(s) (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known:	---
Suspected:	Unknown Pollutants (biological impacts), Nutrients (phosphorus)
Unconfirmed:	---

### Source(s) of Pollutant(s)

Known:	---
Suspected:	Unknown Source
Unconfirmed:	Agriculture, Onsite/Septic Systems

## Management Information

**Management Status:** No Action Needed  
**Lead Agency/Office:** ext/WQCC  
**IR/305(b) Code:** Water Attaining All Standards (IR Category 1)

## Further Details

### Overview

This portion of Dyke Creek is assessed as having no known impacts; aquatic life is thought to be threatened by unspecified pollutants. Biological sampling results show slightly to non-impacted conditions with minimal anthropogenic impacts and with a community that is most similar to natural conditions.

### Use Assessment

This portion of Dyke Creek is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is evaluated as fully supported but threatened based on biological sampling that shows slight to non-impacted conditions. This sampling can also be used to infer that there no significant impacts to recreational (fishing) uses. (DEC/DOW, BWAM, February 2016)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH

Health Advisories and DEC/DOW, BWAM, January 2014)

#### Water Quality Information

A biological (macroinvertebrate) assessment of Dyke Creek in Andover (at Route 417) was conducted as part of the RIBS biological screening effort in 2009. Sampling results reflect slightly to non-impacted conditions and good water quality. The macroinvertebrate community shows some beginning signs of alteration, some expected sensitive species are not present and overall macroinvertebrate species richness is somewhat lower than expected, but overall there is still balanced distribution of all expected taxa. Aquatic life is fully supported and there are no other apparent water quality impacts. This evaluation is consistent with results from previous sampling at the site conducted in 1999. (DEC/DOW, BWAM/SBU, January 2015)

Non-impacted conditions are also consistent with citizen conducted biological sampling through the NYSDEC Water Assessment by Volunteer Monitors (WAVE) Program. A biological (macroinvertebrate) assessment of Dyke Creek in Andover, NY was conducted in 2015 as part of NYSDEC's citizen science stream monitoring program, WAVE. The macroinvertebrate community was found to be non-impacted and the waterbody was evaluated as fully supporting of aquatic life. (DEC/DOW, BWAM/WAVE, December 2014)

#### Source Assessment

Based on the biologic community composition, surrounding land use and other knowledge of the waterbody, the most likely source of nutrients to the waterbody is agricultural activities, though these sources should be verified. Organic inputs were identified as the likely cause of the impact in Andover. Livestock and other agricultural activity in the watershed are suspected sources of the organic and nutrient loads. Poorly operating onsite septic systems serving Andover have been previously noted. However individual system upgrades and some sewerage have resulted in water quality improvements. Any impacts to recreation should be verified. (DEC/DOW, BWAM/SBU, January 2015)

#### Management Actions

No specific management actions have been identified for the waterbody. Given the generally low level of impact, local stakeholders (SWCD/WQCC) – with input from Regional DOW staff – would be appropriate to oversee management activity.

#### Section 303(d) Listing

Upper Dyke Creek is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There appear to be no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

#### Segment Description

This segment includes the portion of the stream and all tribs above Railroad Brook (-12) in Andover. The waters of this portion of the stream are Class C. Tribs to this reach are primarily Class C; Best Hollow Brook is Class C(TS). Railroad Brook (-12) and Marsh Creek (-12-1) are listed separately.

# Railroad Brook, Marsh Creek and tribs (0403-0072) No Known Impacts

## Waterbody Location Information

Revised: 08/01/2016

**Water Index No:** Ont 117-184-12  
**Hydro Unit Code:** Dyke Creek (0413000202)  
**Water Type/Size:** River/Stream 27.7 Miles  
**Description:** entire length of both streams and tribs

**Water Class:** C  
**Drainage Basin:** Genesee River  
**Reg/County:** 9/Allegany (2)

## Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Fully Supported	Suspected
Fish Consumption	Fully Supported	Unconfirmed

### Conditions Evaluated

Habitat/Hydrology	Unknown
Aesthetics	Unknown

### Type of Pollutant(s)

(CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known:	---
Suspected:	---
Unconfirmed:	---

### Source(s) of Pollutant(s)

Known:	---
Suspected:	---
Unconfirmed:	---

## Management Information

**Management Status:** No Action Needed  
**Lead Agency/Office:** ext/WQCC  
**IR/305(b) Code:** Water Attaining All Standards (IR Category 1)

## Further Details

### Overview

Railroad Brook, Marsh Creek is assessed as having no known impacts; all evaluated uses are considered to be fully supported. This assessment is based on sampling conducted on Marsh/East Valley Creek and is thought to be representative of the larger waterbody segment. Pending verification of conditions in the remainder of the watershed, the assessment of no known impact is noted as suspected.

### Use Assessment

Railroad Brook, Marsh Creek is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Aquatic life is considered to be fully supported based on citizen conducted biological sampling through the NYSDEC Water Assessment by Volunteer Monitors (WAVE) Program that shows non-impacted conditions. This sampling can also be used to infer that there are no significant impacts to recreational (fishing) uses, although more specific sampling is necessary to confirm this is the case. (DEC/DOW, BWAM/SBU, December 2014)

There are no health advisories in place limiting the consumption of fish from this waterbody (beyond the general

advice for all waters). Fish consumption is considered to be fully supported based on the absence of any waterbody-specific advisory, but is noted as unconfirmed since routine monitoring of contaminants in fish is limited. (NYS DOH Health Advisories and DEC/DOW, BWAM, January 2014)

#### Water Quality Information

A biological (macroinvertebrate) assessment of Marsh Creek/East Valley Creek in Andover, NY was conducted in 2015 as part of NYSDEC's citizen science stream monitoring program, WAVE. The macroinvertebrate community was found to be non-impacted and the waterbody was evaluated as fully supporting of aquatic life.

#### Source Assessment

There are no apparent sources of pollutants to the waterbody.

#### Management Actions

No specific management actions have been identified or deemed necessary for the waterbody.

#### Section 303(d) Listing

The Railroad Brook, Marsh Creek segment is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts/impairments that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2016)

#### Segment Description

This segment includes the entire length of Railroad Brook (-12) and Marsh/East Valley Creek (-12-1) and all tribs. The waters of these stream and their tribs are primarily Class C; a portion of Marsh/East Valley Creek is Class C(TS).

# Andover Pond (0403-0056)

# Impaired

## Waterbody Location Information

Revised: 08/01/2016

<b>Water Index No:</b>	Ont 117-184-12-P164	<b>Water Class:</b>	C
<b>Hydro Unit Code:</b>	Dyke Creek (0413000202)	<b>Drainage Basin:</b>	Genesee River
<b>Water Type/Size:</b>	Lake/Reservoir	<b>Reg/County:</b>	9/Allegany (2)
<b>Description:</b>	7.6 Acres entire lake		

## Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Impaired	Known
Aquatic Life	Stressed	Suspected
Fish Consumption	Unassessed	-
<b>Conditions Evaluated</b>		
Habitat/Hydrology	Unknown	
Aesthetics	Fair	

**Type of Pollutant(s)** (CAPS indicate Major Pollutants/Sources that contribute to an Impaired/Precluded Uses)

Known: NUTRIENTS (phosphorus), HARMFUL ALGAL BLOOMS

Suspected: - - -

Unconfirmed: Low D.O./Oxygen Demand

**Source(s) of Pollutant(s)**

Known: - - -

Suspected: AGRICULTURE, Urban/Storm Runoff

Unconfirmed: Onsite/Septic Systems

## Management Information

**Management Status:** Restoration/Protection Strategy Needed

**Lead Agency/Office:** DOW/Reg9

**IR/305(b) Code:** Impaired Water Requiring a TMDL (IR Category 5), PROPOSED

## Further Details

### Overview

Andover Pond is assessed as an impaired waterbody due to recreation uses that are known to be impaired by elevated phosphorus levels and resulting algal growth, including harmful algal blooms. No specific sources have been identified, but sampling results and surrounding land use suggests various nonpoint sources, likely including agriculture, contribute to the impacts.

### Use Assessment

Andover Pond is a Class C waterbody, suitable for general recreation use and support of aquatic life, but not as a water supply or for public bathing.

Recreation use is considered to be impaired due to elevated nutrients (phosphorus), excessive algae, poor water clarity, and open water and shoreline harmful algal blooms. Aesthetic conditions of the lake are considered to be poor due to excessive algae and algal blooms. There have been no specific fishery or biological studies to assess aquatic life use, but based on observed conditions and recreational impacts, aquatic life is thought to be at least stressed. (DEC/DOW, BWAM/LMAS, July 2016)



Fish Consumption use is considered to be unassessed. There are no health advisories limiting the consumption of fish from this waterbody (beyond the general advice for all waters). However due to the presence of impacts/contaminants in the stream and the uncertainty as to whether the lack of a waterbody-specific health advisory is based on actual sampling, fish consumption use is noted as unassessed, rather than fully supported but unconfirmed. (NYS DOH Health Advisories and DEC/DOW, BWAM, December 2014)

#### Water Quality Information

Water quality sampling of Andover Pond has been conducted through the NYSDEC Lake Classification and Inventory (LCI) Program in 2015. Results of this sampling indicate the lake is best characterized as eutrophic, or highly productive. Chlorophyll/algal levels are well above criteria corresponding to impaired recreational uses, while phosphorus concentrations are typically very high. Lake clarity measurements indicate water transparency fail to meet the recommended minimum criteria for swimming beaches. Harmful algal blooms (HABs) have also been documented in both the open water and the along shoreline. (DEC/DOW, BWAM/LMAS, May 2016)

#### Source Assessment

Specific sources of pollutants to the waterbody have not been identified. However based on surrounding land use and other knowledge of the waterbody, various nonpoint sources, including agriculture, are the most likely sources of pollutants and impacts to the waterbody. Onsite wastewater/septic systems may also contribute to impacts, but these sources have not been investigated.

#### Management Actions

No specific management actions have been identified for the waterbody. The waterbody is recommended for inclusion on the next Section 303(d) List for eventual development of a TMDL or other restoration strategy (see below).

#### Section 303(d) Listing

Andover Pond is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. However this updated assessment suggests it is appropriate to include this waterbody on the next List. It is recommended that this waterbody be added to Part 1 of the List as an impaired waterbody requiring development of a TMDL to address phosphorus. (DEC/DOW, BWAM, July 2016)

#### Segment Description

This segment includes the entire area of the lake. The waters of the lake are Class C.