

# **Great Valley Creek Watershed** (0501000107)

## Water Index Number Pa

## Waterbody Segment

Pa-53-25	Great Valley Cr, Lower, and minor tribs (0201-0039)
Pa-53-25	Great Valley Cr, Middle, and minor tribs (0201-0012)
Pa-53-25	Great Valley Cr, Upper, and tribs (0201-0040)
Pa-53-25- 6	Wrights Creek and tribs (0201-0041)
Pa-53-25-11	Forks Creek and tribs (0201-0042)

## Category

Threatened No Known Impacts No Known Impacts No Known Impacts Threatened

## Great Valley Cr, Lower, and minor tribs (0201-0039)

## Waterbody Location Information

Water Index No:Pa-53-25Drain Basin:Allegheny RiverUnit Code:0501000107Class: BUpper AlleghenyWater Type/Size:River50.0 MilesReg/County:9/ Cattaraugus Co. (5)Description:stream and minor tribs, from mouth to Great ValleyStream and minor tribs, from mouth to Great ValleyStream and minor tribs, from mouth to Great Valley

## Water Quality Problem/Issue Information

<b>Uses Evaluated</b>	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Threatened	Known
Fish Consumption	Fully Supported	Unconfirmed
<b>Conditions Evaluate</b>	d	
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

### Type of Pollutant(s)

Known:	
Suspected:	UNKNOWN POLLUTANTS (biological impacts)
Unconfirmed:	Silt/Sediment, Nutrients, Pesticides

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

Known: ---Suspected: UNKNOWN SOURCE Unconfirmed: ---

## **Management Information**

<b>Management Status:</b>	Verification of Pollutants/Causes Needed
Lead Agency/Office:	DOW/BWAM
IR/305(b) Code:	Water Attaining All Standards (IR Category 1)

## **Further Details**

Overview

This portion of Great Valley Creek is assessed as being threatened due to aquatic life that is thought to be threatened by unspecified pollutants. Biological sampling results show slightly impacted conditions that approach the nonimpacted range with minimal anthropogenic impacts and with a community that has some similarity to natural conditions.

### Use Assessment

This portion of Great Valley 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.

## Threatened

Aquatic life is considered to be supported with minimal impacts. Biological sampling of the stream show conditions to be in the slightly impacted range, but approaching non-impacted and with a community that has some similarity to natural 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, July 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 Great Valley Creek in Kill Buck (at Route 417) was conducted as part of the RIBS biological screening effort in 2006. Sampling results reflect good water quality. Conditions were in the slightly impacted range but approaching non-impacted and communities have some similarity to natural conditions. 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. Previous sampling in 2002 and 1996 found non-impacted conditions. (DEC/DOW, BWAM/SBU, January 2015)

NYSDEC Rotating Intensive Basin Studies (RIBS) Intensive Network monitoring of Great Valley Creek in Salamanca/Kill Buck, Cattaraugus County, (at Route 219) was conducted in 2002. Sampling of the water column, sediments, and invertebrate tissues was conducted, as well as macroinvertebrate community analysis. Biological (macroinvertebrate) sampling revealed non-impacted water quality conditions. The fauna was dominated by clean-water mayflies. Water column sampling revealed mercury to be parameter(s) of concern. However, this is based on elevated concentrations in just one of nine samples collected. Toxicity testing of water column, sediment assessment and macroinvertebrate tissue analysis showed no significant impacts. Toxicity testing of sediments indicated some possible impacts. Taken together, these results indicate no significant water quality impacts and uses of the stream are considered to be fully supported. (DEC/DOW, BWAM/RIBS, January 2005)

### Source Assessment

Specific sources of pollutants to the waterbody have not been identified. Based on the biologic community composition, silt/sediment, nonpoint nutrients and pesticides are possible pollutants, but the community is als similar to natural conditions. (DEC/DOW, BWAM/SBU, January 2015)

### Management Action

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

### Section 303(d) Listing

This portion of Great Valley Creek is not included on the current (2014) 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 2015)

#### Segment Description

This segment includes the portion of the stream and selected/smaller tribs from the mouth to Forks Creek (-11) near Great Valley. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Hungry Hollow Creek (-3), Mutton Hollow Creek (-8) and Christian Valley Creek (-10), are Class C,C(T). Wrights Creek (-6) and Forks Creek (-11) are listed separately.

## Great Valley Cr, Middle, and minor tribs (0201-0012) No Known Impacts

## Waterbody Location Information

Water Index No:Pa-53-25Hydro Unit Code:Great Valley Creek (0501000107)Water Type/Size:River/Stream43.3 MilesDescription:stream and tribs, from Great Valley to Ellicottville

## 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
<b>Conditions Evaluated</b>		
Habitat/Hydrology	Unassessed	
Aesthetics	Unassessed	
Type of Pollutant(s)		

Known:	
Suspected:	
Unconfirmed:	

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

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

## **Management Information**

Management Status:No Action NeededLead Agency/Office:DOW/BWAMIR/305(b) Code:Water Attaining All Standards (IR Category 1)

## **Further Details**

Overview

This portion of Great Valley Creek is assessed as having no known impacts; all evaluated uses are considered to be fully supported. Sampling on a trib, Elk Creek (-18), revealed moderate impacts to the biological community. Though non-impacted conditions at three other sites are thought to be more reflective of overall water quality in the segment, follow-up investigation of impacts in Elk Creek are recommended.

### Use Assessment

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

Revised: 04/01/2016

Water Class:C(T)Drainage Basin:Allegheny RiverReg/County:9/Cattaraugus (5)

(CAPS indicate MAJOR Pollutants/Sources)

Aquatic life is considered to be fully supported based on biological sampling that shows non-impacted conditions at two sites on the Creek and at one of two trib sites. 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, 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

Biological (macroinvertebrate) assessments of Great Valley Creek at two sites in Ellicottville (below the WWTP and at Martha Street) were conducted as part of the RIBS biological screening effort in 2011 and 2006. Sampling results indicated non-impacted conditions and very good water quality. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Aquatic life community is fully supported. Assessments were also conducted on two tribs. Sampling of Sommerville Creek in Great Valley in 2011 found non-impacted conditions. But sampling of Elk Creek in Ellicottville in 2006 revealed moderately impacted conditions. Though non-impacted conditions at three other sites that were sampled more recently are thought to be more reflective of overall water quality in the segment, follow-up investigation of impacts in Elk Creek are recommended. (DEC/DOW, BWAM/SBU, January 2015)

### Source Assessment

Continued expansion and growth of the ski and recreational areas in and around Ellicottville results in a need to increase existing wastewater treatment plant capability. The WWTP permit was revised in 2014 to allow for increased discharge flow but also require more stringent effluent limits. These limits necessitate nitrogen removal in order to meet Class C(T) standards (stream was reclassified from C to C(T) in 1987) and low flow/intermittent stream conditions. Plans for a facility upgrade to meet the revised permit limits have been submitted and are under review. (DEC/DOW, Region 9, February 2015)

Additional residential and commercial development in support of the recreational areas also contributes to stress on the stream. Agricultural and other lands are being converted into ski areas, golf courses, condominiums and commercial businesses. In addition to water quality impacts from stormwater runoff, the impact on changing hydrology and flooding is also a concern. (DEC/DOW, Region 9, February 2015)

### Management Actions

No specific management actions have been identified for the overall waterbody. However localized issues regarding an upgrade to the Ellicottville WWTP are being addressed (see Source Assessment). Additional sampling to followup on possible impacts in Elk Creek is also recommended. (DEC/DOW, BWAM, February 2015)

### Section 303(d) Listing

This portion of Great Valley Creek is not included on the current (2016) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. This portion of Great Valley Creek was originally listed in 2014 and was delisted in 2016 due to reassessement indicating uses are fully supporting. (DEC/DOW, BWAM/WQAS, April 2016)

### Segment Description

This segment includes the portion of the stream and all tribs from Forks Creek (-11) near Great Valley to/including Elk Creek (-18) in Ellicottville. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Sommerville Valley Creek (-14), Plum Creek (-17) and Elk Creek (-18), are Class C,C(T). Forks Creek (-11) is listed

separately.

## **Great Valley Cr, Upper, and tribs (0201-0040)**

### Waterbody Location Information

Water Index No:Pa-53-25Unit Code:0501000107Class:C(T)Water Type/Size:River97.2 MilesDescription:stream and tribs, above Ellicottville

### Water Quality Problem/Issue Information

<b>Uses Evaluated</b>	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Fully Supported	Known
Fish Consumption	Fully Supported	Unconfirmed
<b>Conditions Evaluate</b>	d	
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	
Type of Pollutant(s)		

#### Known: - - -

Suspected:	-	-	,
Unconfirmed:	-	-	,

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

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

### **Management Information**

Management Status:	Verification of Problem Severity Needed
Lead Agency/Office:	DOW/BWAM
IR/305(b) Code:	Water Attaining All Standards (IR Category 1)
<b>Further Details</b>	

Overview

This portion of Great Valley Creek is assessed as having no known impacts; all evaluated uses are considered to be fully supported. Sampling on a trib, Devereaux Branch (-26), revealed slight impacts to the biological community, but approaching non-impacted conditions.

### Use Assessment

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

## Drain Basin: Allegheny River Upper AlleghenyReg/County: 9/ Cattaraugus Co. (5)

## **No Known Impacts**

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n nfidence

Aquatic life is considered to be fully supported based on biological sampling that shows non-impacted conditions at a site on the Creek; one trib site revealed slight impacts than approached 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, 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 Great Valley Creek in Ellicottville (at Martha Street) was conducted as part of the RIBS biological screening effort in 2011 and 2006. Sampling results indicated non-impacted conditions and very good water quality. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Aquatic life community is fully supported. An assessment was also conducted on a trib. Sampling of Devereaux Branch in Cattaraugus 2006 found slight impacts that approached non-impacted conditions and had similarity to natural conditions. (DEC/DOW, BWAM/SBU, January 2015)

### Source Assessment

Continued expansion and growth of the ski and recreational areas in and around Ellicottville results in a need to increase existing wastewater treatment plant capability. The WWTP permit was revised in 2014 to allow for increased discharge flow but also require more stringent effluent limits. These limits necessitate nitrogen removal in order to meet Class C(T) standards (stream was reclassified from C to C(T) in 1987) and low flow/intermittent stream conditions. Plans for a facility upgrade to meet the revised permit limits have been submitted and are under review. (DEC/DOW, Region 9, February 2015)

Additional residential and commercial development in support of the recreational areas also contributes to stress on the stream. Agricultural and other lands are being converted into ski areas, golf courses, condominiums and commercial businesses. In addition to water quality impacts from stormwater runoff, the impact on changing hydrology and flooding is also a concern. (DEC/DOW, Region 9, February 2015)

### Management Action

No specific management actions have been identified for the overall waterbody. However localized issues regarding an upgrade to the Ellicottville WWTP are being addressed (see Source Assessment). Additional sampling to follow-up on possible impacts in Elk Creek is also recommended. (DEC/DOW, BWAM, February 2015)

### Section 303(d) Listing

This portion of Great Valley Creek is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

### Segment Description

This segment includes the portion of the stream and all tribs above Elk Creek (-18) in Ellicottville. The waters of this portion of the stream are Class C(T). Tribs to this reach/segment, including Bryant Hill Creek (-22), McMurray Creek (-23), Beaver Meadows Creek (-25) and Devereaux Branch (-26), are Class C,C(T).

## Wrights Creek and tribs (0201-0041)

## Waterbody Location Information

Water Index No:	Pa-53-25- 6		Drain Basin:	Allegheny River
Unit Code:	0501000107	Class: C(T)		Upper Allegheny
Water Type/Size:	River	96.6 Miles	<b>Reg/County:</b>	9/ Cattaraugus Co.
<b>Description:</b>	entire stream a	and tribs		-

## Water Quality Problem/Issue Information

<b>Uses Evaluated</b>	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Fully Supported	Known
Fish Consumption	Fully Supported	Unconfirmed
<b>Conditions Evaluate</b>	d	
Habitat/Hydrology	Fair	
Aesthetics	Unknown	
Type of Pollutant(s)		

Known:	
Suspected:	
Unconfirmed:	

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

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

## **Management Information**

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

## **Further Details**

Overview

Wrights Creek is assessed as having no known impacts; all evaluated uses are considered to be fully supported.

Use Assessment

Wrights 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 considered to be fully supported based on biological sampling 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)

## **No Known Impacts**

(5)

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 Wrights Creek in Great Valley (at Route 219) was conducted as part of the RIBS biological screening effort in 2006. Sampling results indicated non-impacted conditions and very good water quality. Such samples are dominated by clean-water species and are most similar to a natural community with minimal human impacts. Aquatic life community is fully supported. An assessment was also conducted on a trib. Sampling of Willoughby Creek in Great Valley in 2011 also found non-impacted conditions most similar to natural communities. (DEC/DOW, BWAM/SBU, January 2015)

### Source Assessment

Specific sources of pollutants to waterbody have not been identified.

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

### Section 303(d) Listing

Wrights Creek is not included on the current (2014) NYS Section 303(d) List of Impaired/TMDL Waters. There are no impacts that would justify the listing of this waterbody. (DEC/DOW, BWAM/WQAS, January 2015)

### Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Barker Run (-1) and Willoughby Creek (-3), are Class C,C(T).

## Forks Creek and tribs (0201-0042)

## Waterbody Location Information

Water Index No:	Pa-53-25-11		Drain Basin:	Allegheny River
Unit Code:	0501000107	Class: C(T)		Upper Allegheny
Water Type/Size:	River	71.1 Miles	<b>Reg/County:</b>	9/ Cattaraugus Co. (5)
<b>Description:</b>	entire stream a	and tribs		

## Water Quality Problem/Issue Information

Uses Evaluated	Severity	Confidence
Water Supply	N/A	-
Public Bathing	N/A	-
Recreation	Fully Supported	Suspected
Aquatic Life	Threatened	Known
Fish Consumption	Fully Supported	Unconfirmed
<b>Conditions Evaluate</b>	ed	
Habitat/Hydrology	Unknown	
Aesthetics	Unknown	

### **Type of Pollutant(s)**

Known:	
Suspected:	UNKNOWN POLLUTANTS (biological impacts)
Unconfirmed:	Silt/Sediment

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

Known: Suspected: UNKNOWN SOURCE Unconfirmed: - - -

## **Management Information**

Management Status:	Verification of Pollutants/Causes Needed
Lead Agency/Office:	DOW/BWAM
IR/305(b) Code:	Water Attaining All Standards (IR Category 1)

## **Further Details**

Overview

Forks Creek is assessed as being threatened due to aquatic life that is thought to be threatened by unspecified pollutants. Biological sampling results show slightly impacted conditions that approach the non-impacted range with minimal anthropogenic impacts and with a community that has some similarity to natural conditions.

#### Use Assessment

Forks 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 considered to be supported with minimal impacts. Biological sampling of the stream show conditions

## **Threatened**

to be in the slightly impacted range, but approaching non-impacted and with a community that has some similarity to natural 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, July 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 Forks Creek above Great Valley (at Martin Road) was conducted as part of the RIBS biological screening effort in 2006. Sampling results reflect good water quality. Conditions were in the slightly impacted range but approaching non-impacted and communities have some similarity to natural conditions; silt/sedimentation and impoundment effects were also indicated. 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. Previous sampling in 2002 and 1996 found non-impacted conditions. (DEC/DOW, BWAM/SBU, January 2015)

### Source Assessment

Specific sources of pollutants to the waterbody have not been identified. Based on the biologic community composition, silt/sediment is a possible pollutant, but the community is also similar to natural conditions and exhibits some impoundment effects. (DEC/DOW, BWAM/SBU, January 2015)

### Management Action

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

### Section 303(d) Listing

Forks Creek is not included on the current (2014) 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 2015)

## Segment Description

This segment includes the entire stream and all tribs. The waters of the stream are Class C,C(T). Tribs to this reach/segment, including Haines Creek (-3), McGuan Creek (-5), Claire Creek (-7) and Morgan Hollow Creek (-8), are also Class C,C(T).