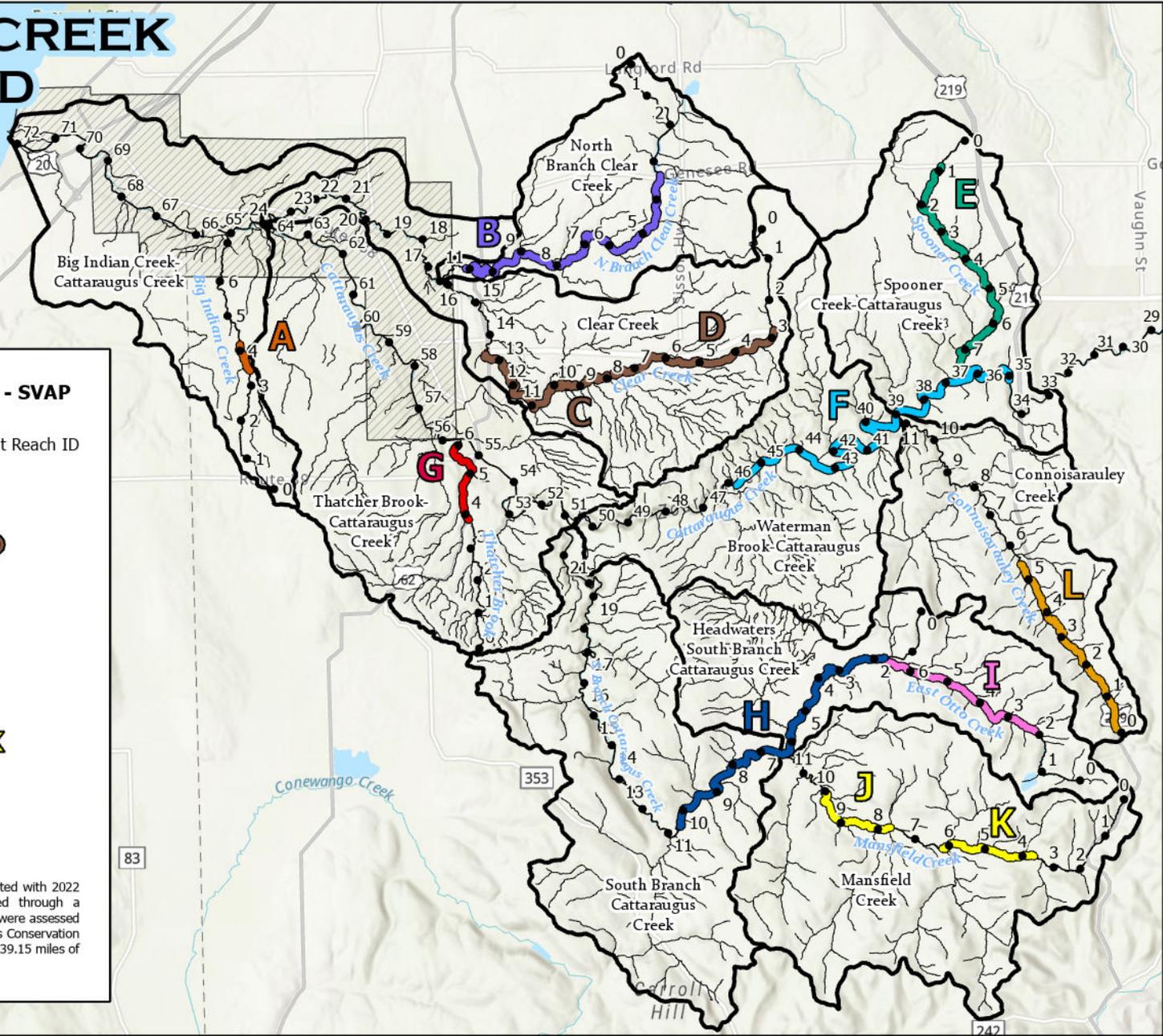


# CATTARAUGUS CREEK SUB-WATERSHED SVAP MILEAGE 2024

## Stream Visual Assessment Protocol - SVAP

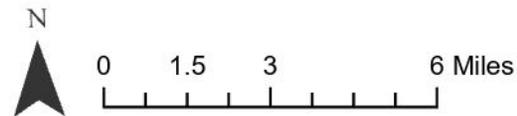
- 10 Calculated Mile Marker
  - SVAP Assessment Reach ID
  - Big Indian Creek
  - North Branch Clear Creek
  - Clear Creek
  - Spooner Creek
  - Cattaraugus Creek
  - Thatcher Brook
  - South Branch Cattaraugus Creek
  - East Otto
  - Mansfield Creek
  - Connoisarauley Creek
  - Waterways
  - Cattaraugus Territory
  - HUC 12 Sub-watershed
- A**  
**B**  
**C**  
**D**  
**E**  
**F**  
**G**  
**H**  
**I**  
**J**  
**K**  
**L**

NOTE: SVAP walked data collected 2024. Desktop analysis conducted with 2022 Orthoimagery and 2023 Eagleview imagery. Reach F assessed through a combination of field and desktop analysis data. Waterway reaches were assessed using a modified SVAP procedure from the USDA Natural Resources Conservation Service. 60.10 miles of waterways were assessed out of a total of 839.15 miles of waterways.



This map was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.

Esri, NASA, NGA, USGSEsri, Airbus DS, N Robinson, NCEAS, NLS, OS, NMA, Geodata styrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

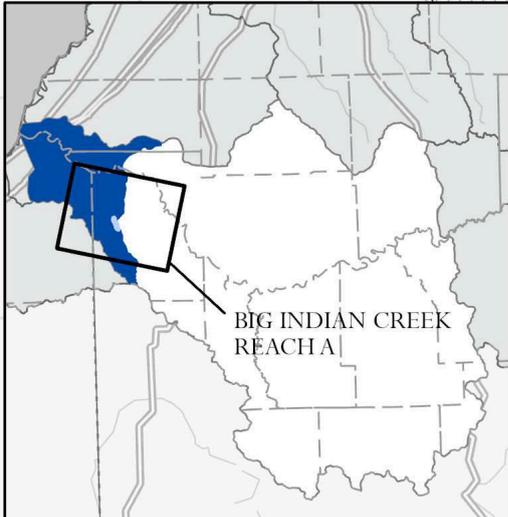
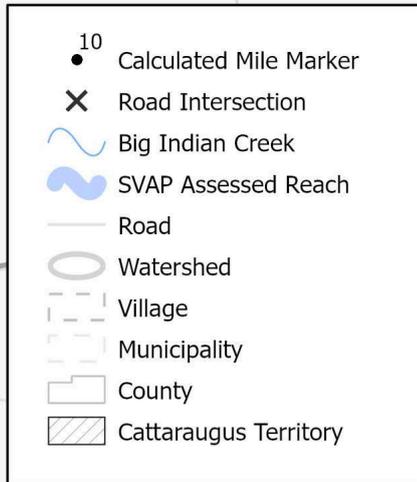


# BIG INDIAN CREEK

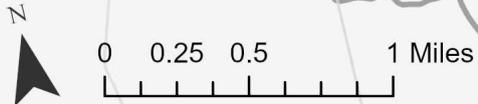
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH A

AVERAGE OVERALL SVAP RATING: **7.4**

## REACH A



BIG INDIAN-CATTARAUGUS CREEK SUB-WATERSHED



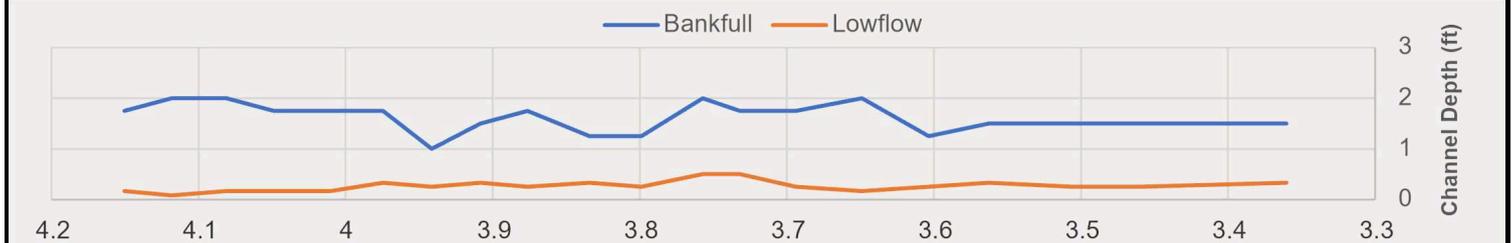
FLOW DIRECTION

Elevation Profile Substrate ◆ Bedrock/Concrete ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay

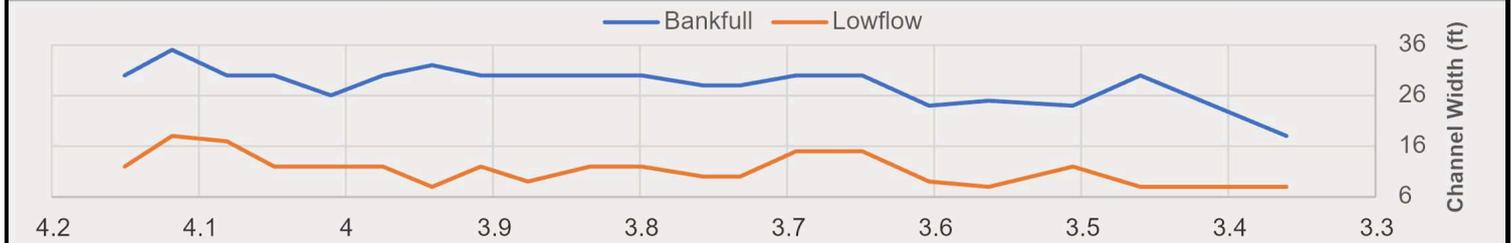


## REACH A

Channel Depth



Channel Width



← FLOW DIRECTION Creek Mile (4.15 at Tailwater, 3.36 at Headwater) FLOW DIRECTION →

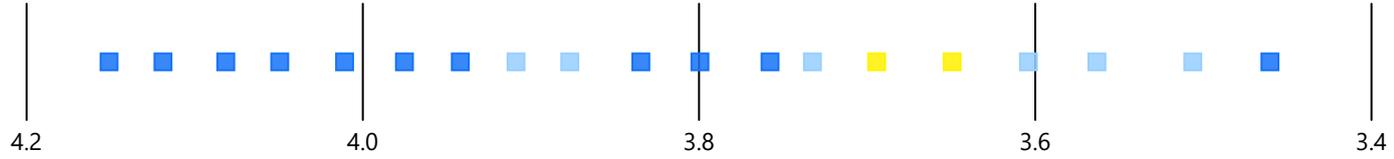
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH A

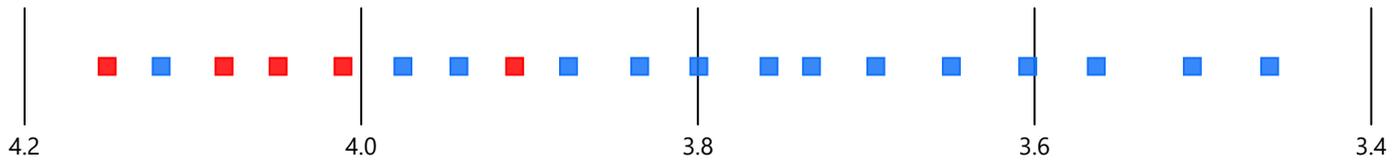
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre



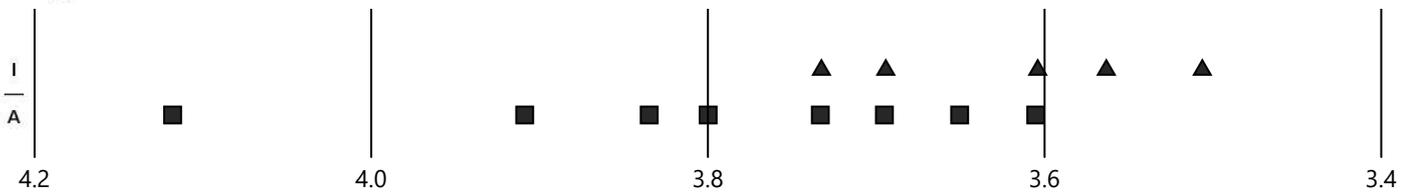
### Stream Bank Hardening

■ No ■ Yes



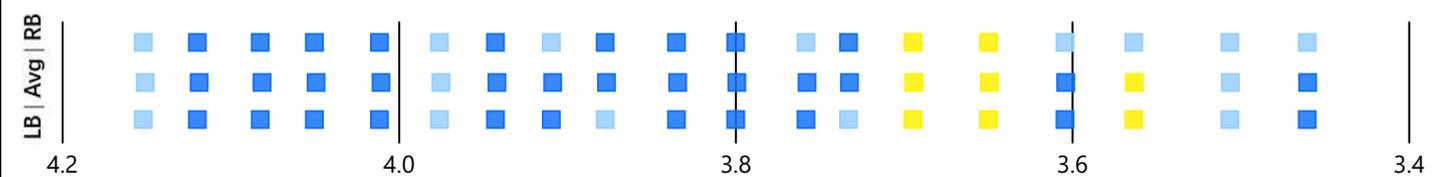
### Aggradation/Incision

■ Aggradation ▲ Incision



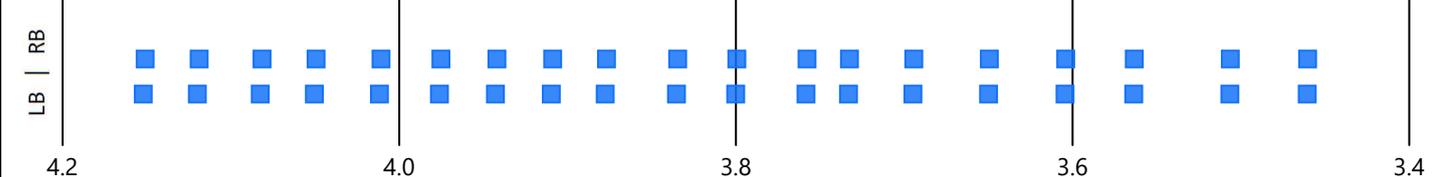
### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre



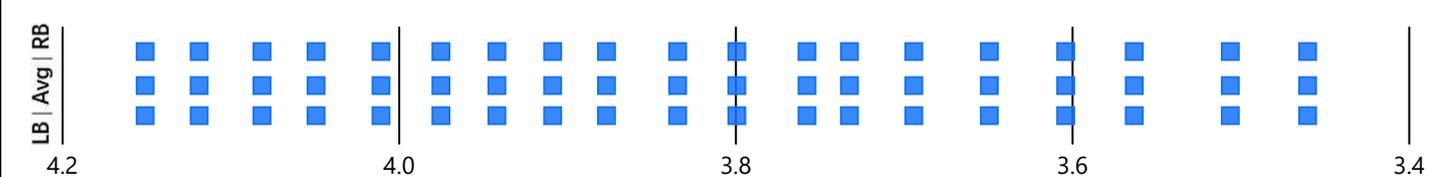
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

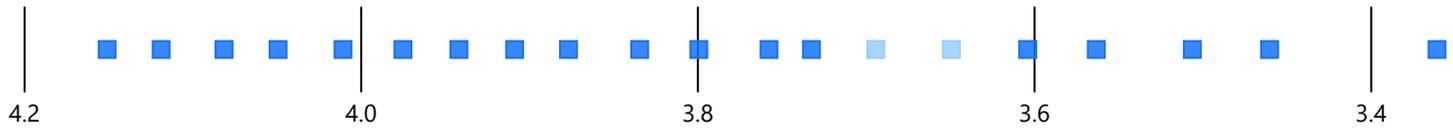
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH A

Water Appearance

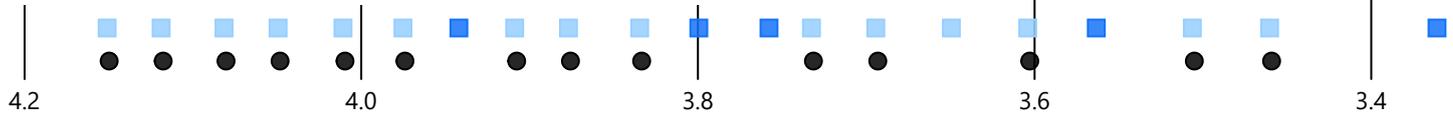
Score ■ Excellent ■ Good



Nutrient Enrichment

■ Low ■ Mild

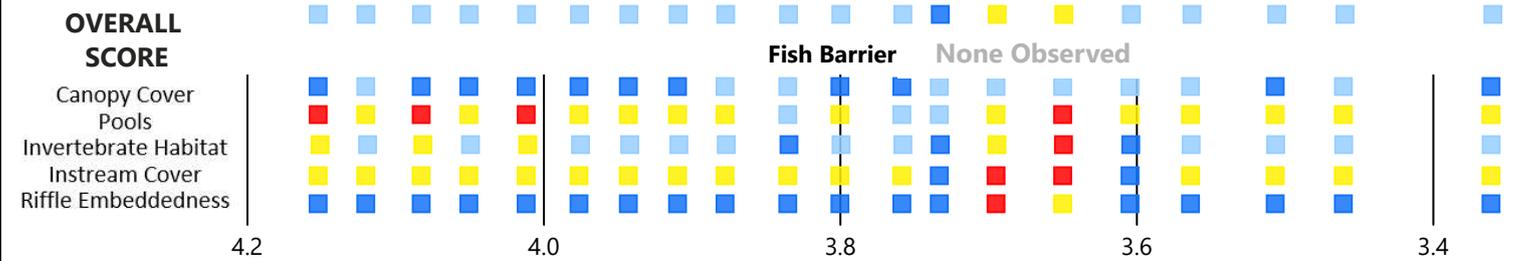
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



Fish Habitat

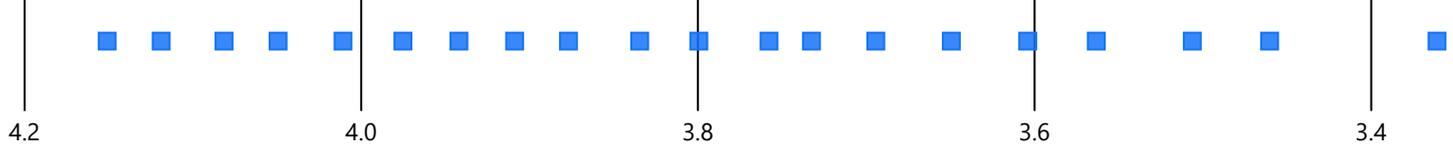
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



Manure Presence

■ None



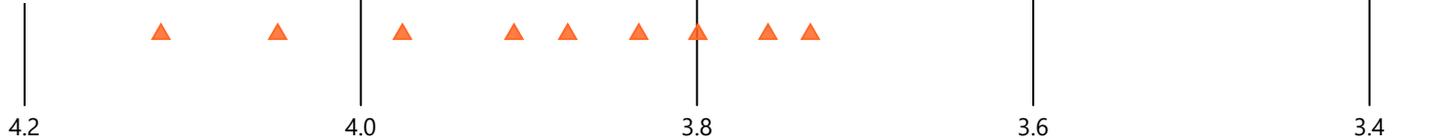
Invasive Species

■ Multiflora Rose



Aquatic Vegetation

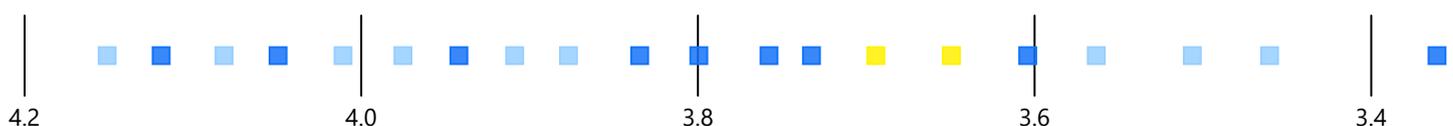
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

BIG INDIAN CREEK

Score ■ Excellent ■ Good ■ Mediocre



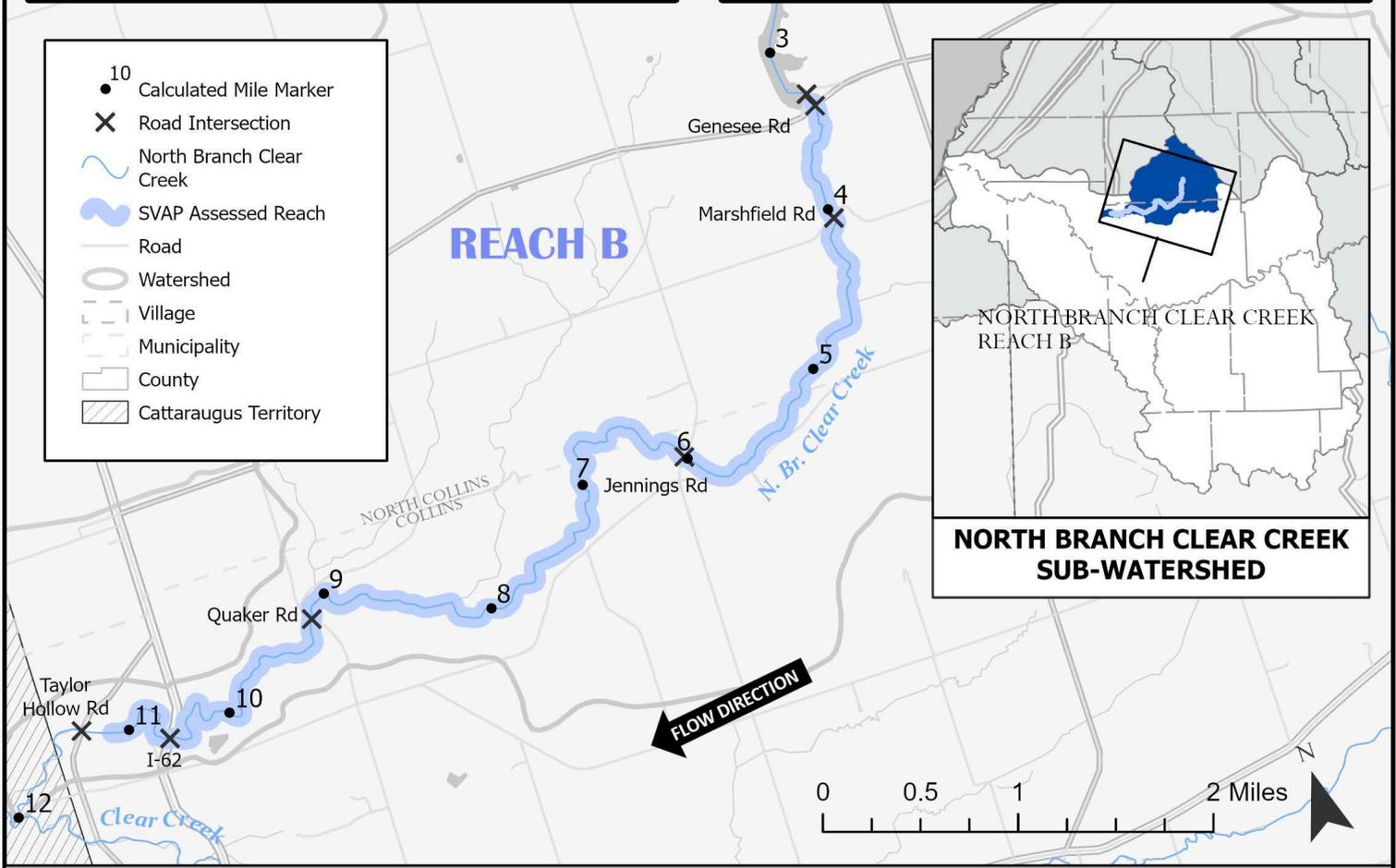
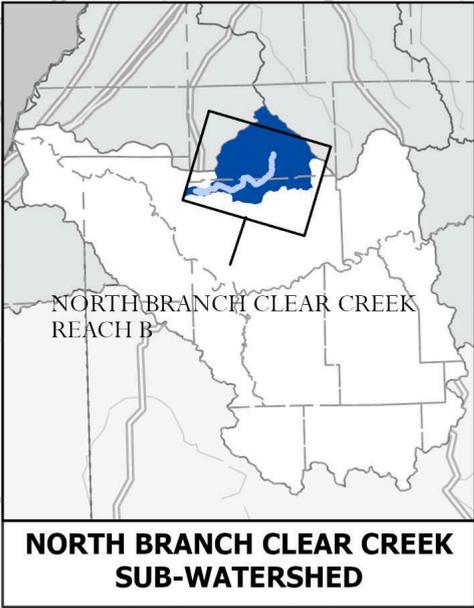
← FLOW DIRECTION Creek Mile (4.15 at Tailwater, 3.36 at Headwater) ← FLOW DIRECTION

# NORTH BRANCH CLEAR CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH B

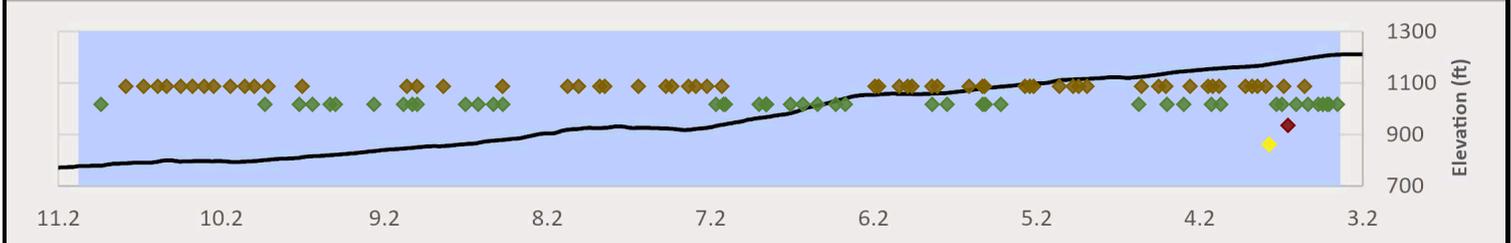
AVERAGE OVERALL SVAP RATING: **6.3**

- 10 Calculated Mile Marker
- ✕ Road Intersection
- ~ North Branch Clear Creek
- ~ SVAP Assessed Reach
- Road
- Watershed
- - - Village
- - - Municipality
- County
- ▨ Cattaraugus Territory



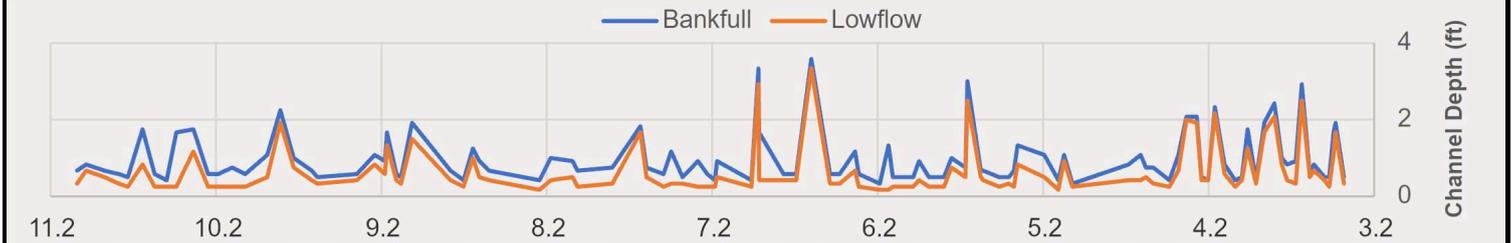
## Elevation Profile

Substrate: ◆ Bedrock/Concrete ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay

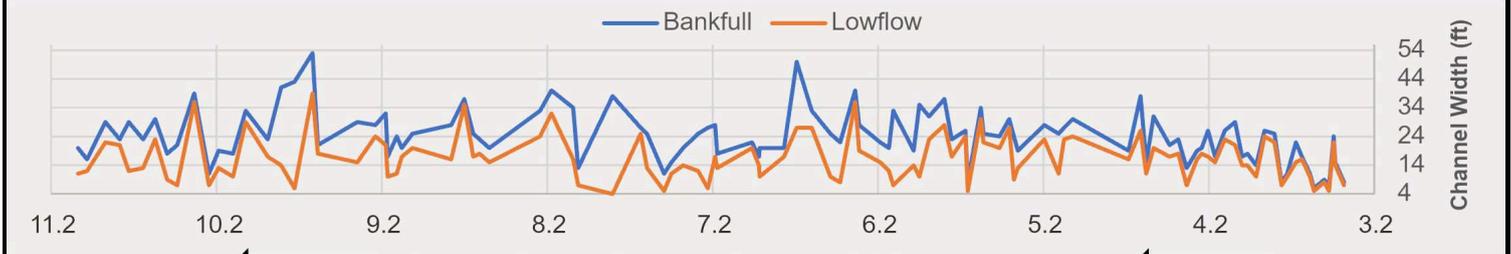


## REACH B

## Channel Depth



## Channel Width



← **FLOW DIRECTION** **Creek Mile (11.04 at Tailwater, 3.38 at Headwater)** **FLOW DIRECTION** →

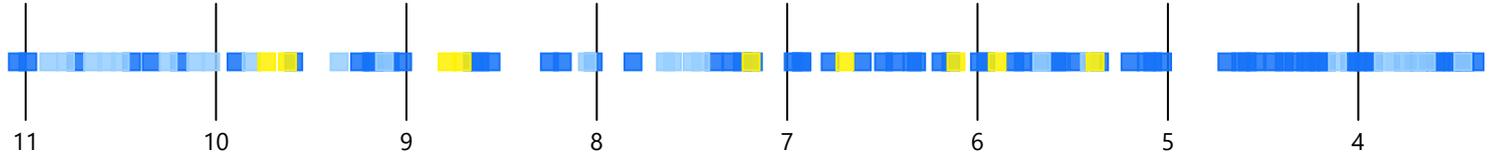
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH B

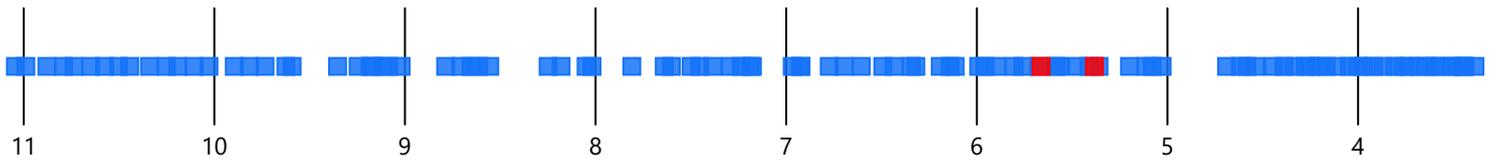
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre



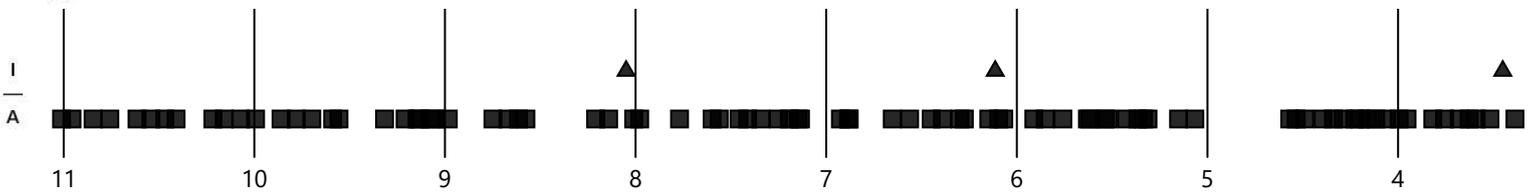
### Stream Bank Hardening

■ No ■ Yes



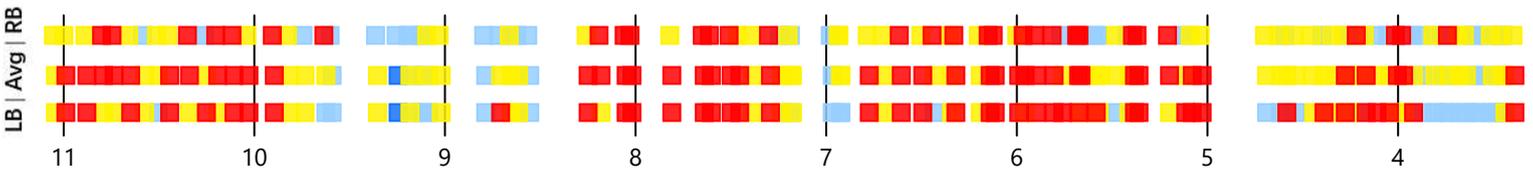
### Aggradation/Incision

■ Aggradation ▲ Incision



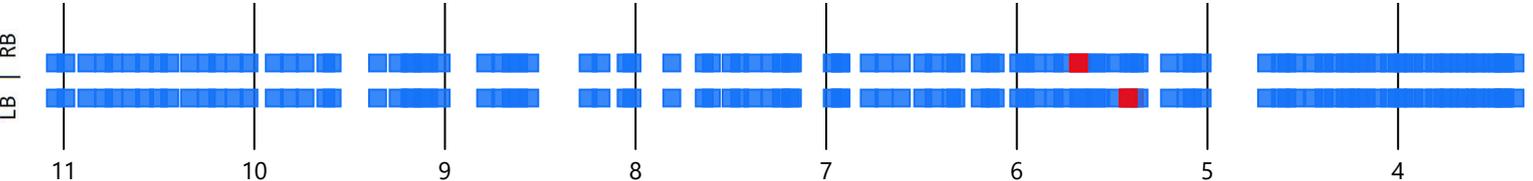
### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



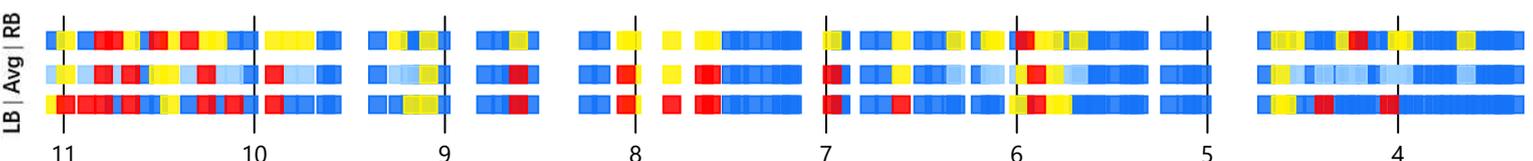
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH B

Water Appearance

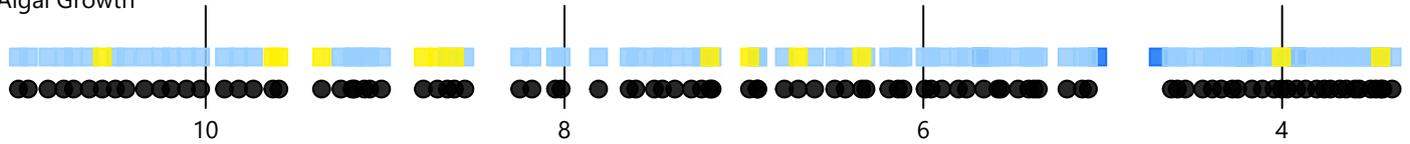
Score ■ Excellent ■ Good



Nutrient Enrichment

■ Low ■ Mild ■ Moderate

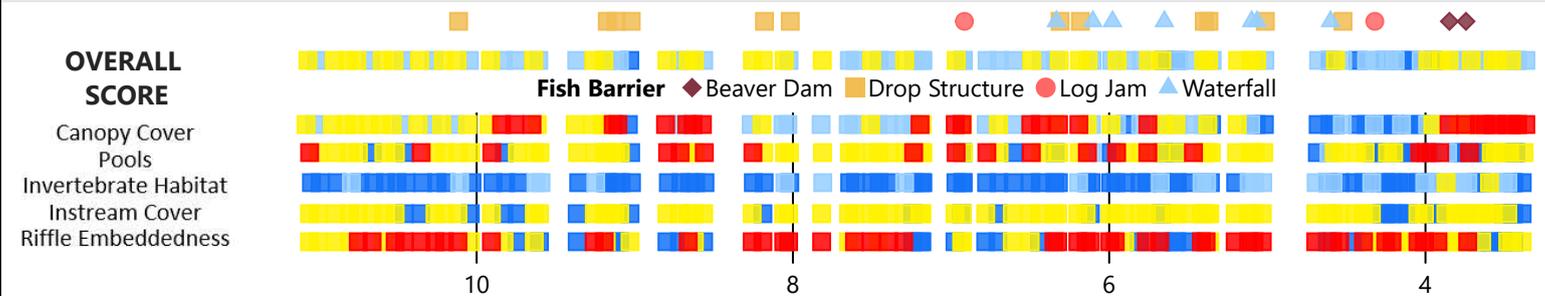
Notes ● Algal Growth



Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



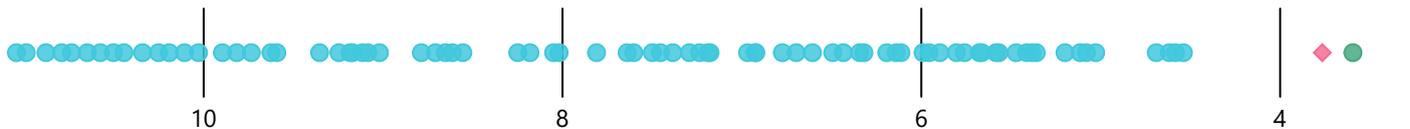
Manure Presence

■ Evidence of Animals in Zone ■ Extensive Manure/CFO Pipes ■ None



Invasive Species

◆ Angelica ● Japanese Knotweed ● Parsnip



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

NORTH BRANCH CLEAR CREEK

Score ■ Excellent ■ Good ■ Mediocre

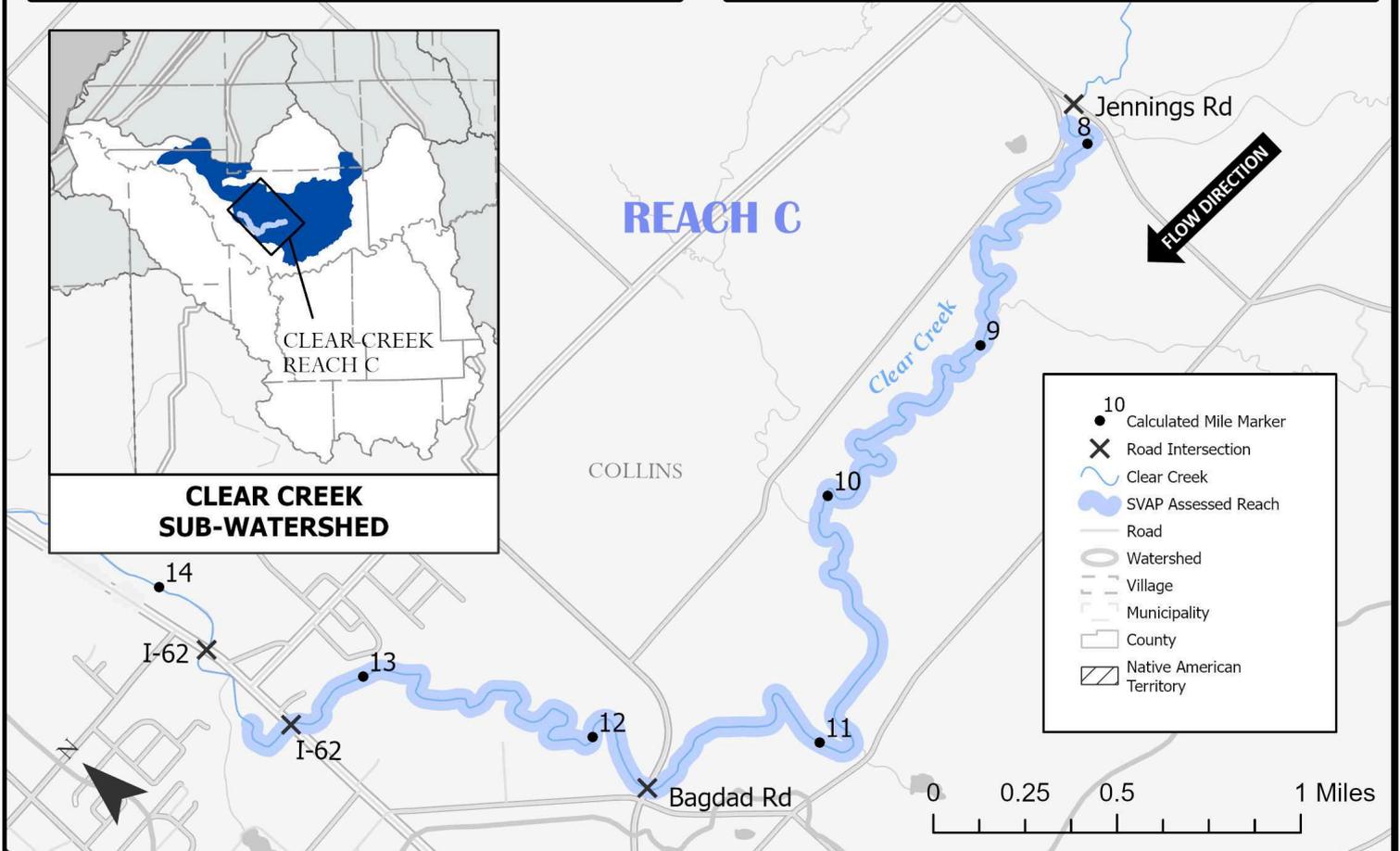


← FLOW DIRECTION Creek Mile (11.04 at Tailwater, 3.38 at Headwater) ← FLOW DIRECTION

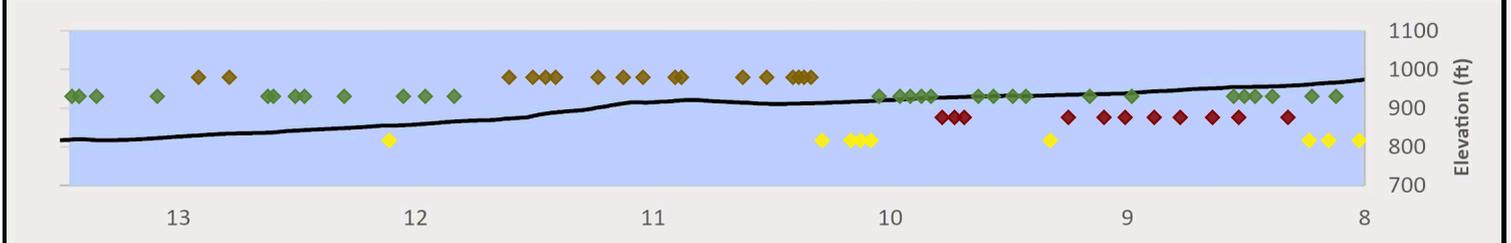
# CLEAR BROOK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH C

AVERAGE OVERALL SVAP RATING: **6.0**

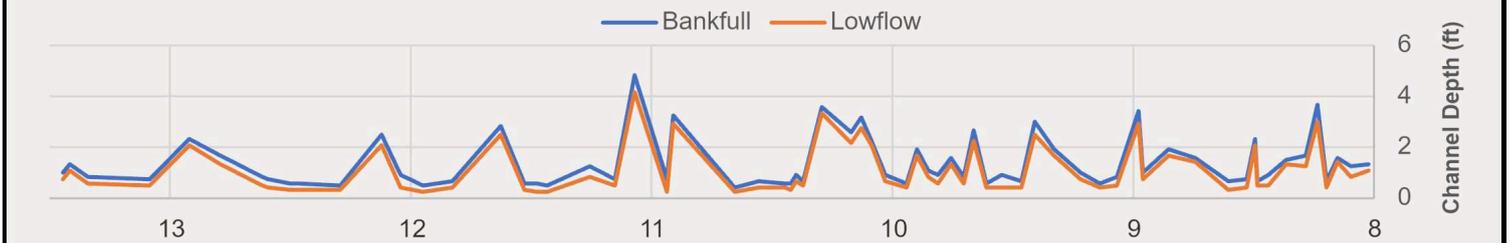


**Elevation Profile** Substrate ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay

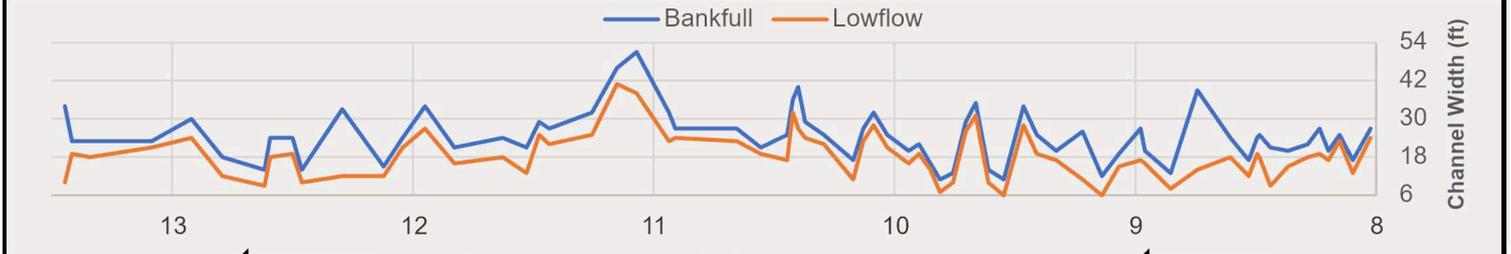


**REACH C**

**Channel Depth**



**Channel Width**



← **FLOW DIRECTION** **Creek Mile (13.44 at Tailwater, 8.02 at Headwater)** **FLOW DIRECTION** →

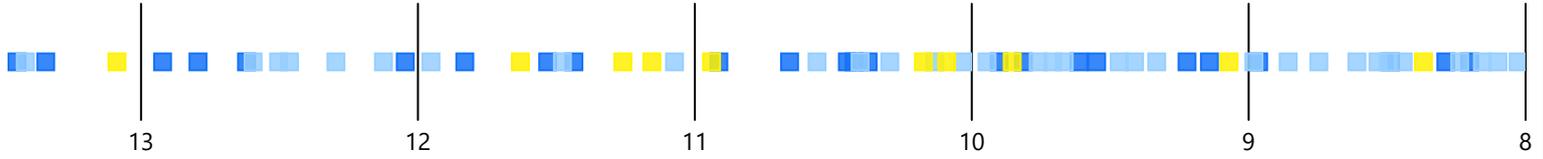
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH C

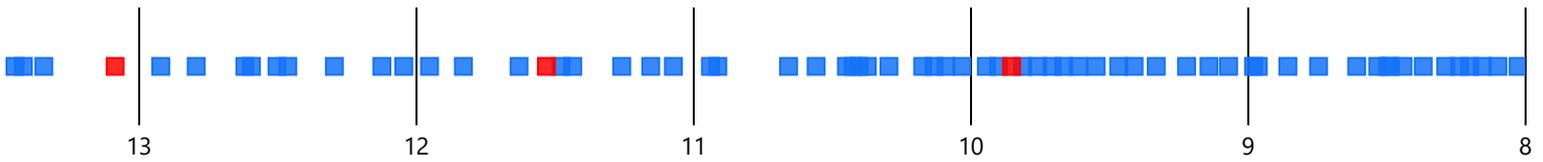
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre



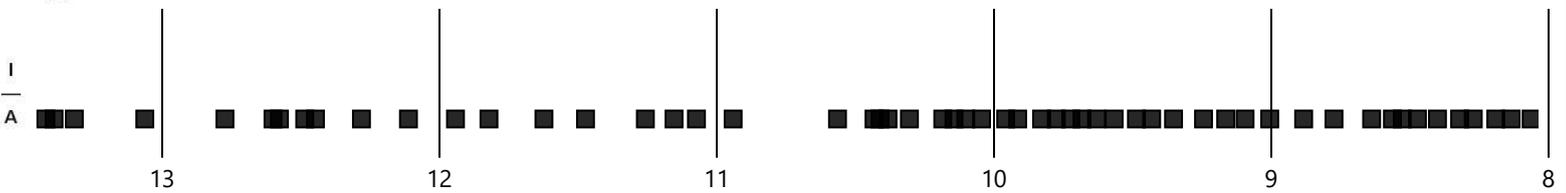
### Stream Bank Hardening

■ No ■ Yes



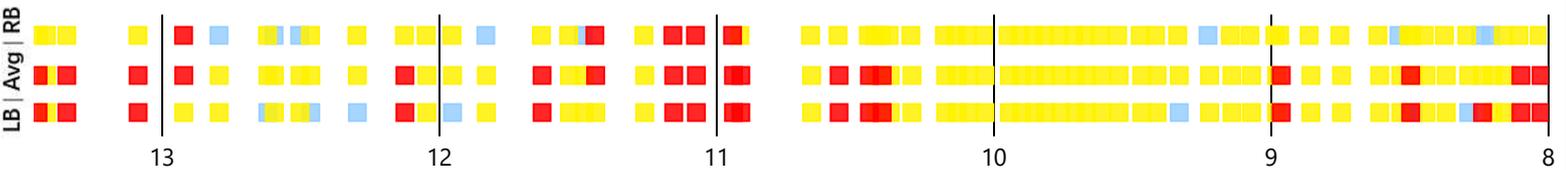
### Aggradation/Incision

■ Aggradation ▲ Incision



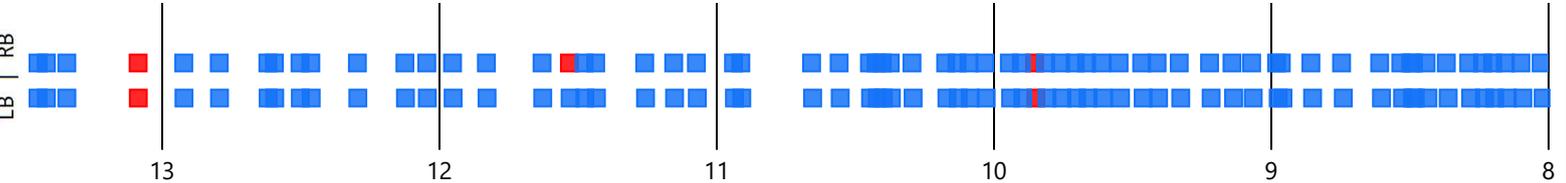
### Bank Stability

Score ■ Mediocre ■ Poor



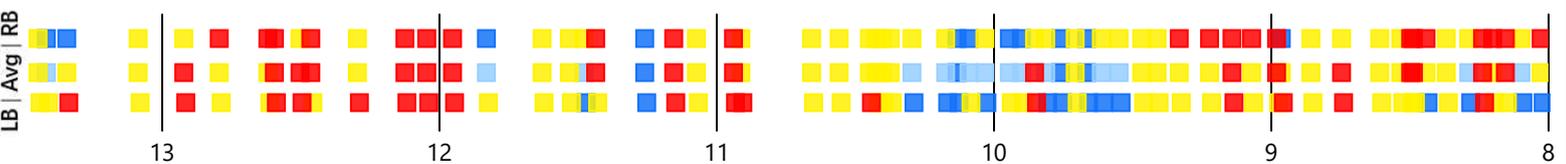
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



# REACH C

## Water Appearance

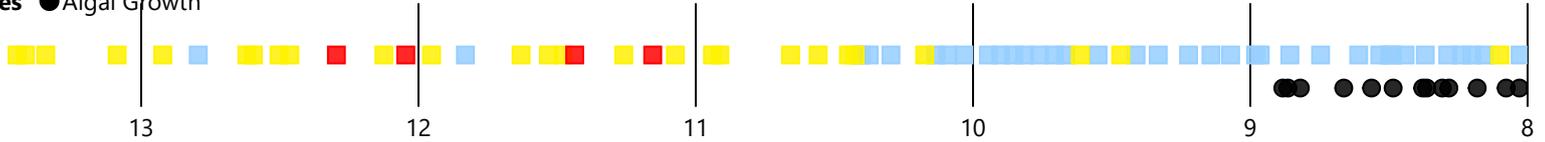
Score ■ Excellent ■ Good ■ Mediocre



## Nutrient Enrichment

■ Mild ■ Moderate ■ Severe

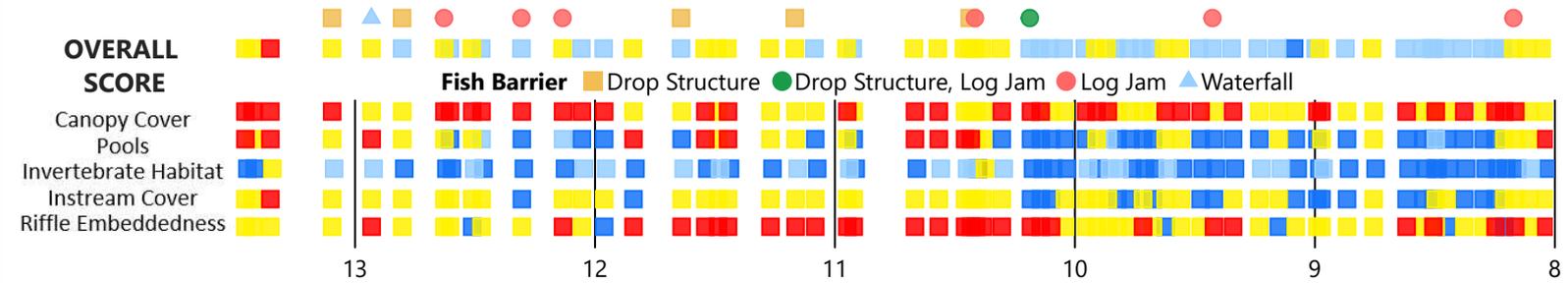
Notes ● Algal Growth



## Fish Habitat

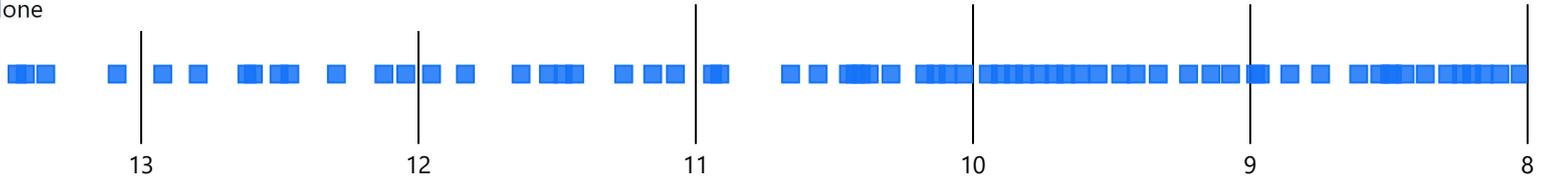
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



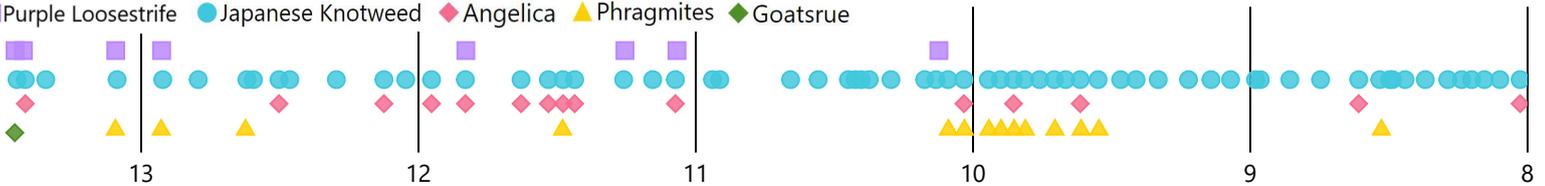
## Manure Presence

■ None



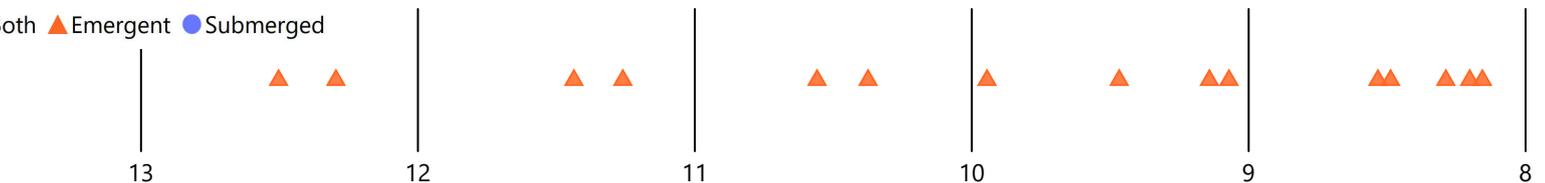
## Japanese Knotweed

■ Purple Loosestrife ■ Japanese Knotweed ■ Angelica ■ Phragmites ■ Goatsrue



## Aquatic Vegetation

■ Both ■ Emergent ■ Submerged



## OVERALL SVAP RATING

CLEAR CREEK REACH C

Score ■ Good ■ Mediocre

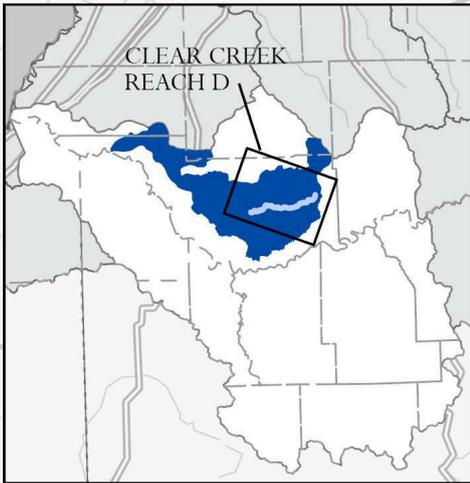


← FLOW DIRECTION Creek Mile (13.44 at Tailwater, 8.02 at Headwater) ← FLOW DIRECTION

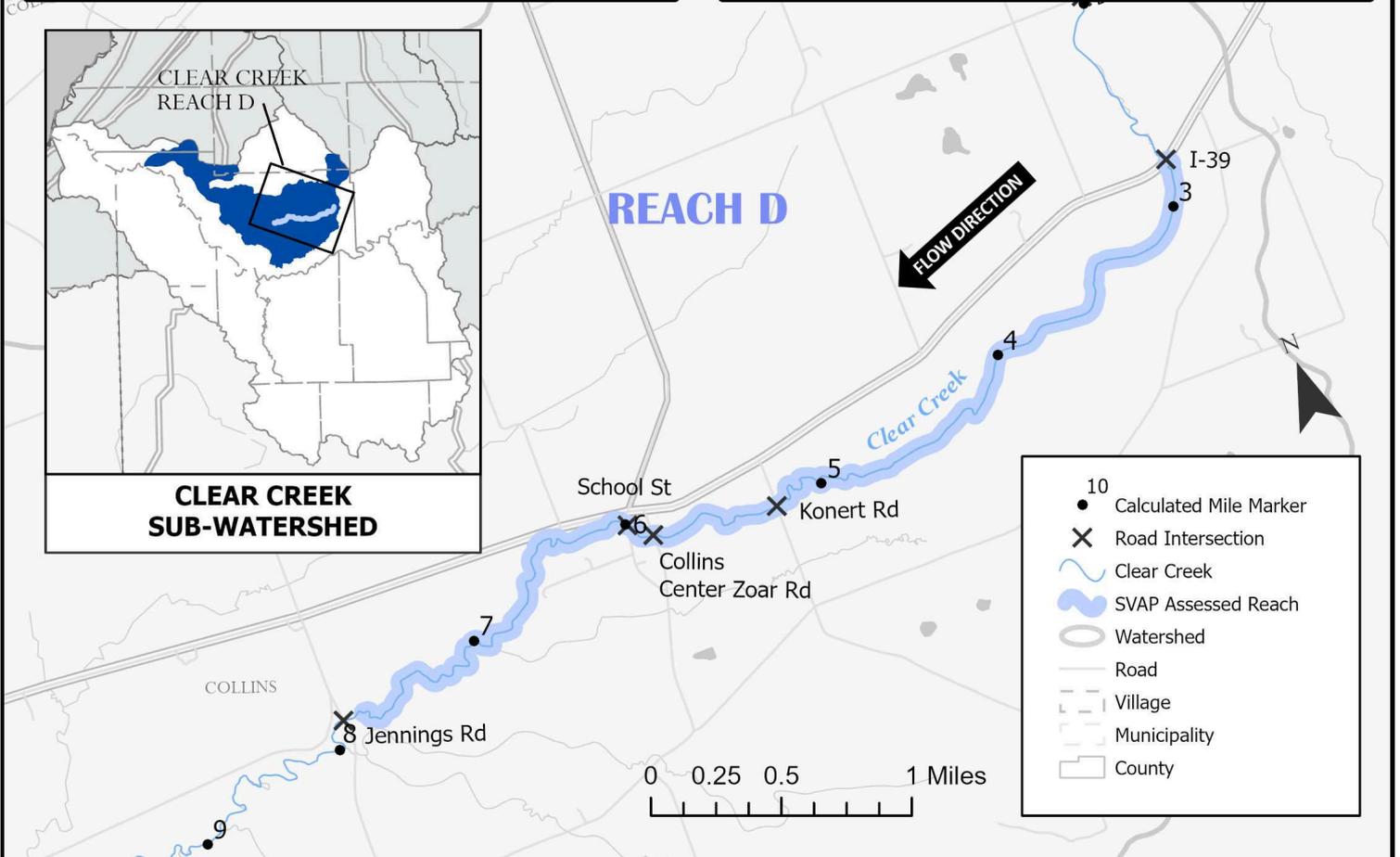
# CLEAR BROOK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH D

AVERAGE OVERALL SVAP RATING: **5.2**

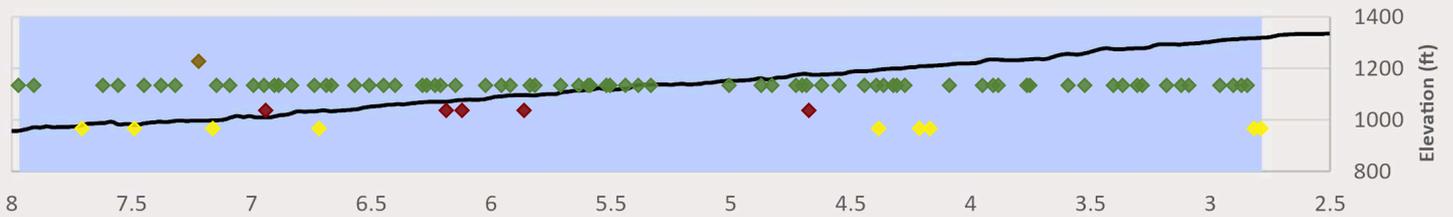


CLEAR CREEK SUB-WATERSHED



## Elevation Profile

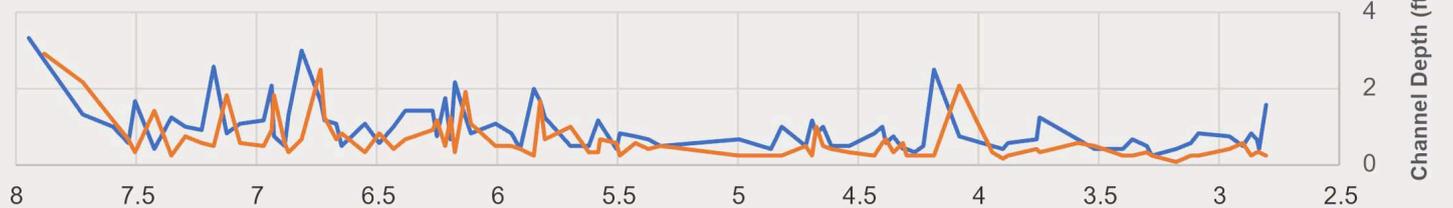
Substrate: ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



## REACH D

## Channel Depth

— Bankfull — Lowflow



## Channel Width

— Bankfull — Lowflow



← FLOW DIRECTION

Creek Mile (7.95 at Tailwater, 2.80 at Headwater)

← FLOW DIRECTION

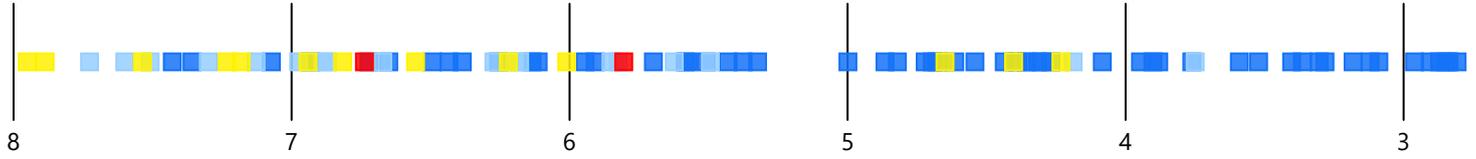
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH D

## Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



## Stream Bank Hardening

■ No ■ Yes



## Aggradation/Incision

■ Aggradation ▲ Incision



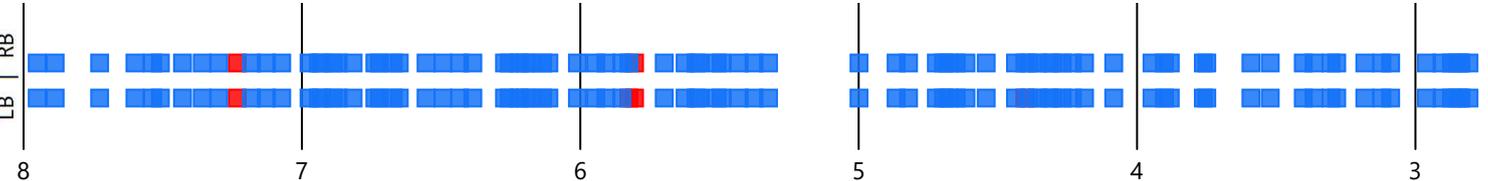
## Bank Stability

Score ■ Good ■ Mediocre ■ Poor



## Bank Condition

■ Hardened Structure ■ Natural



## Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



← FLOW DIRECTION
Creek Mile (7.95 at Tailwater, 2.80 at Headwater)
FLOW DIRECTION →

REACH D

Water Appearance

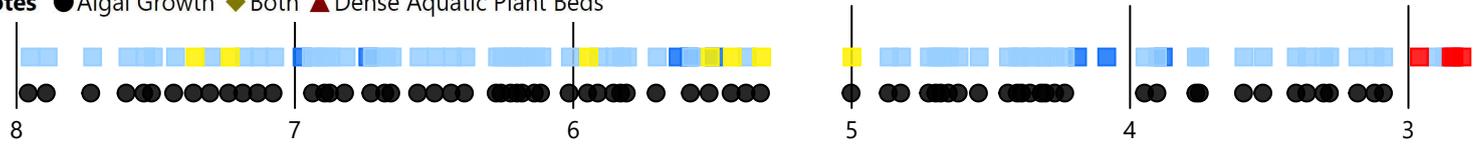
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

■ Low ■ Mild ■ Moderate ■ Severe

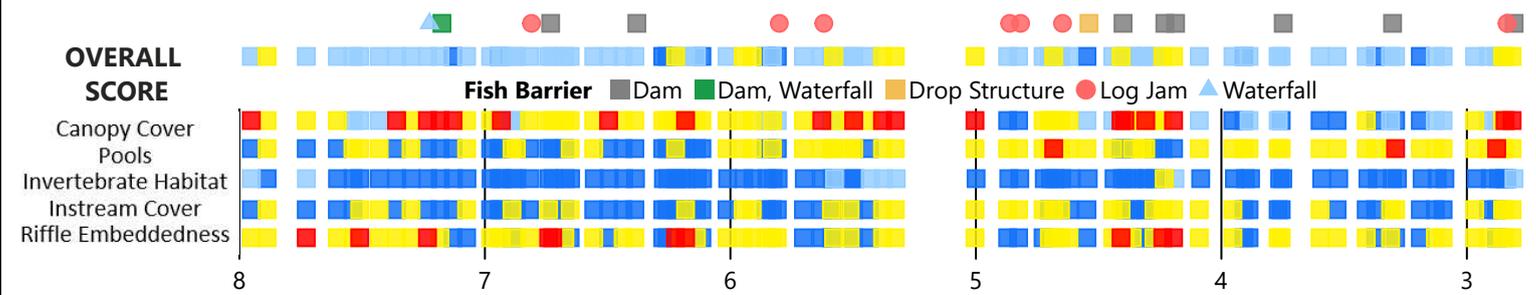
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



Manure Presence

■ Evidence of Animals in Zone ■ Extensive Manure/CFO Pipes ■ None



Knotweed

● Japanese Knotweed ◆ Angelica ▲ Phragmites



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

CLEAR CREEK REACH D

Score ■ Excellent ■ Good ■ Mediocre

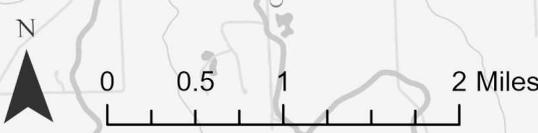
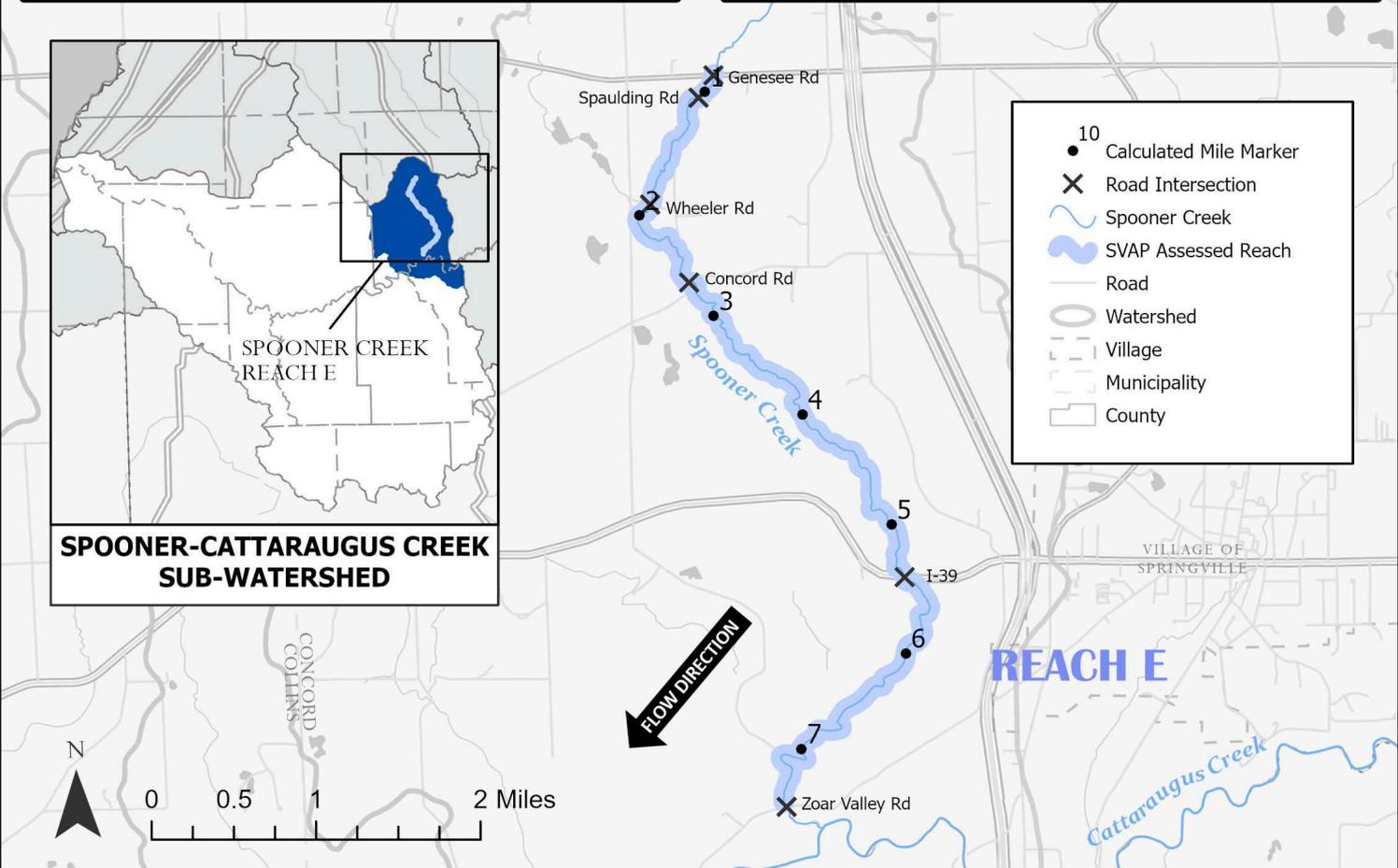
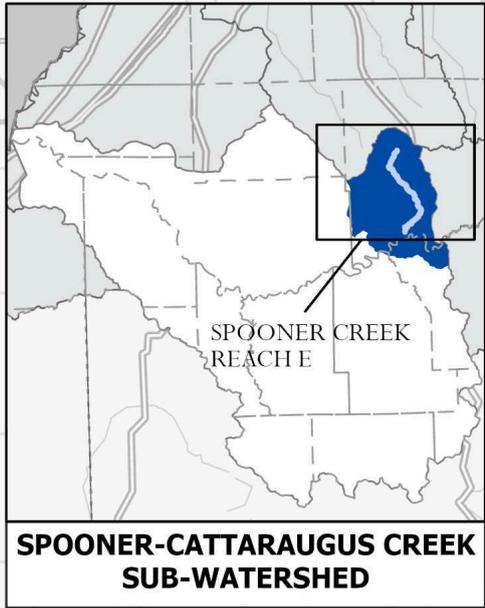


← FLOW DIRECTION Creek Mile (7.95 at Tailwater, 2.80 at Headwater) ← FLOW DIRECTION

# SPOONER CREEK

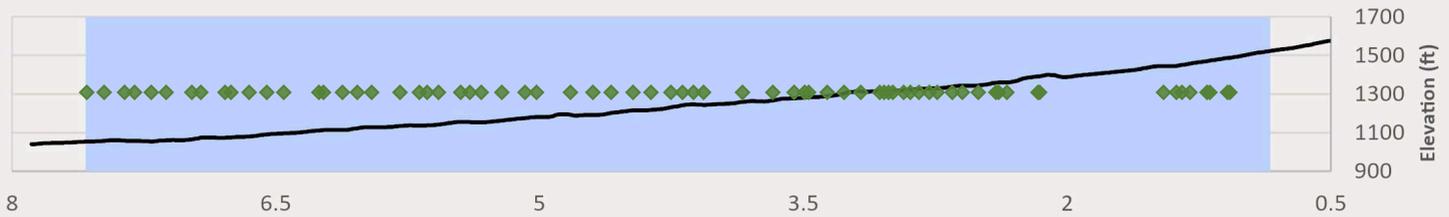
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH E

AVERAGE OVERALL SVAP RATING: **6.2**



## Elevation Profile

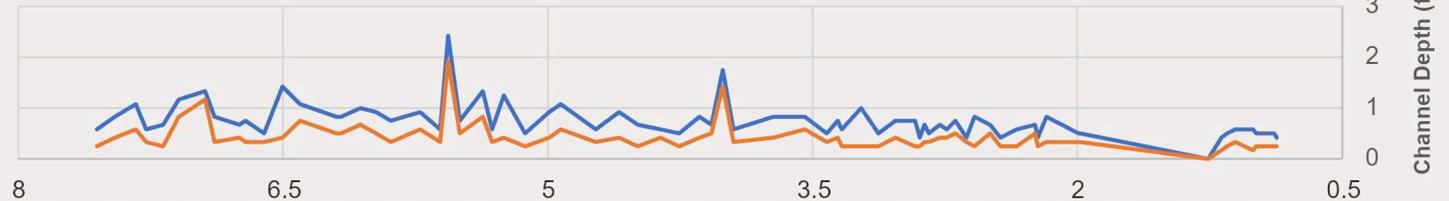
Substrate ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



## REACH E

## Channel Depth

— Bankfull — Lowflow



## Channel Width

— Bankfull — Lowflow



← FLOW DIRECTION Creek Mile (7.56 at Tailwater, 0.87 at Headwater) FLOW DIRECTION →

# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH E

### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



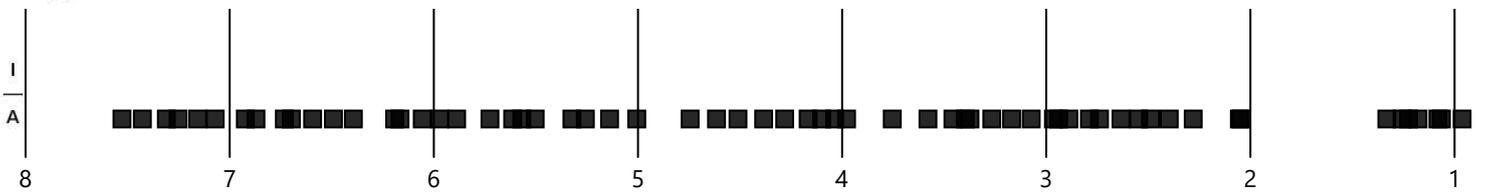
### Stream Bank Hardening

■ No ■ Yes



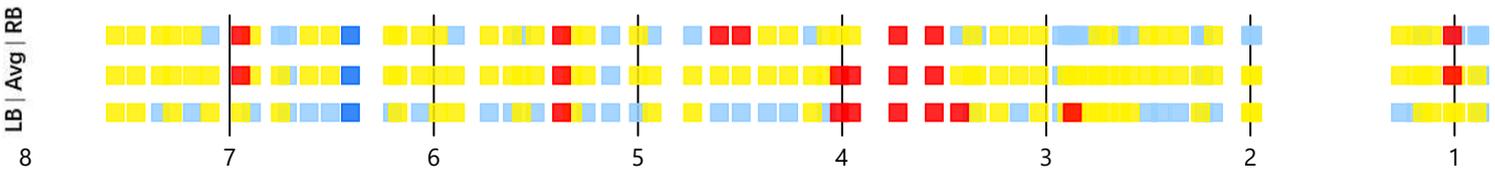
### Aggradation/Incision

■ Aggradation ▲ Incision



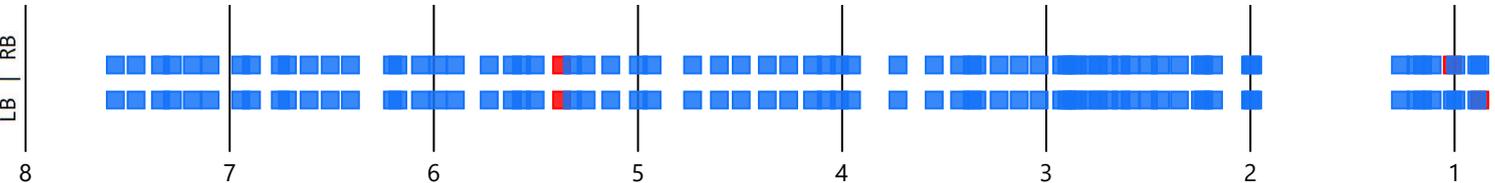
### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



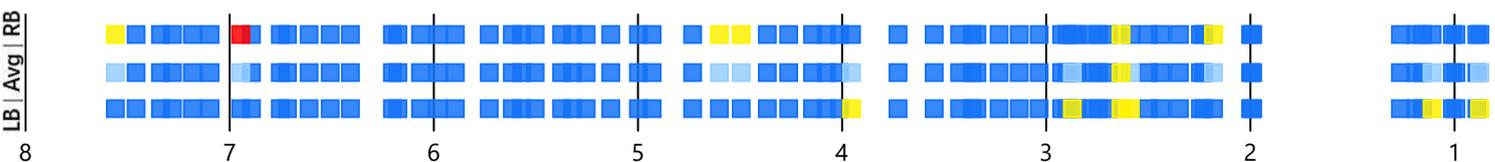
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH E

Water Appearance

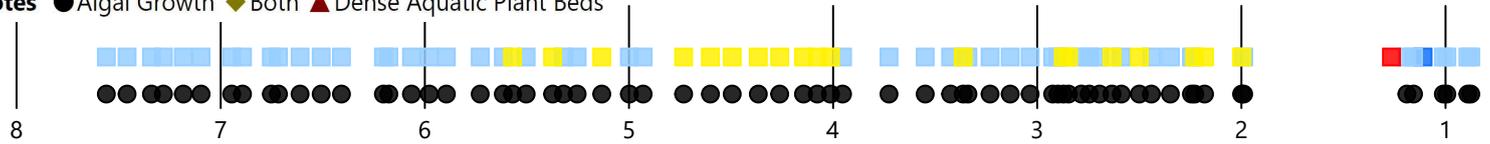
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

■ Low ■ Mild ■ Moderate ■ Severe

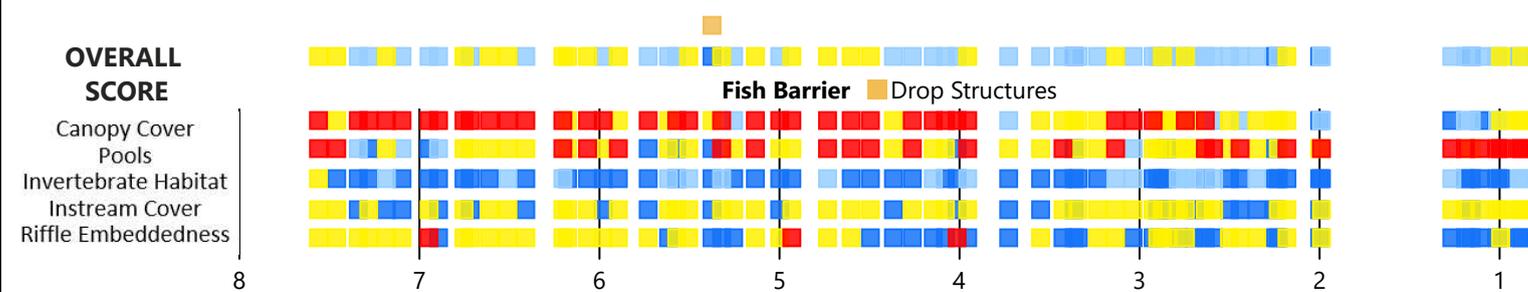
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



Manure Presence

■ None



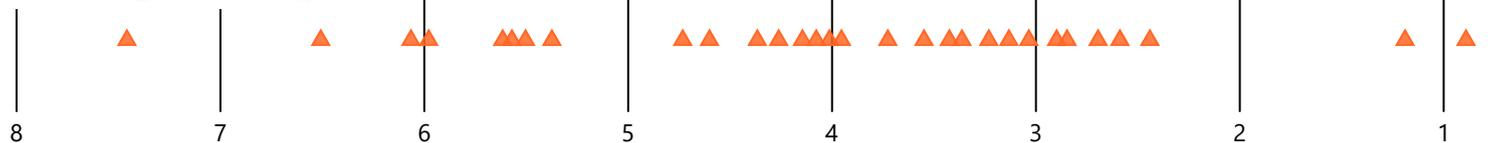
Invasive Species

▲ Angelica



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

SPOONER CREEK

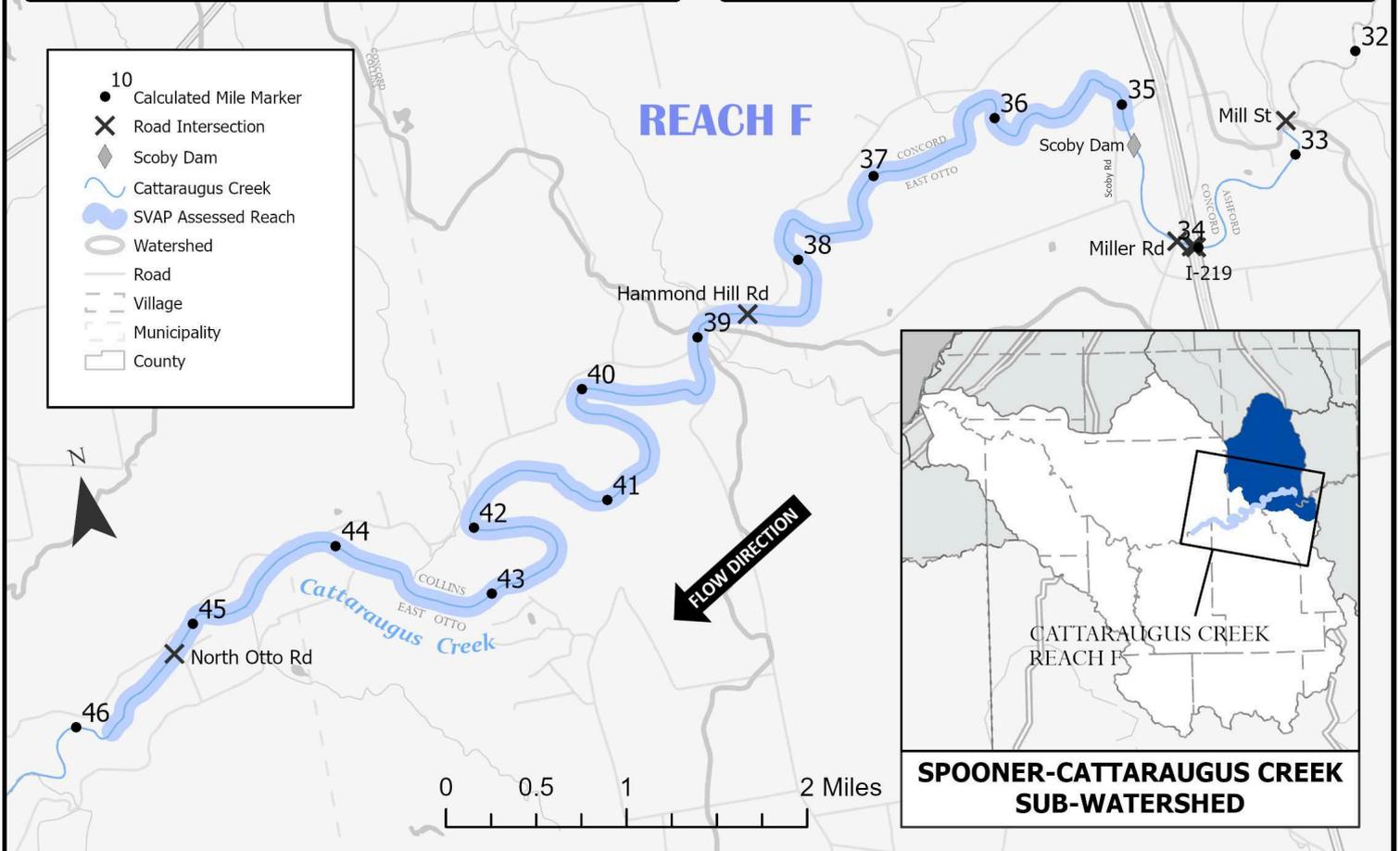
Score ■ Excellent ■ Good ■ Mediocre



# CATTARAUGUS CREEK

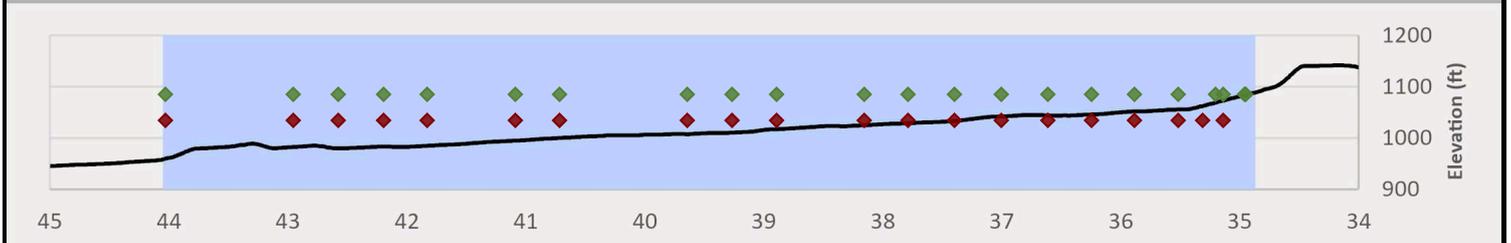
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH F

AVERAGE OVERALL SVAP RATING: **6.1**

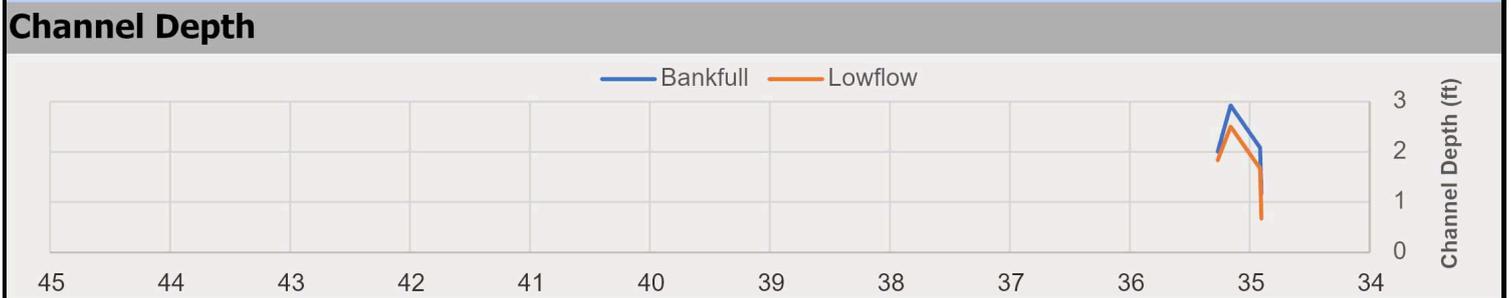


## Elevation Profile

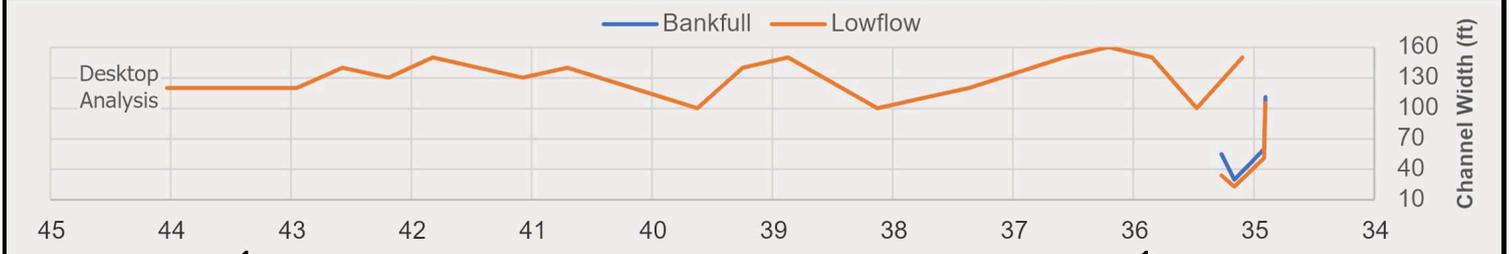
Substrate: ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



## Channel Depth



## Channel Width



← **FLOW DIRECTION** Creek Mile (44.03 at Tailwater, 34.90 at Headwater) **FLOW DIRECTION** →

# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH F

### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre



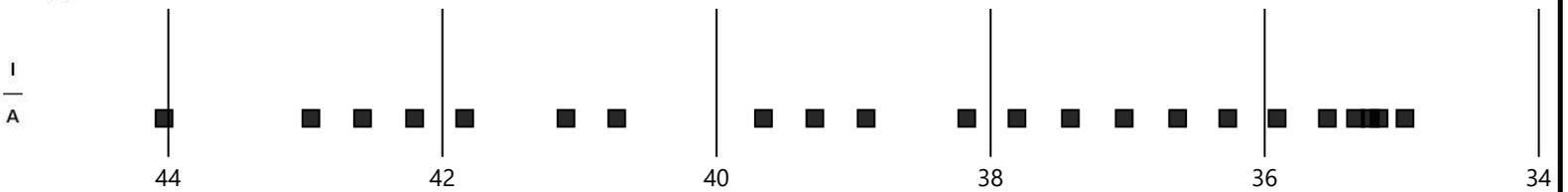
### Stream Bank Hardening

■ No ■ Yes



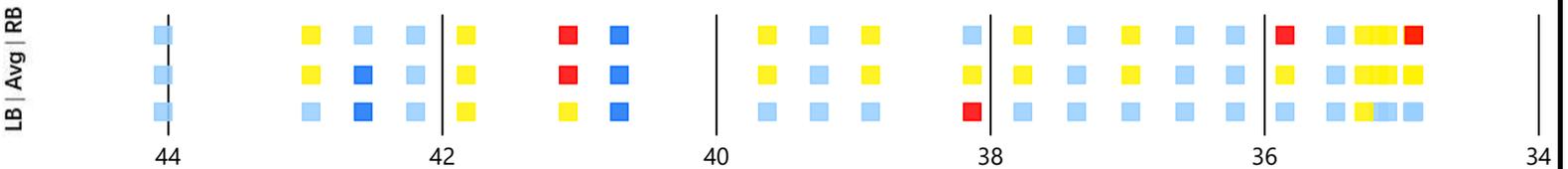
### Aggradation/Incision

■ Aggradation ▲ Incision



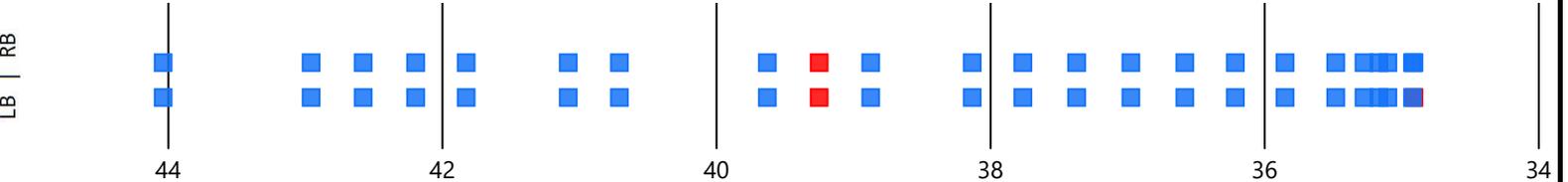
### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



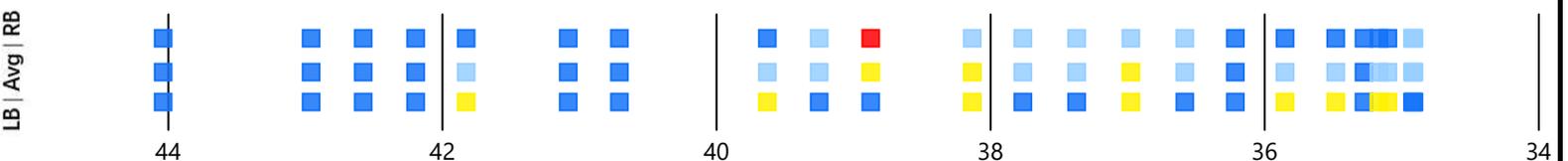
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



← FLOW DIRECTION Creek Mile (44.03 at Tailwater, 34.90 at Headwater) FLOW DIRECTION →

REACH F

Water Appearance

Score ■ Excellent ■ Mediocre — NO DATA ■ Poor



Nutrient Enrichment

■ Mild ■ Moderate — NO DATA ■ Severe

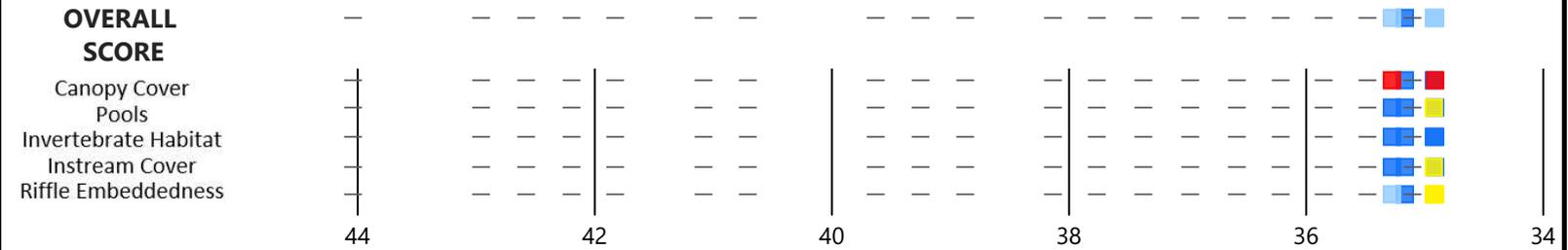
Notes ● Algal Growth



Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



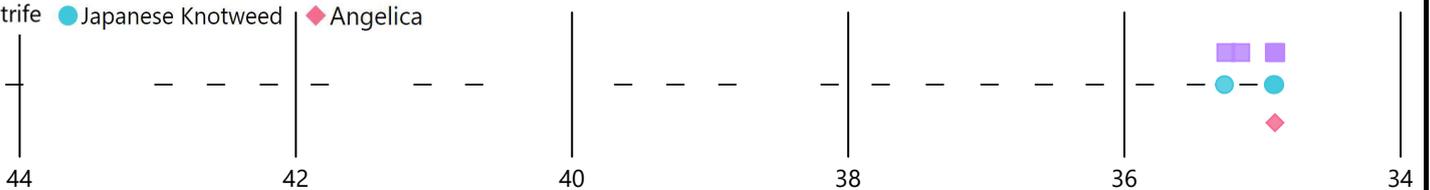
Manure Presence

■ None



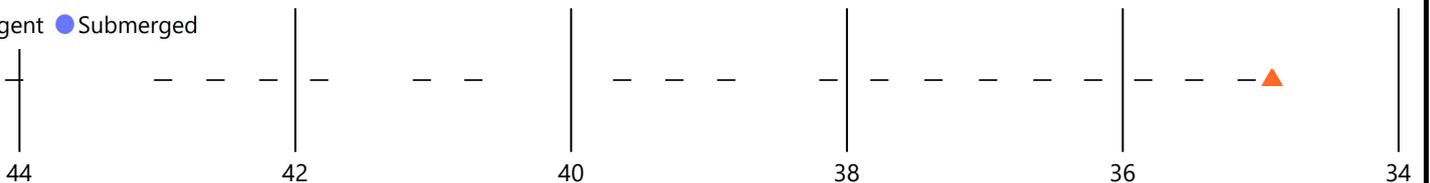
Invasive Species

■ Purple Loosestrife ● Japanese Knotweed ◆ Angelica



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

CATTARAUGUS CREEK

Score ■ Excellent ■ Good ■ Mediocre

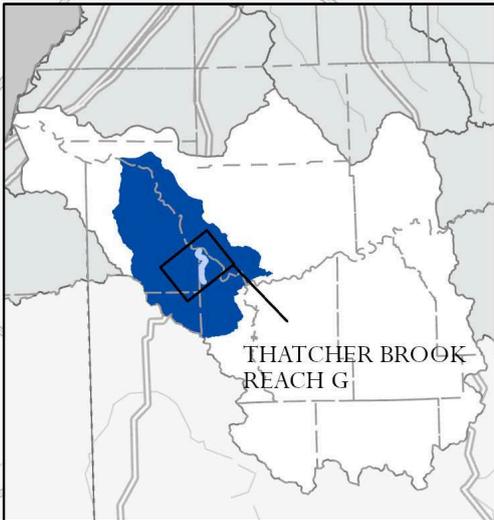


← FLOW DIRECTION Creek Mile (44.03 at Tailwater, 34.90 at Headwater) ← FLOW DIRECTION

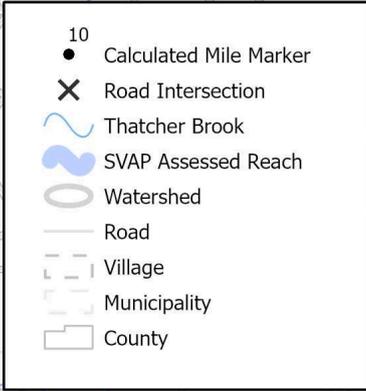
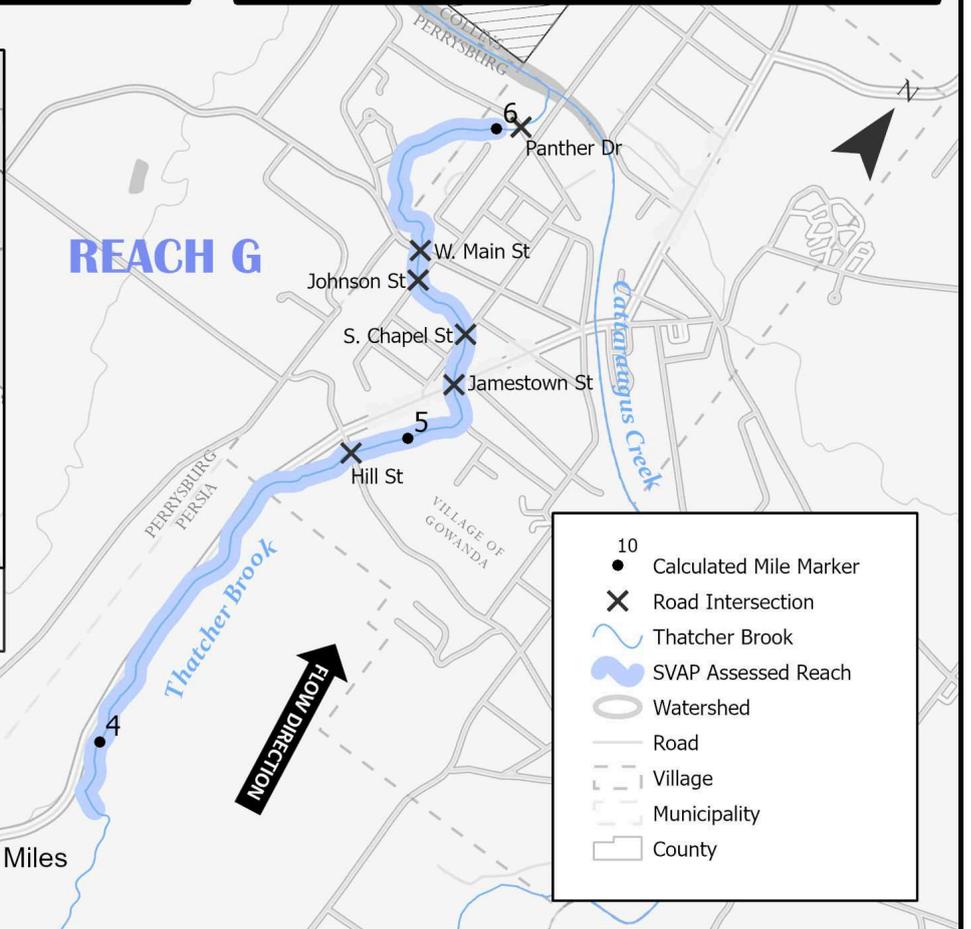
# THATCHER BROOK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH G

AVERAGE OVERALL SVAP RATING: **6.6**



THATCHER BROOK-CATTARAUGUS CREEK SUB-WATERSHED



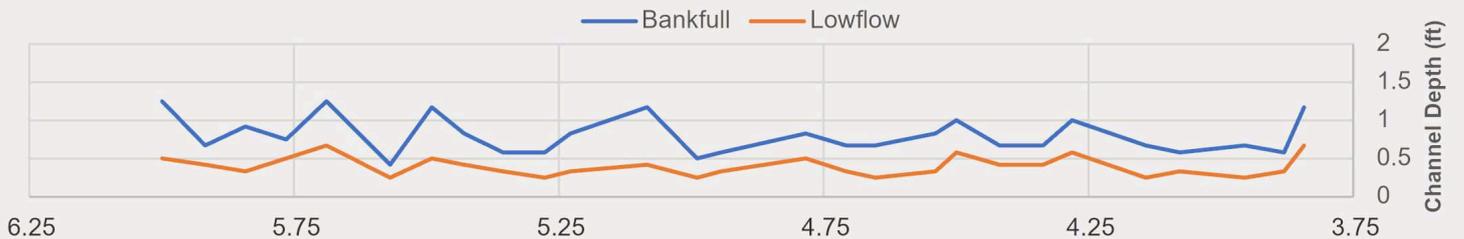
## Elevation Profile

Substrate: ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay

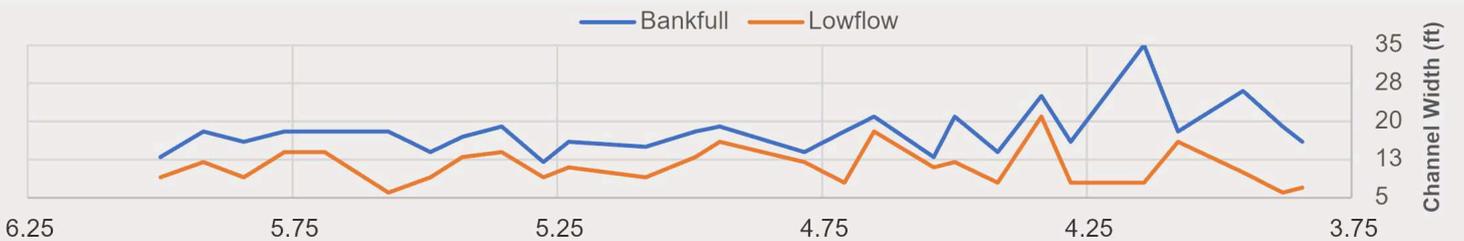


### REACH G

## Channel Depth



## Channel Width



← FLOW DIRECTION Creek Mile (6.00 at Tailwater, 3.84 at Headwater) ← FLOW DIRECTION

# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH G

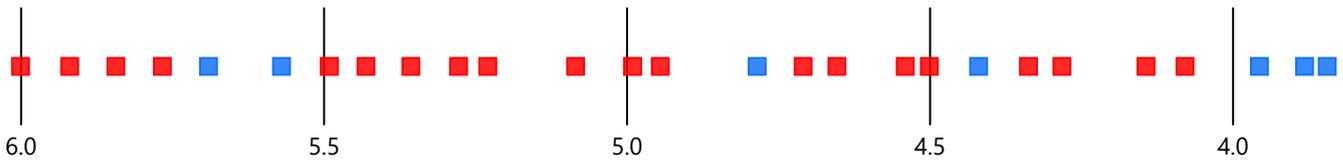
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



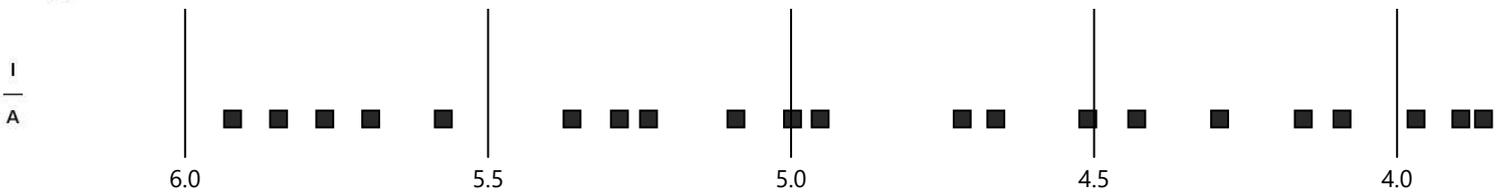
### Stream Bank Hardening

■ No ■ Yes



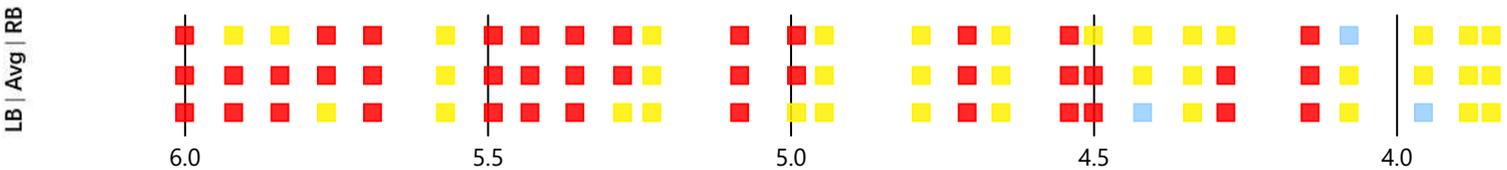
### Aggradation/Incision

■ Aggradation ▲ Incision



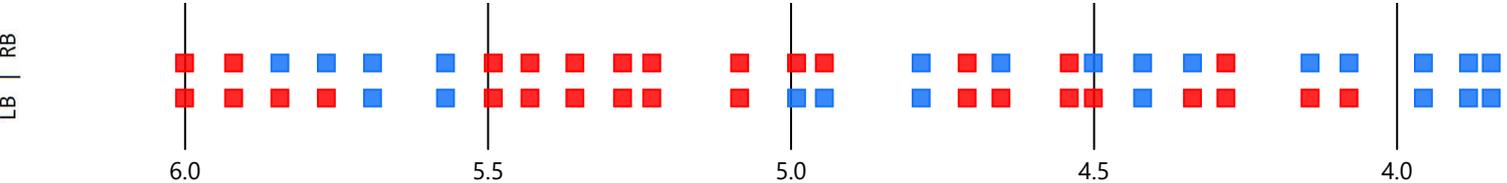
### Bank Stability

Score ■ Mediocre ■ Poor



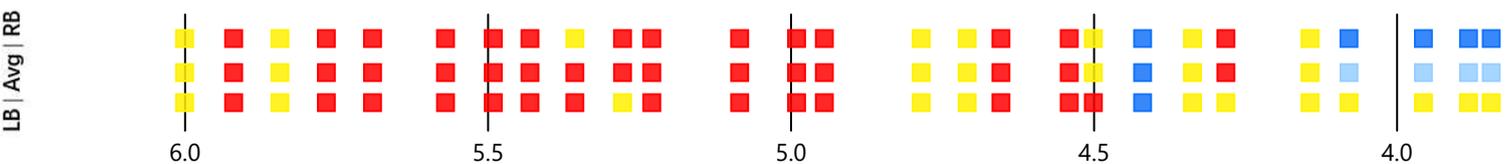
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

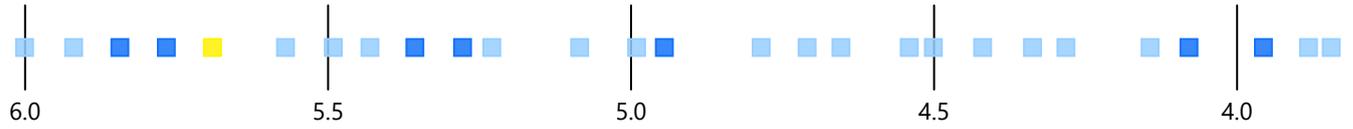
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH G

Water Appearance

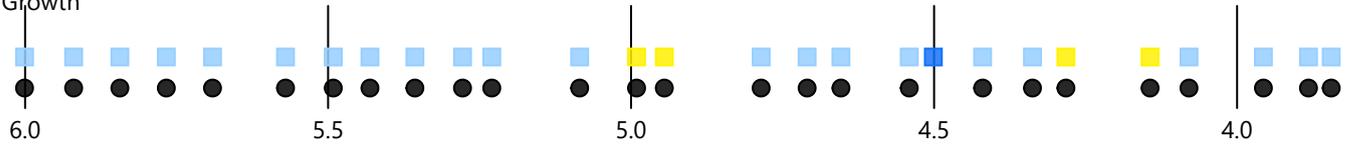
Score ■ Excellent ■ Good ■ Mediocre



Nutrient Enrichment

■ Low ■ Mild ■ Moderate

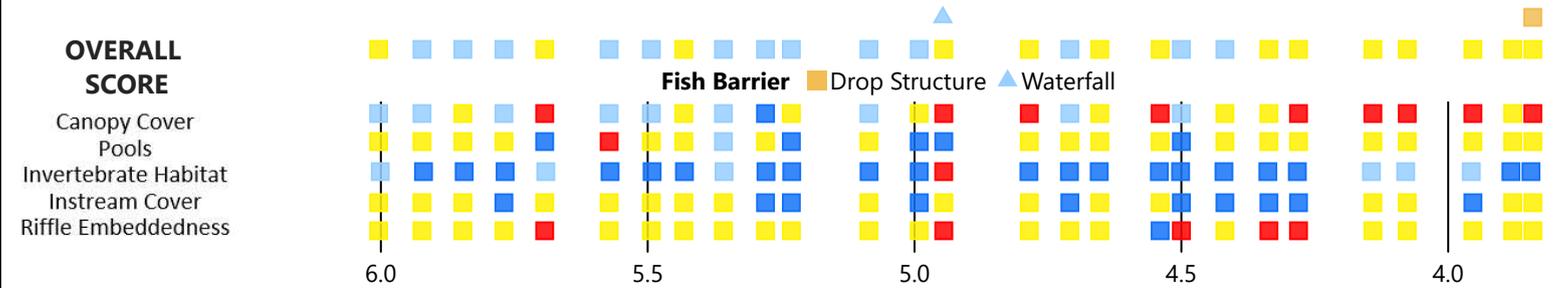
Notes ● Algal Growth



Fish Habitat

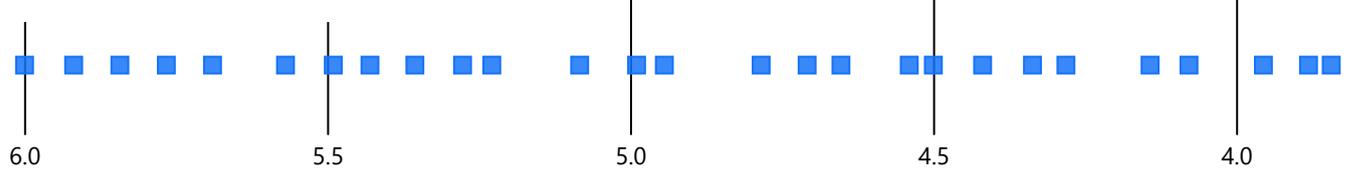
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



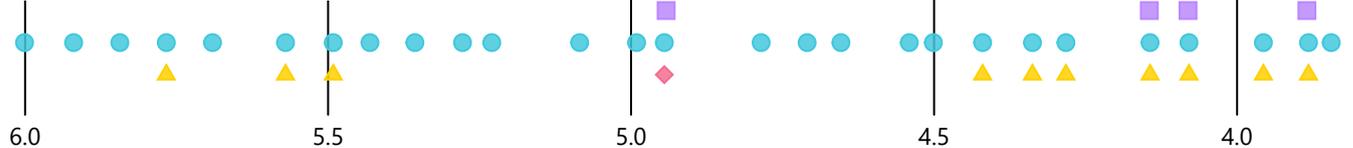
Manure Presence

■ None



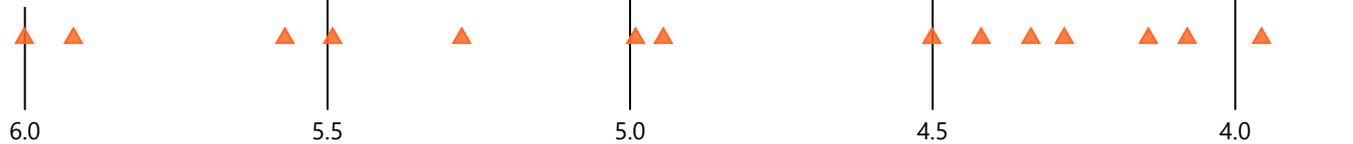
Knotweed

● Japanese Knotweed ◆ Angelica ▲ Phragmites ■ Purple Loosestrife



Aquatic Vegetation

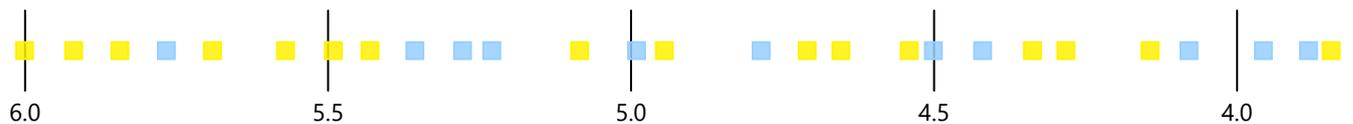
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

THATCHER BROOK

Score ■ Good ■ Mediocre



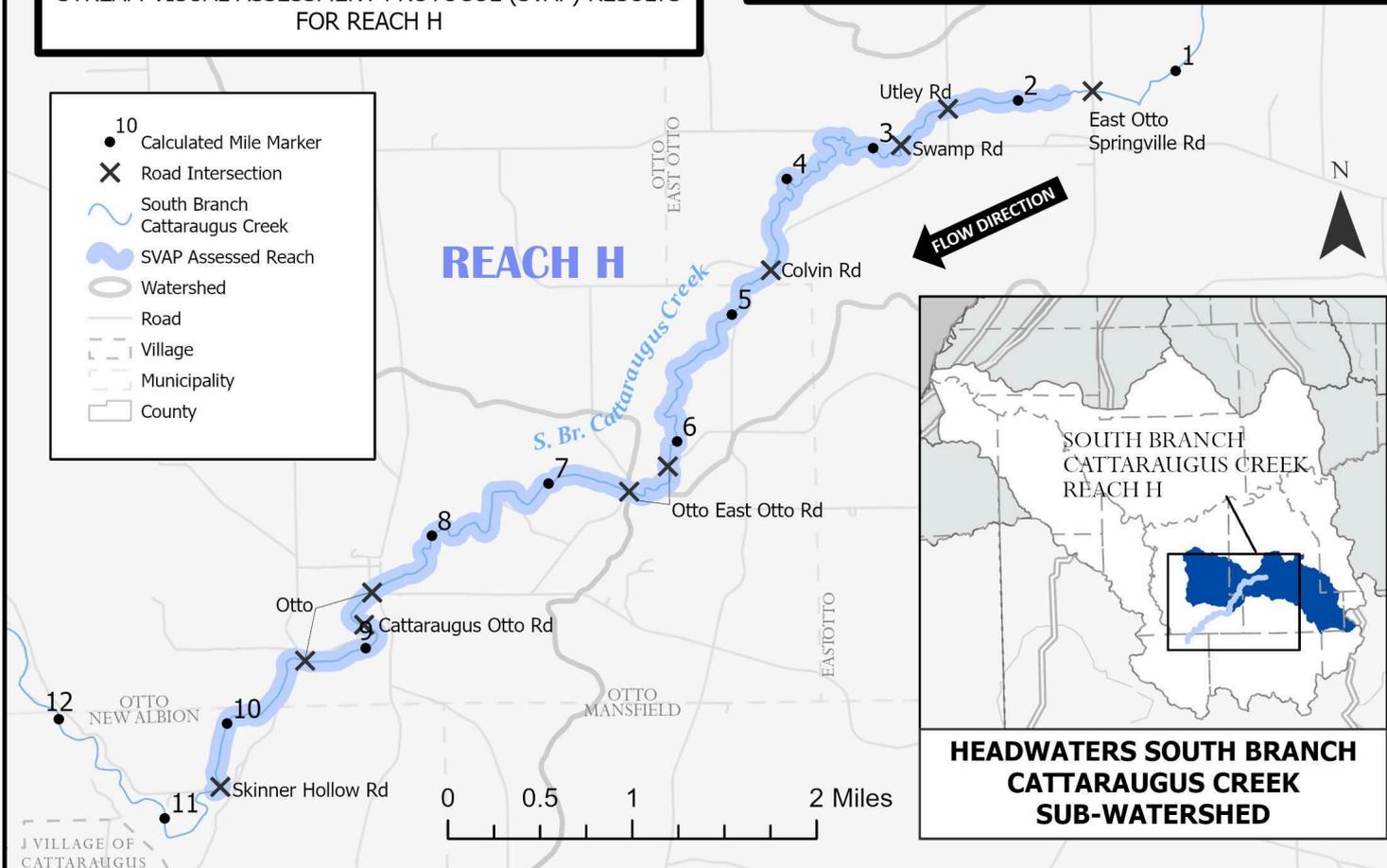
← FLOW DIRECTION Creek Mile (6.00 at Tailwater, 3.84 at Headwater) FLOW DIRECTION ←

# SOUTH BRANCH CATTARAUGUS CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH H

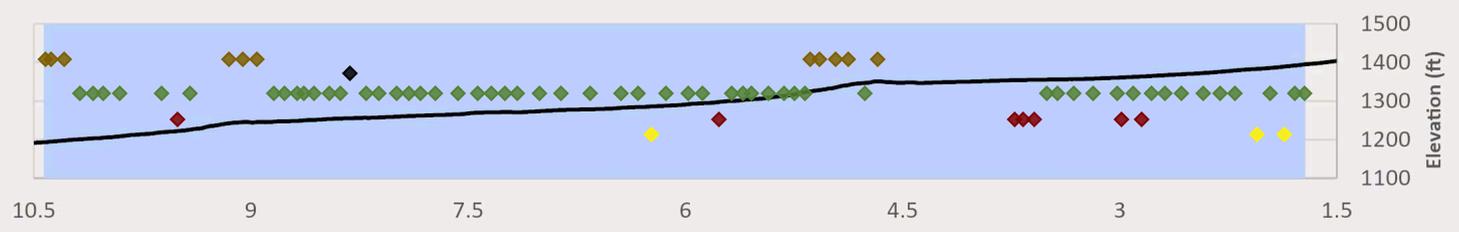
AVERAGE OVERALL SVAP RATING: **6.4**

- 10 Calculated Mile Marker
- ✕ Road Intersection
- ~ South Branch Cattaraugus Creek
- ~ SVAP Assessed Reach
- Watershed
- Road
- - - Village
- - - Municipality
- County

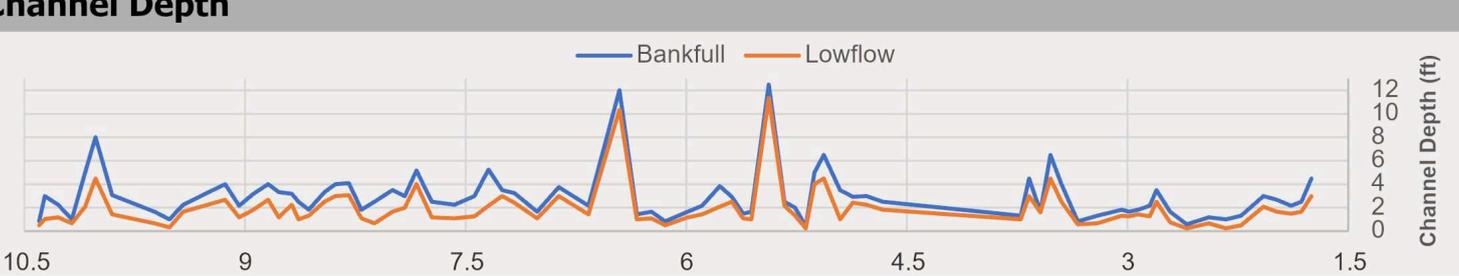


## Elevation Profile

Substrate: ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



## Channel Depth



## Channel Width



← **FLOW DIRECTION** Creek Mile (10.40 at Tailwater, 1.75 at Headwater) ← **FLOW DIRECTION**

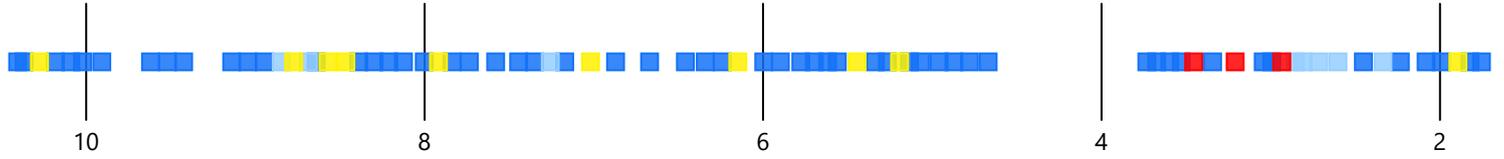
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH H

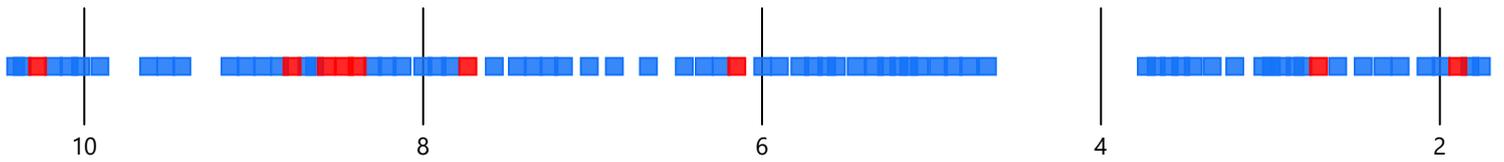
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



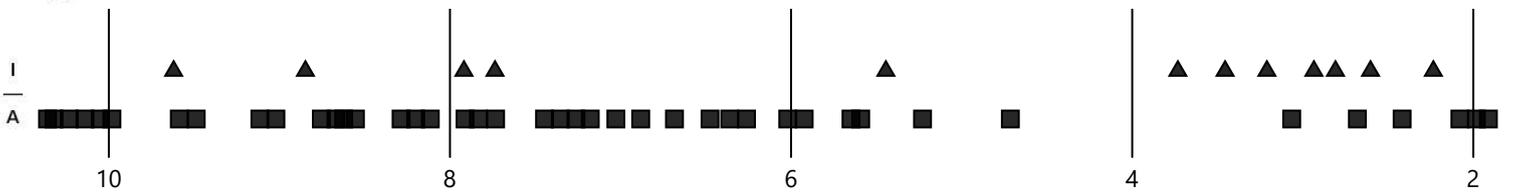
### Stream Bank Hardening

■ No ■ Yes



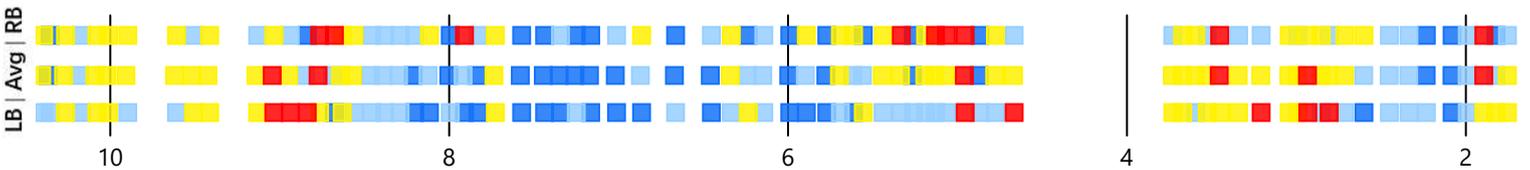
### Aggradation/Incision

■ Aggradation ▲ Incision



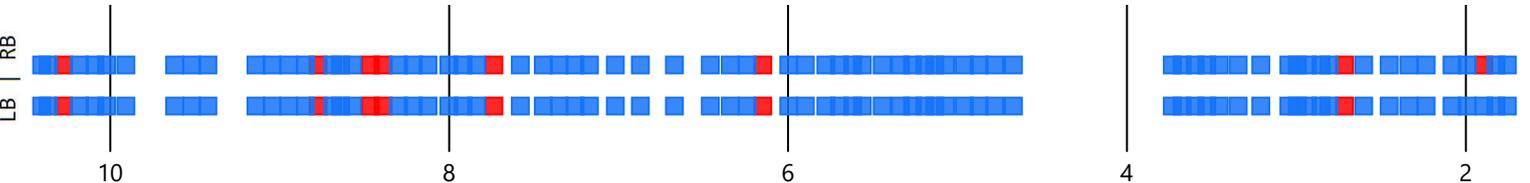
### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



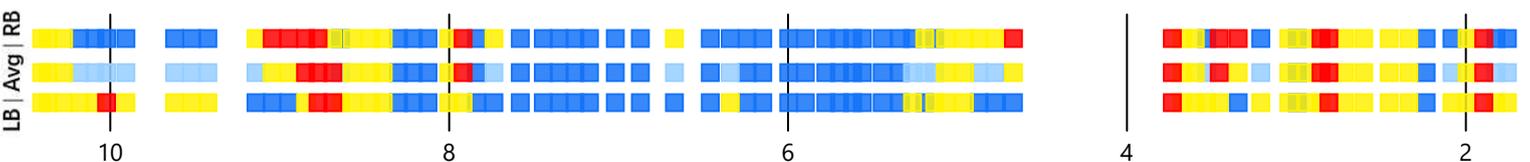
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

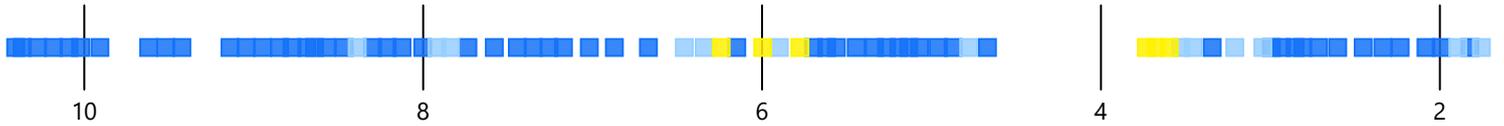
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH H

Water Appearance

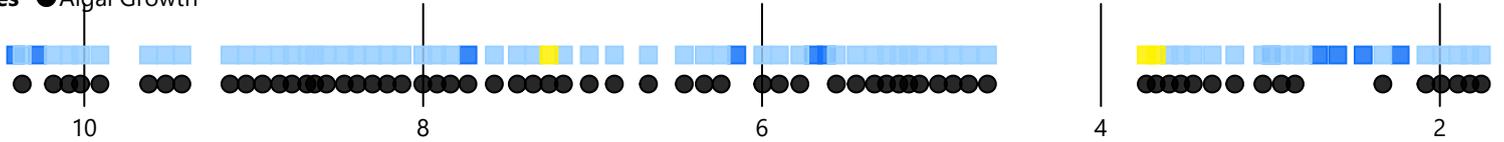
Score ■ Excellent ■ Good ■ Mediocre



Nutrient Enrichment

■ Low ■ Mild ■ Moderate

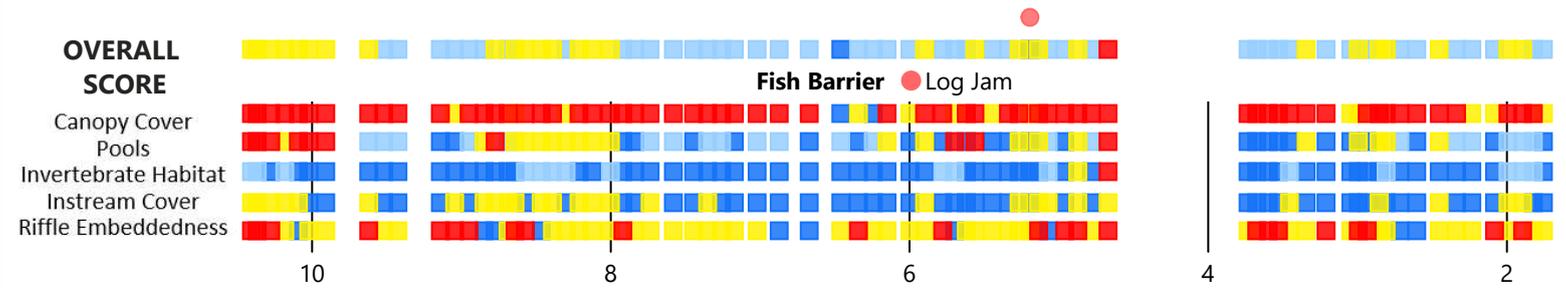
Notes ● Algal Growth



Fish Habitat

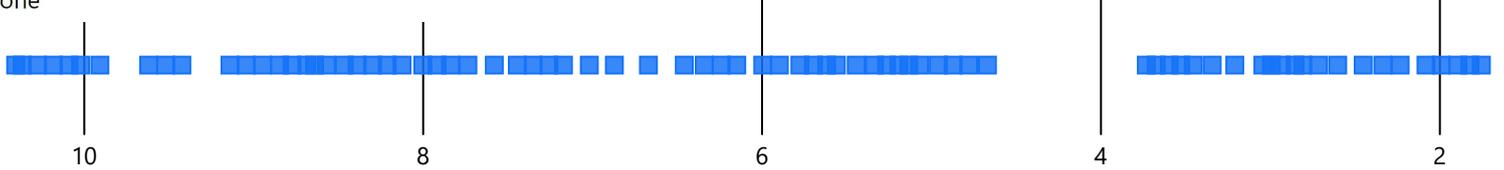
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



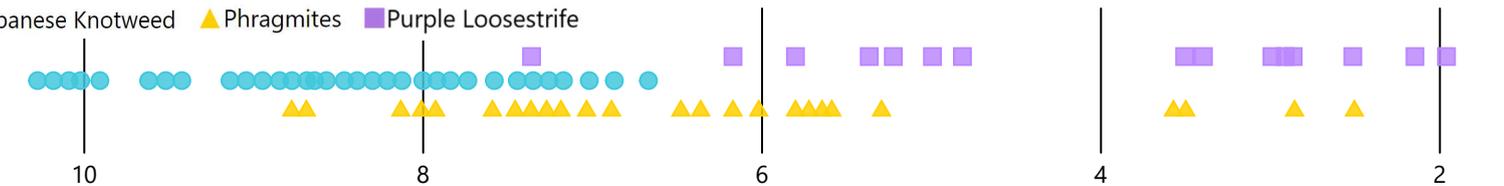
Manure Presence

■ None



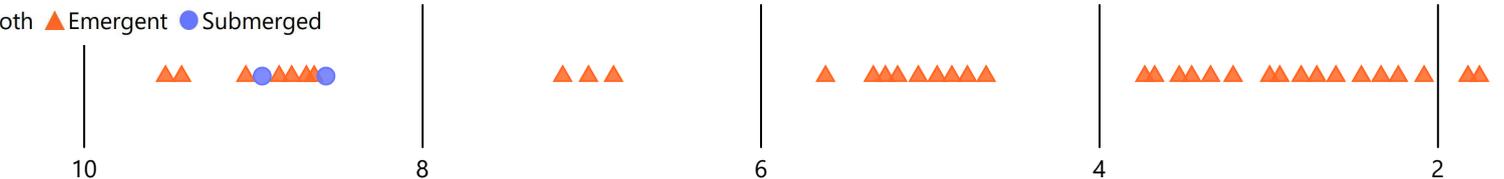
Japanese Knotweed

● Japanese Knotweed ▲ Phragmites ■ Purple Loosestrife



Aquatic Vegetation

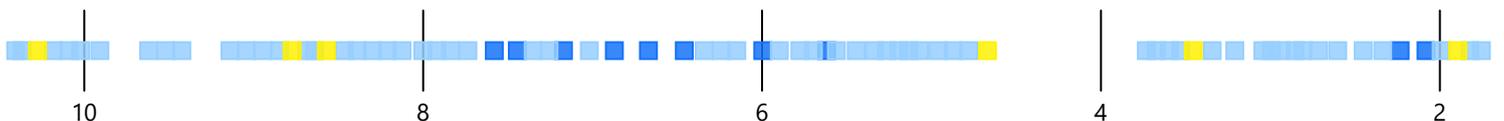
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

SOUTH BRANCH CATTARAUGUS CREEK

Score ■ Excellent ■ Good ■ Mediocre

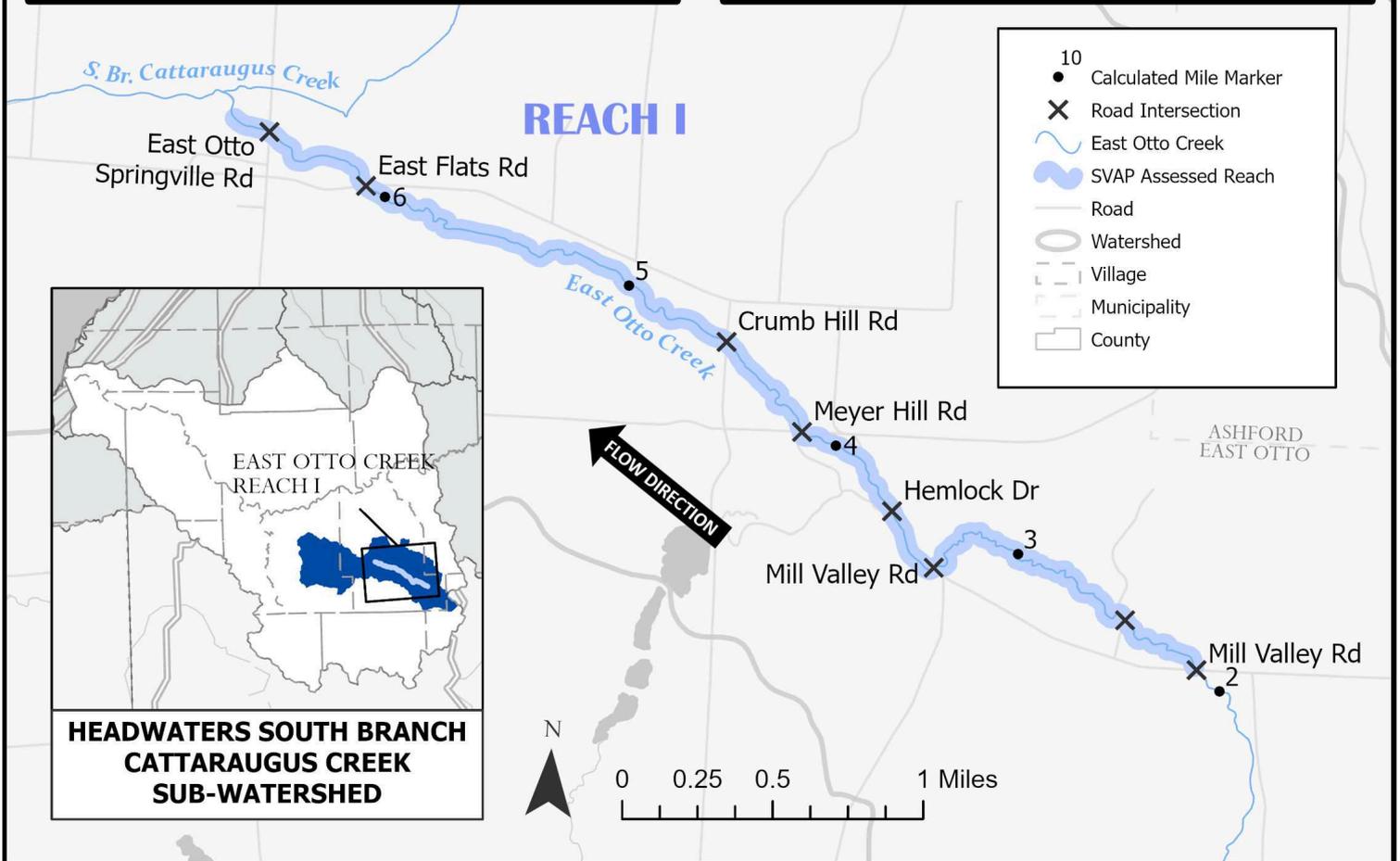


← FLOW DIRECTION Creek Mile (10.40 at Tailwater, 1.75 at Headwater) ← FLOW DIRECTION

# EAST OTTO CREEK

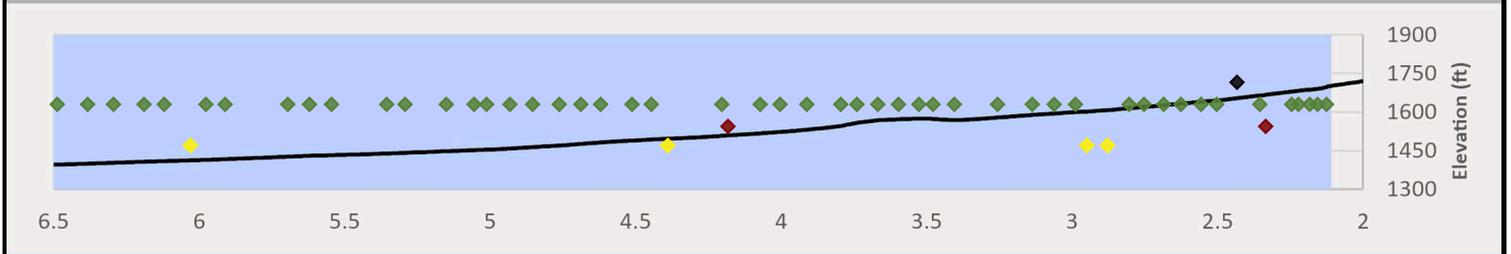
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH I

AVERAGE OVERALL SVAP RATING: **6.2**

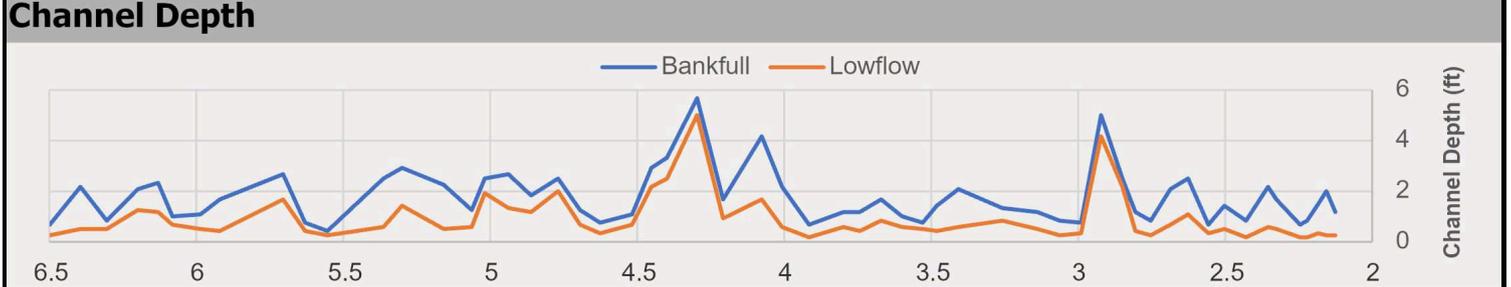


## Elevation Profile

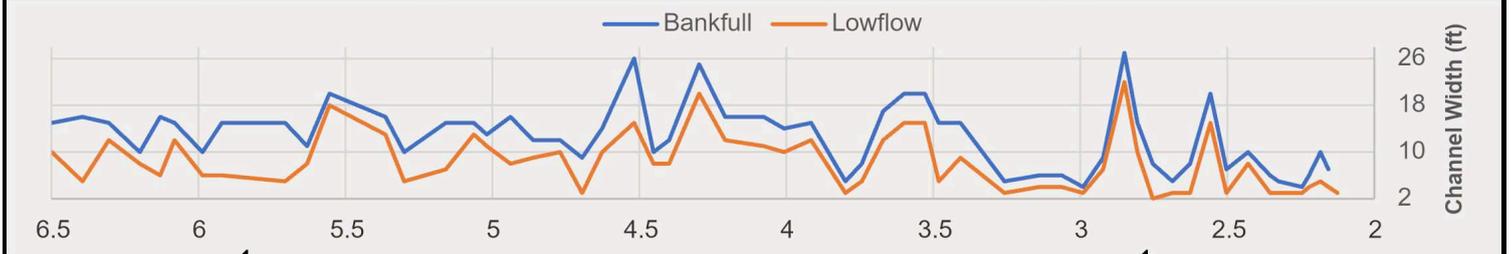
Substrate: ◆ Bedrock ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



## Channel Depth



## Channel Width



← FLOW DIRECTION Creek Mile (6.50 at Tailwater, 2.13 at Headwater) → FLOW DIRECTION

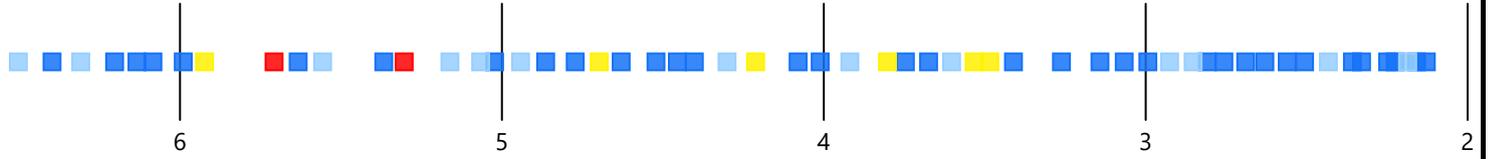
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH I

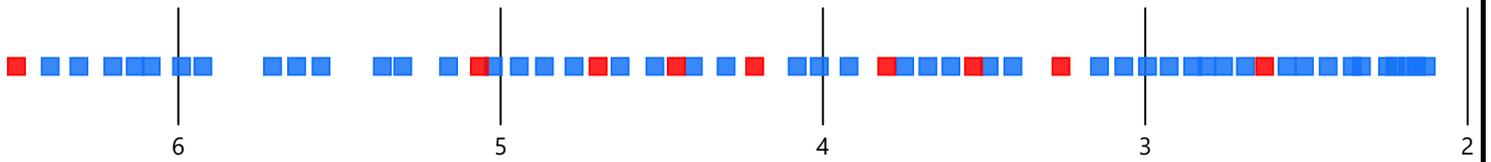
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



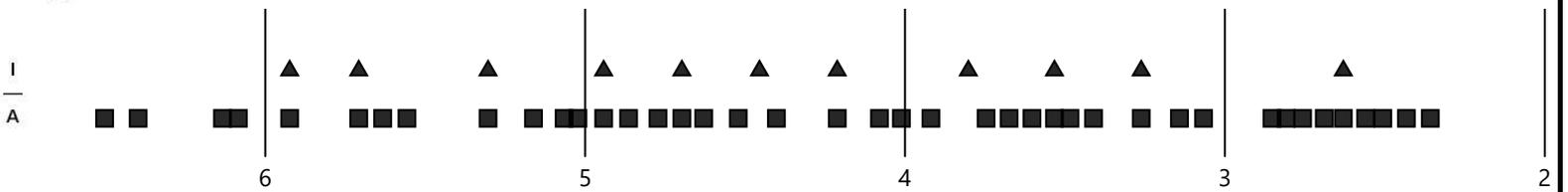
### Stream Bank Hardening

■ No ■ Yes



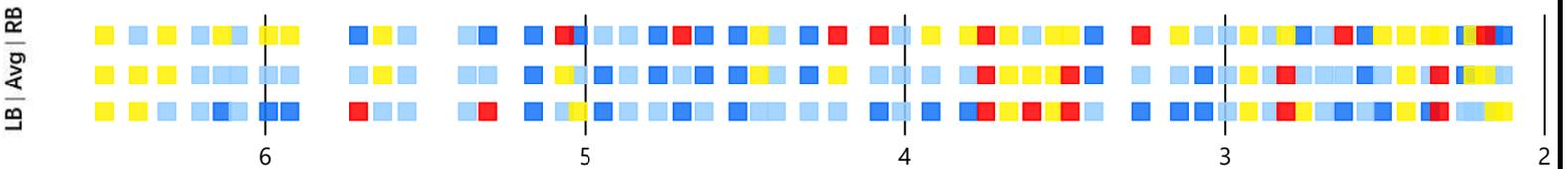
### Aggradation/Incision

■ Aggradation ▲ Incision



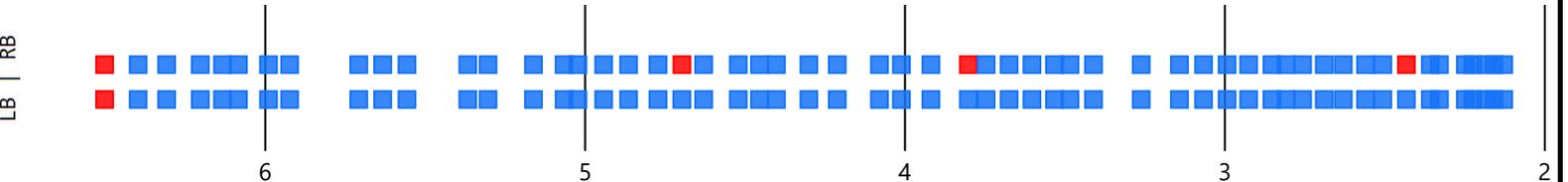
### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



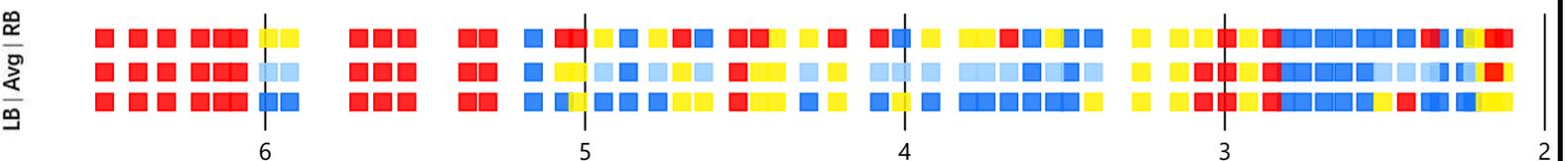
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH I

Water Appearance

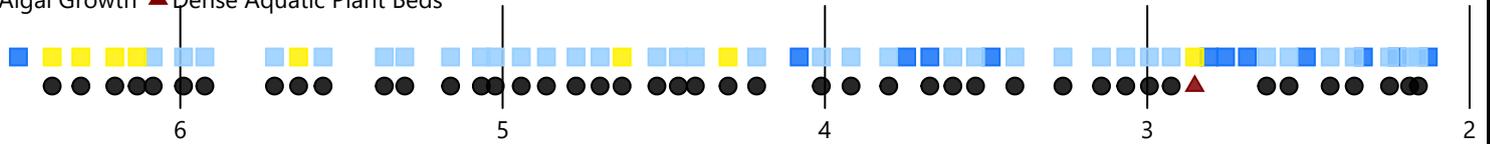
Score ■ Excellent ■ Good ■ Mediocre



Nutrient Enrichment

■ Low ■ Mild ■ Moderate

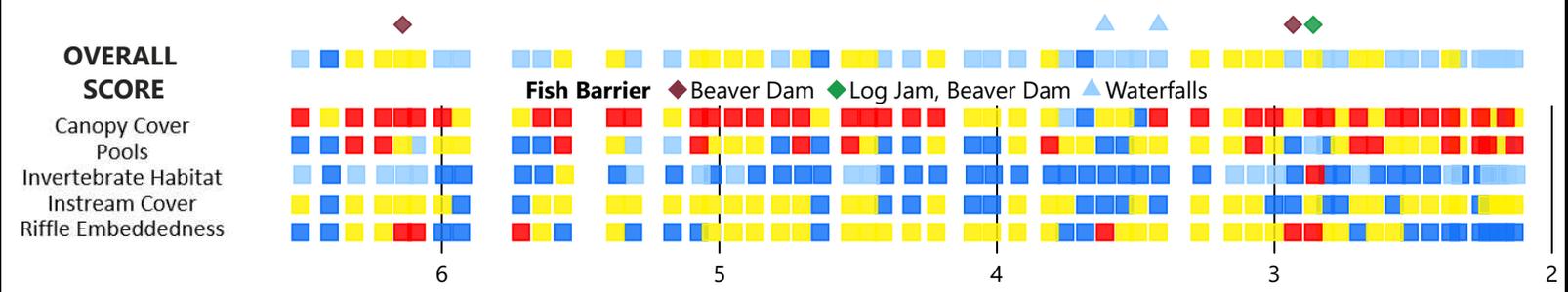
Notes ● Algal Growth ▲ Dense Aquatic Plant Beds



Fish Habitat

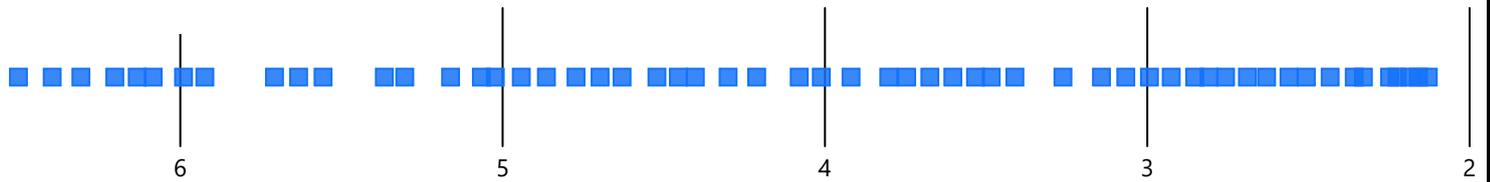
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



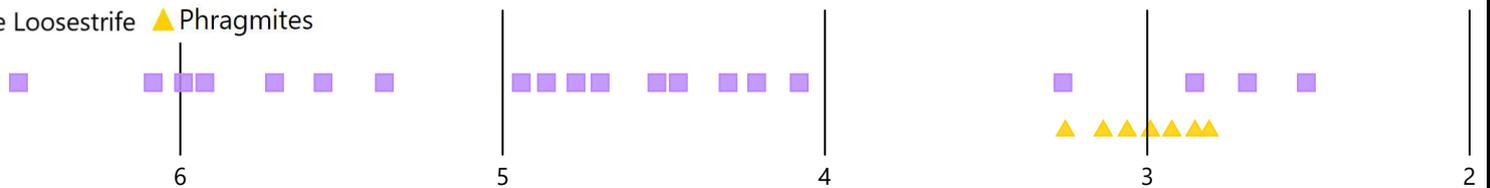
Manure Presence

■ None



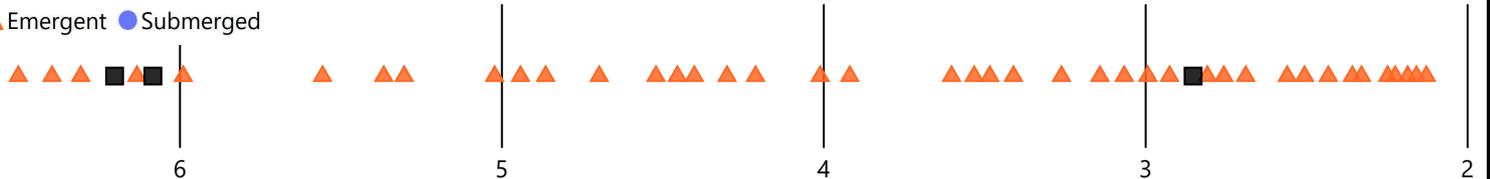
Invasive Species

■ Purple Loosestrife ▲ Phragmites



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

EAST OTTO CREEK

Score ■ Excellent ■ Good ■ Mediocre

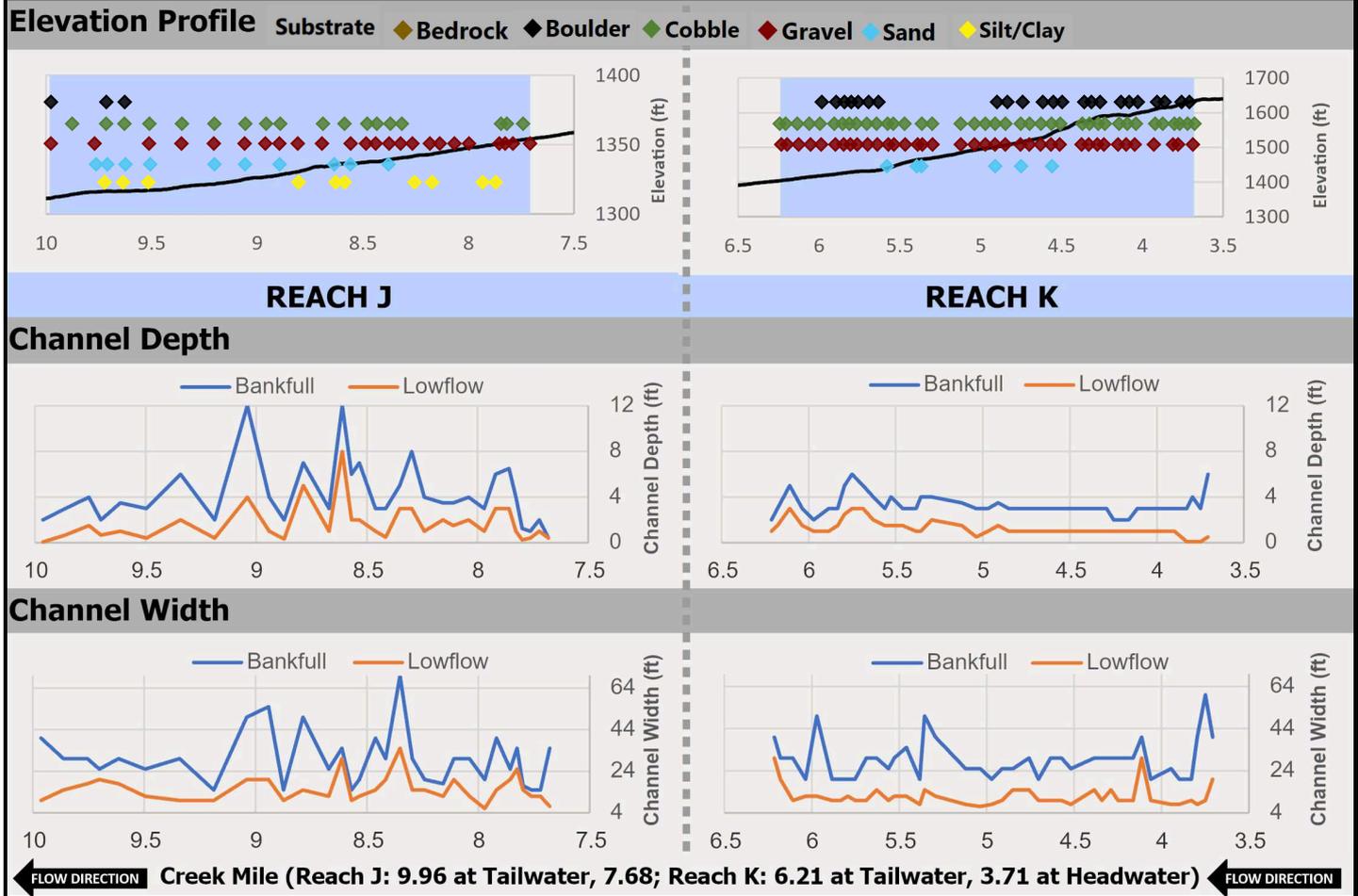
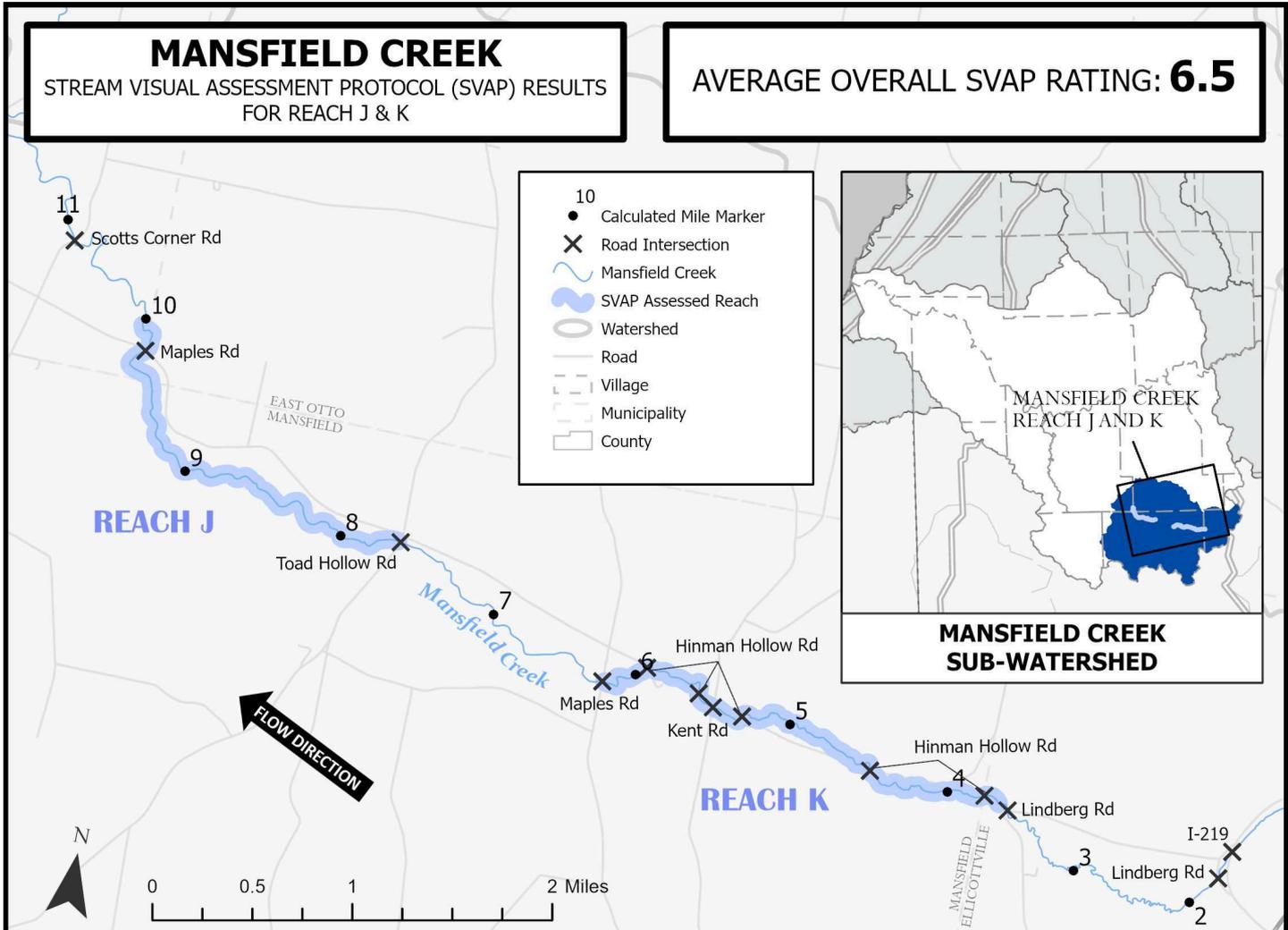


← FLOW DIRECTION Creek Mile (6.50 at Tailwater, 2.13 at Headwater) ← FLOW DIRECTION

# MANSFIELD CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH J & K

AVERAGE OVERALL SVAP RATING: **6.5**



← FLOW DIRECTION Creek Mile (Reach J: 9.96 at Tailwater, 7.68; Reach K: 6.21 at Tailwater, 3.71 at Headwater) → FLOW DIRECTION

# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

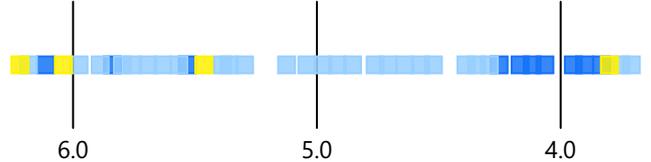
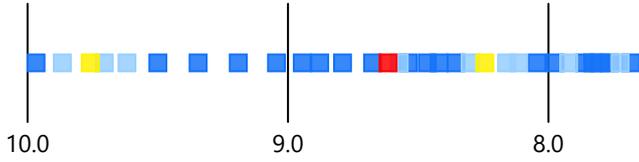
## REACH J

## REACH K

### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

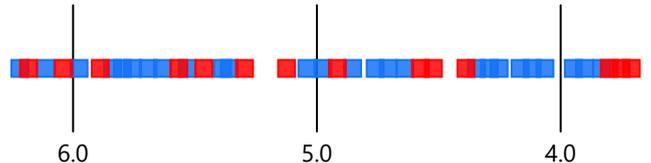
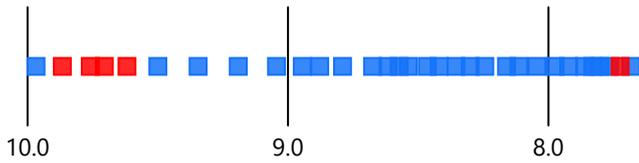
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



### Stream Bank Hardening

■ No ■ Yes

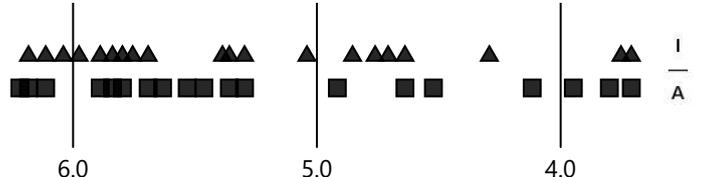
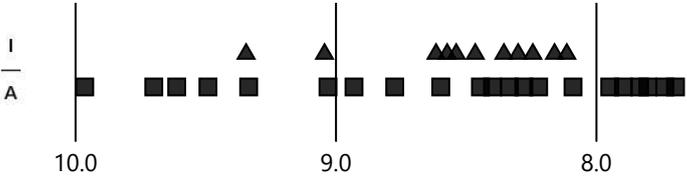
■ No ■ Yes



### Aggradation/Incision

■ Aggradation ▲ Incision

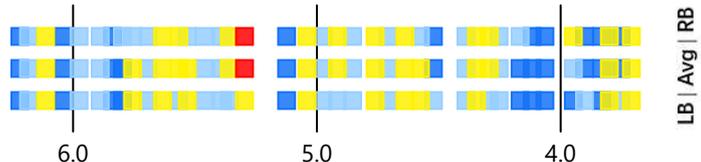
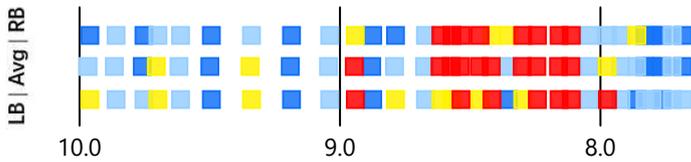
■ Aggradation ▲ Incision



### Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

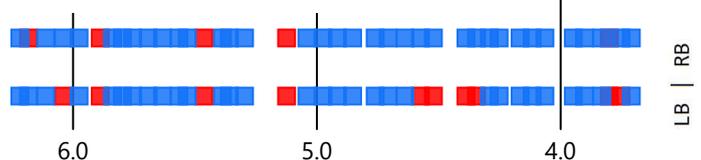
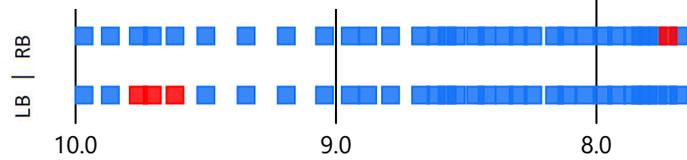
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



### Bank Condition

■ Hardened Structure ■ Natural

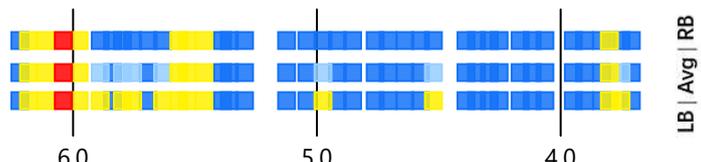
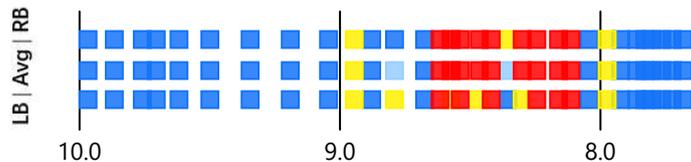
■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

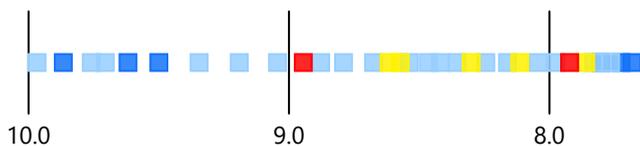


REACH J

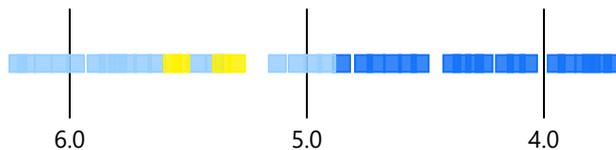
REACH K

Water Appearance

Score Excellent Good Mediocre Poor



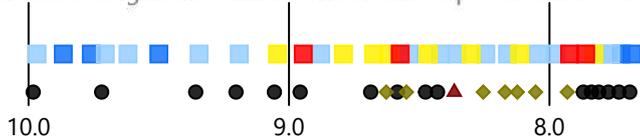
Score Excellent Good Mediocre Poor



Nutrient Enrichment

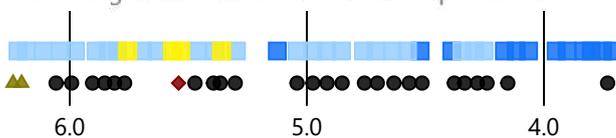
Score Low Mild Moderate Severe

NE Notes: Algal Growth Both Dense Aquatic Plant Beds



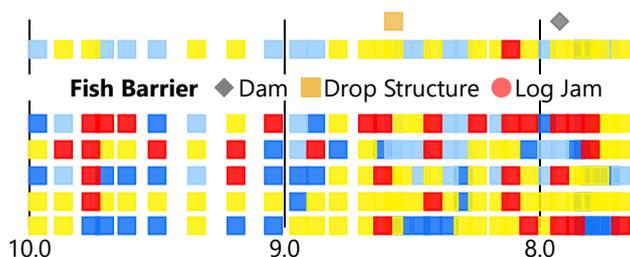
Score Low Mild Moderate Severe

NE Notes: Algal Growth Both Dense Aquatic Plant Beds



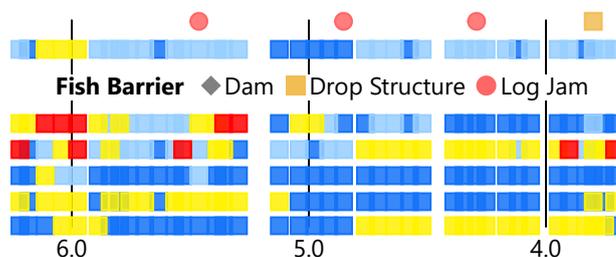
Fish Habitat Score Excellent Good Mediocre Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



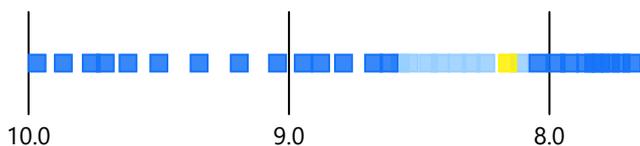
OVERALL SCORE

Canopy Cover Pools Invertebrate Habitat Instream Cover Riffle Embeddedness

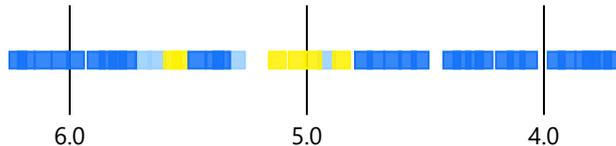


Manure Presence

Evidence of Animals in Zone Manure Present None

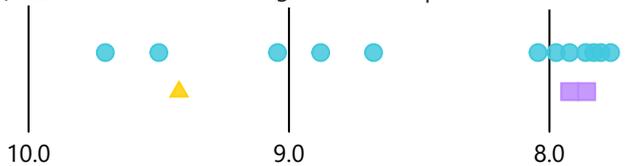


Score Evidence of Animals in Zone Manure Present None

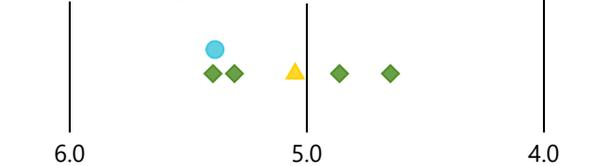


Japanese Knotweed

Japanese Knotweed Phragmites Purple Loosestrife

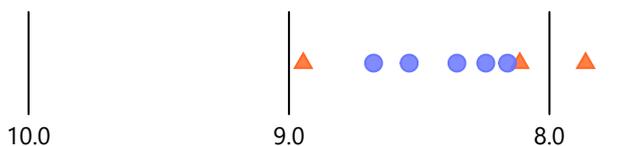


Japanese Knotweed Reed Canary Grass Phragmites

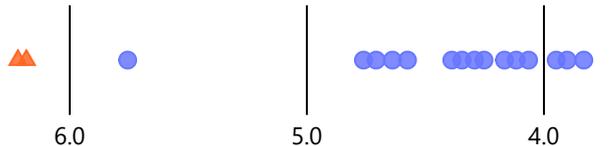


Aquatic Vegetation

Both Emergent Submerged



Both Emergent Submerged

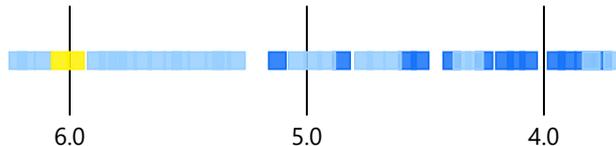
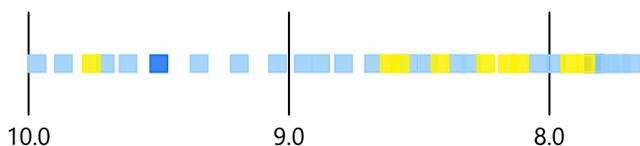


Overall SVAP RATING

MANSFIELD CREEK

Score Excellent Good Mediocre

Score Excellent Good Mediocre



← FLOW DIRECTION

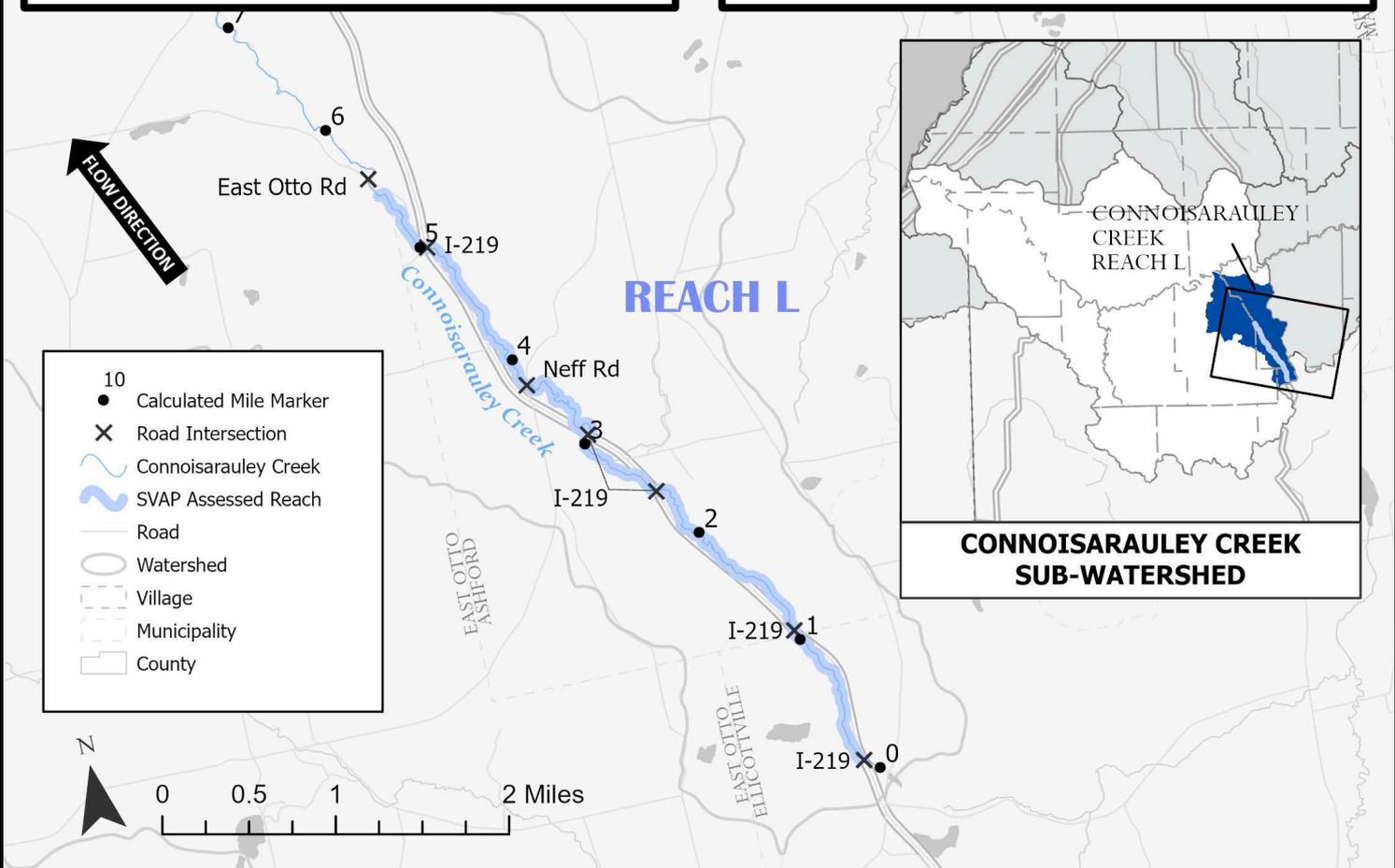
Creek Mile (Reach J: 9.96 at Tailwater, 7.68 at Headwater, Reach K: 6.21 at Tailwater, 3.71 at Headwater)

← FLOW DIRECTION

# CONNOISAULEY CREEK

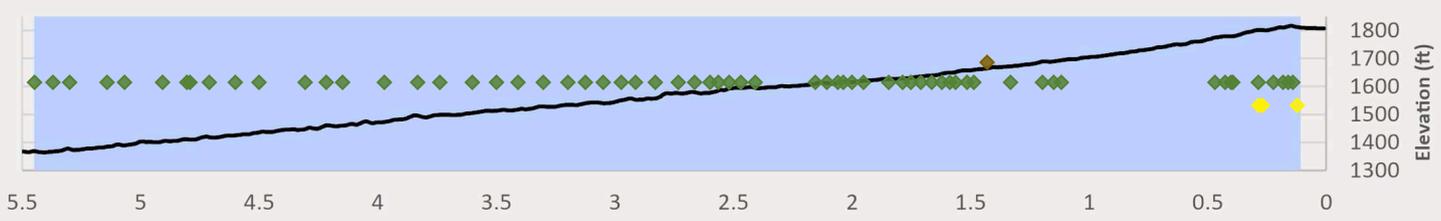
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH L

AVERAGE OVERALL SVAP RATING: **6.6**



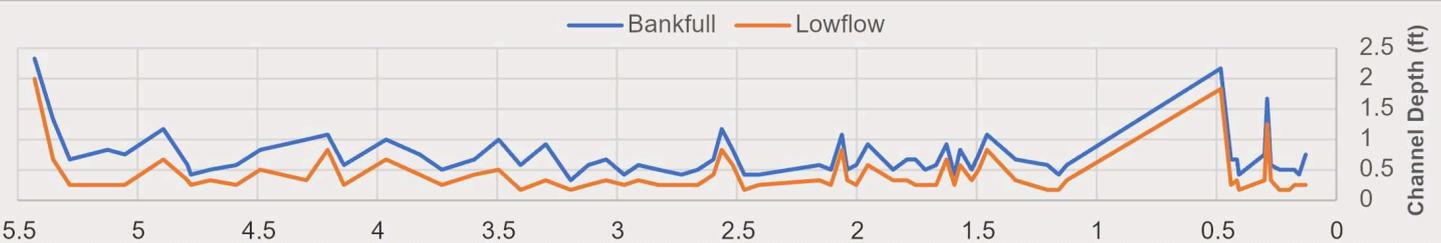
## Elevation Profile

Substrate ◆ Bedrock/Concrete ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay

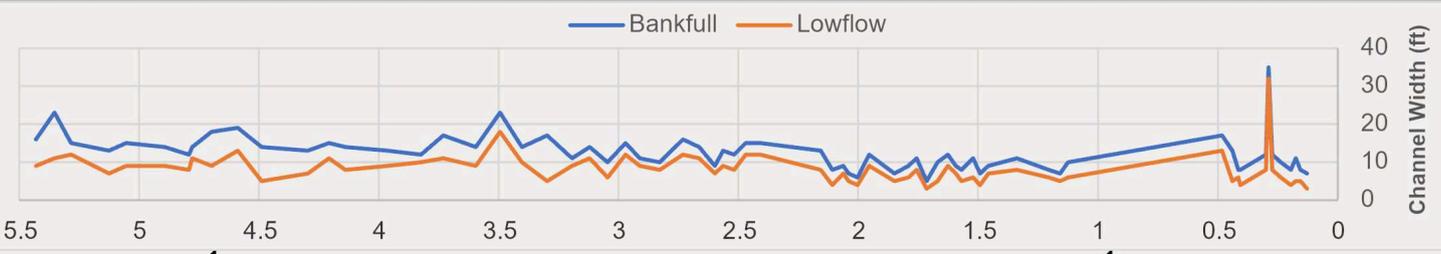


## REACH L

## Channel Depth



## Channel Width



← FLOW DIRECTION Creek Mile (5.43 at Tailwater, 0.13 at Headwater) ← FLOW DIRECTION

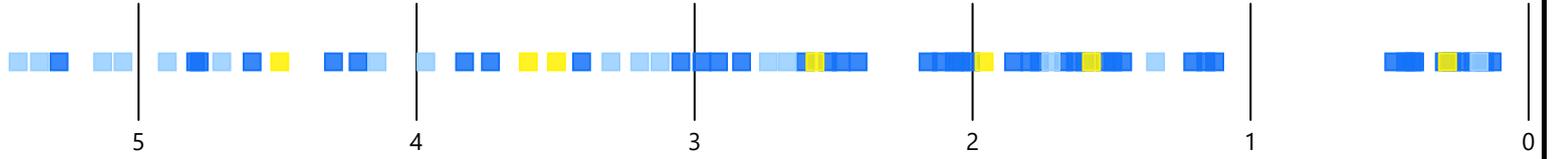
# Classification Scheme for SVAP Parameters

Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

## REACH L

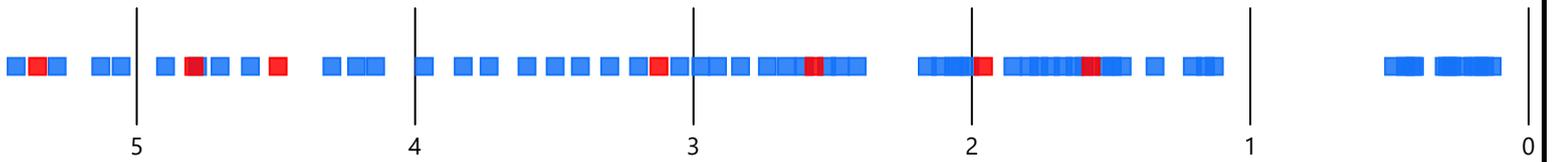
### Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre



### Stream Bank Hardening

■ No ■ Yes



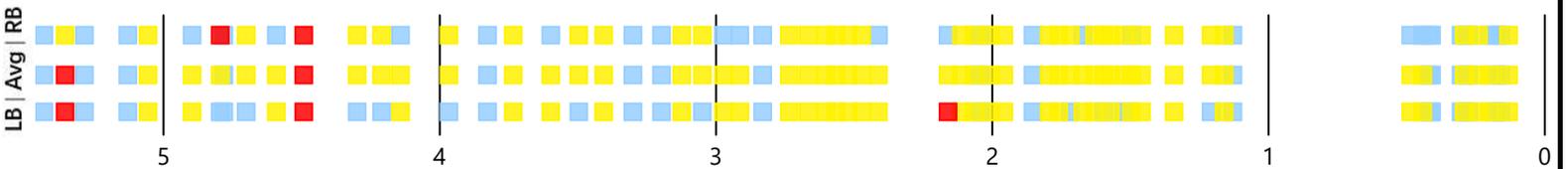
### Aggradation/Incision

■ Aggradation ▲ Incision



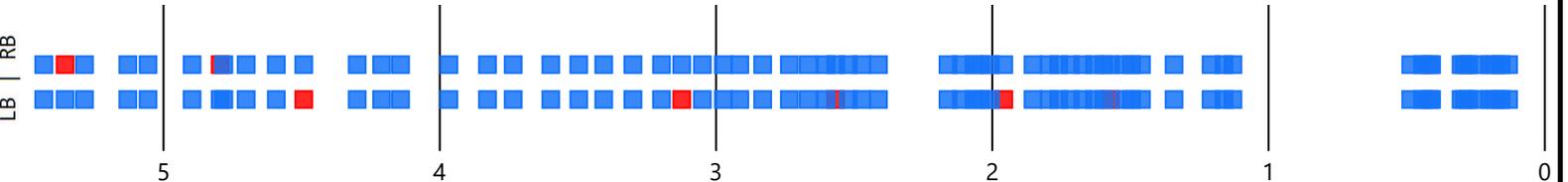
### Bank Stability

Score ■ Good ■ Mediocre ■ Poor



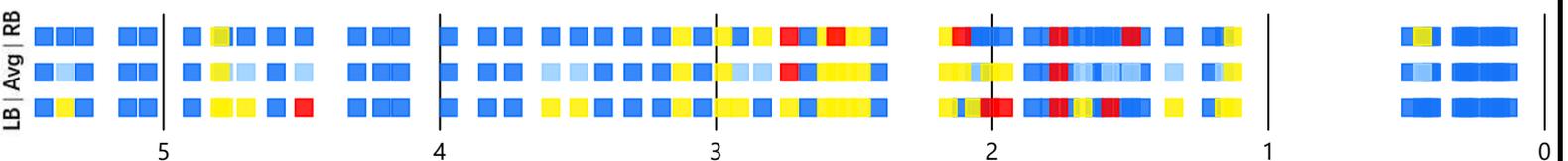
### Bank Condition

■ Hardened Structure ■ Natural



### Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH L

Water Appearance

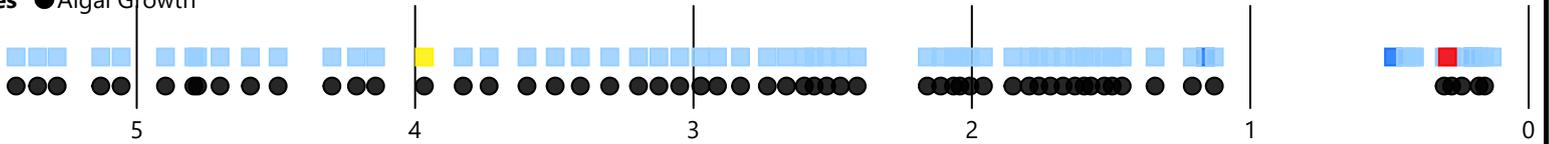
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

■ Low ■ Mild ■ Moderate ■ Severe

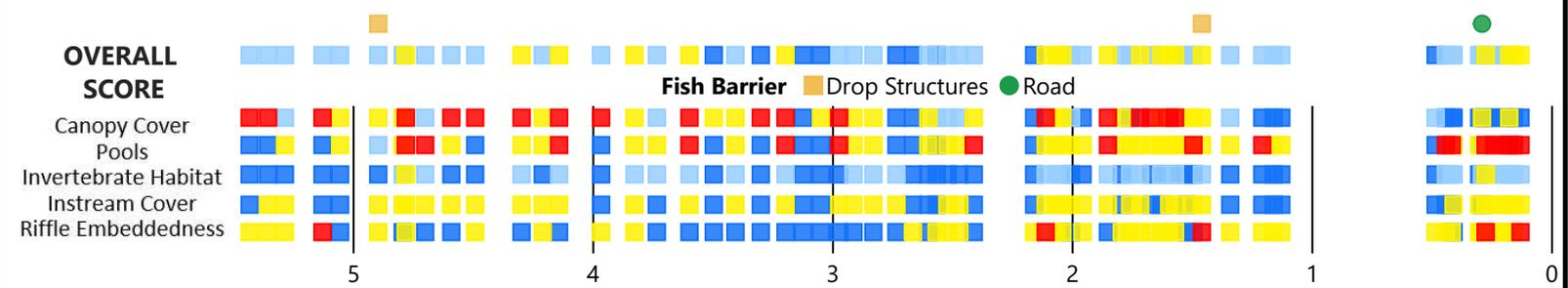
Notes ● Algal Growth



Fish Habitat

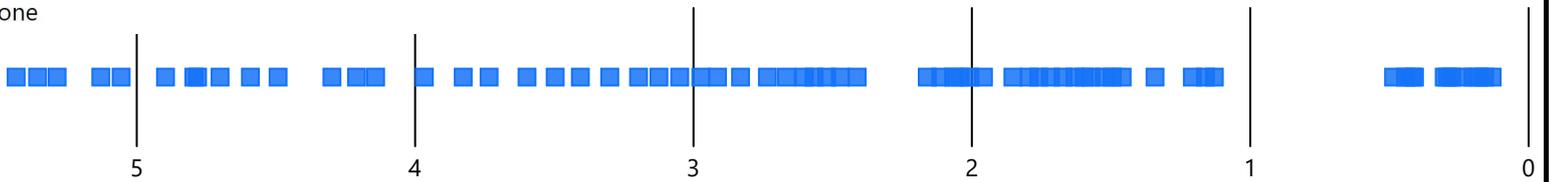
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.



Manure Presence

■ None



Invasive Species

▲ Phragmites ■ Purple Loosestrife



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

CONNOISARAULEY CREEK

Score ■ Excellent ■ Good ■ Mediocre

