

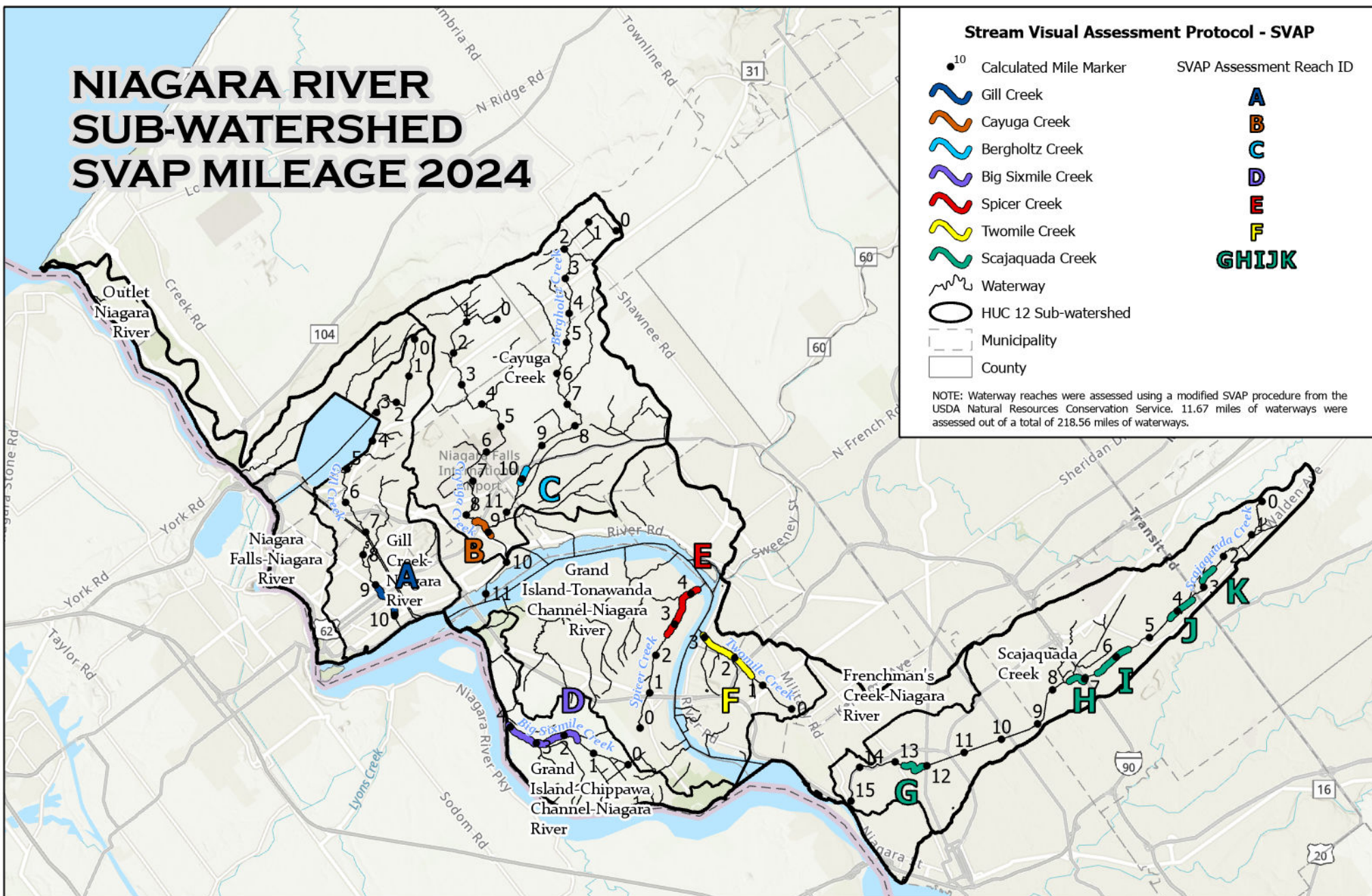
NIAGARA RIVER SUB-WATERSHED SVAP MILEAGE 2024

Stream Visual Assessment Protocol - SVAP

- ¹⁰ Calculated Mile Marker
- SVAP Assessment Reach ID
- Gill Creek
- Cayuga Creek
- Bergholtz Creek
- Big Sixmile Creek
- Spicer Creek
- Twomile Creek
- Scajaquada Creek
- Waterway
- HUC 12 Sub-watershed
- Municipality
- County

A
B
C
D
E
F
GHIJK

NOTE: Waterway reaches were assessed using a modified SVAP procedure from the USDA Natural Resources Conservation Service. 11.67 miles of waterways were assessed out of a total of 218.56 miles of waterways.



**Department
of State**

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 stylisen,
Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the
GIS user community



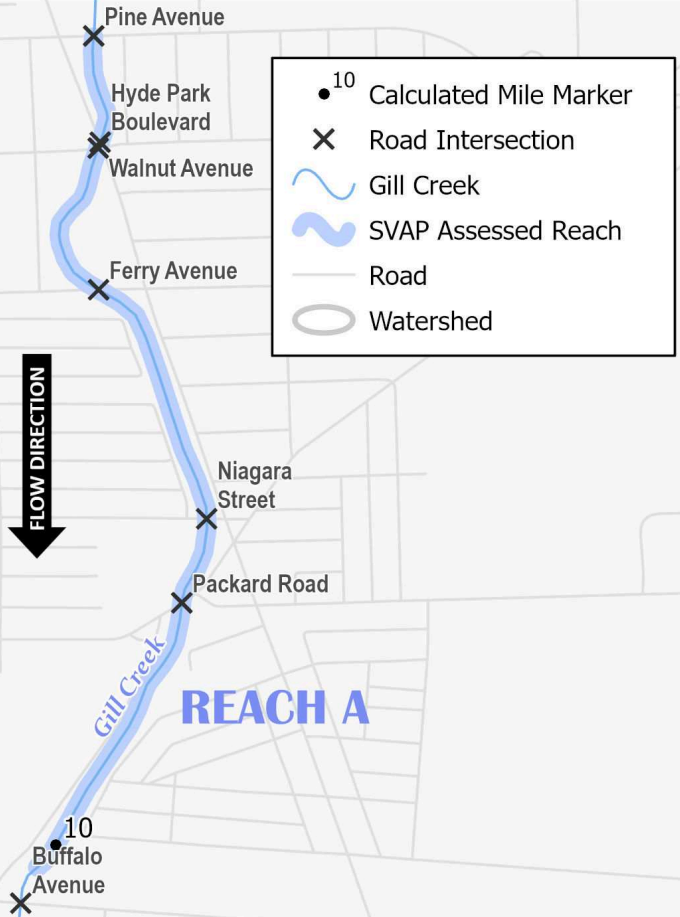
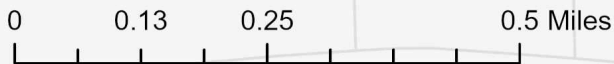
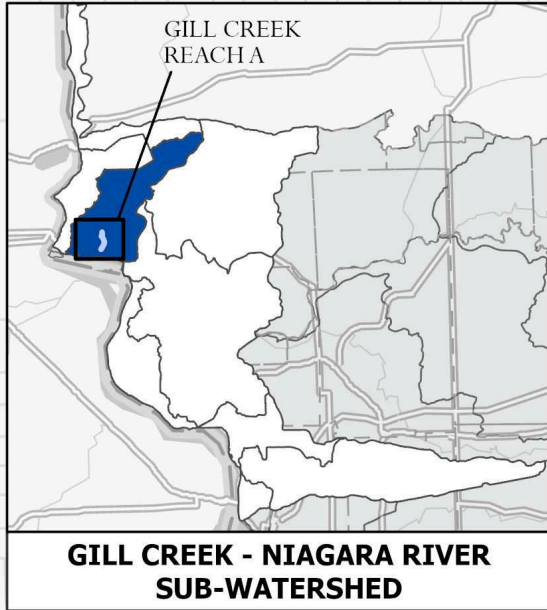
0 1.5 3 6 Miles



GILL CREEK

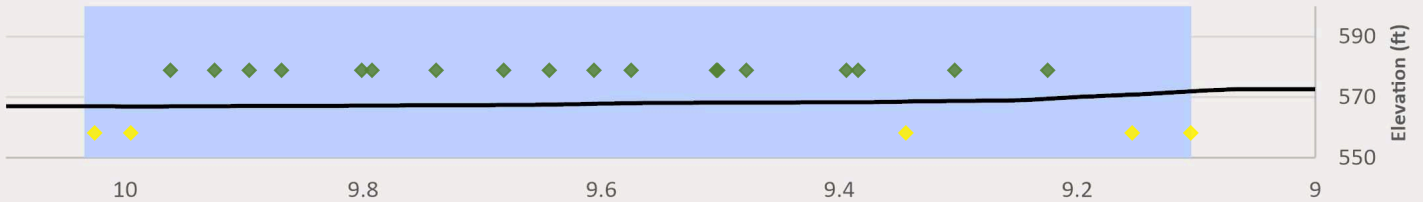
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH A

AVERAGE OVERALL SVAP RATING: **4.7**



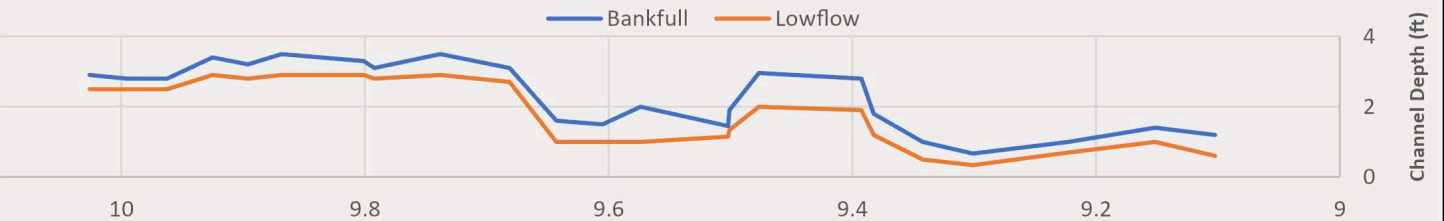
Elevation Profile Substrate

◆ Cobble ◆ Silt/Clay

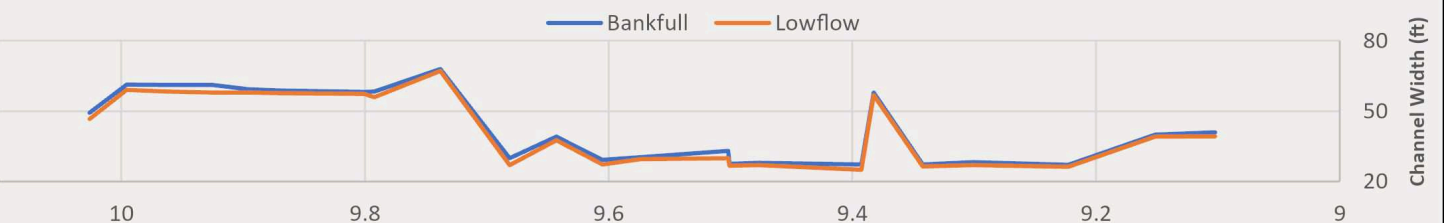


REACH A

Channel Depth



Channel Width



← FLOW DIRECTION

Creek Mile (10.03 at Tailwater, 9.10 at Headwater)

← FLOW DIRECTION



REACH A

Water Appearance

Score Good Mediocre Poor



Nutrient Enrichment

Moderate Severe

Notes Algal Growth Both Dense Aquatic Plant Beds



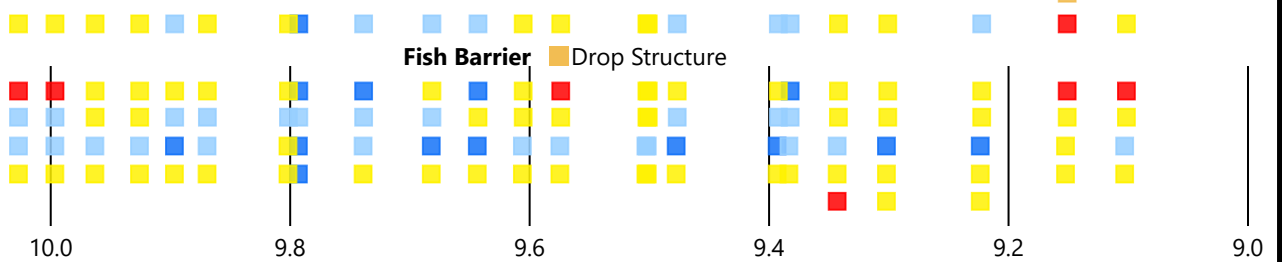
Fish Habitat

Score Excellent Good Mediocre Poor

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

OVERALL SCORE
Canopy Cover
Pools
Invertebrate Habitat
Instream Cover
Riffle Embeddedness

Fish Barrier Drop Structure



Manure Presence

None



Invasive Species

Japanese Knotweed



Aquatic Vegetation

Both Emergent Submerged



OVERALL SVAP RATING

GILL CREEK

Score Good Mediocre

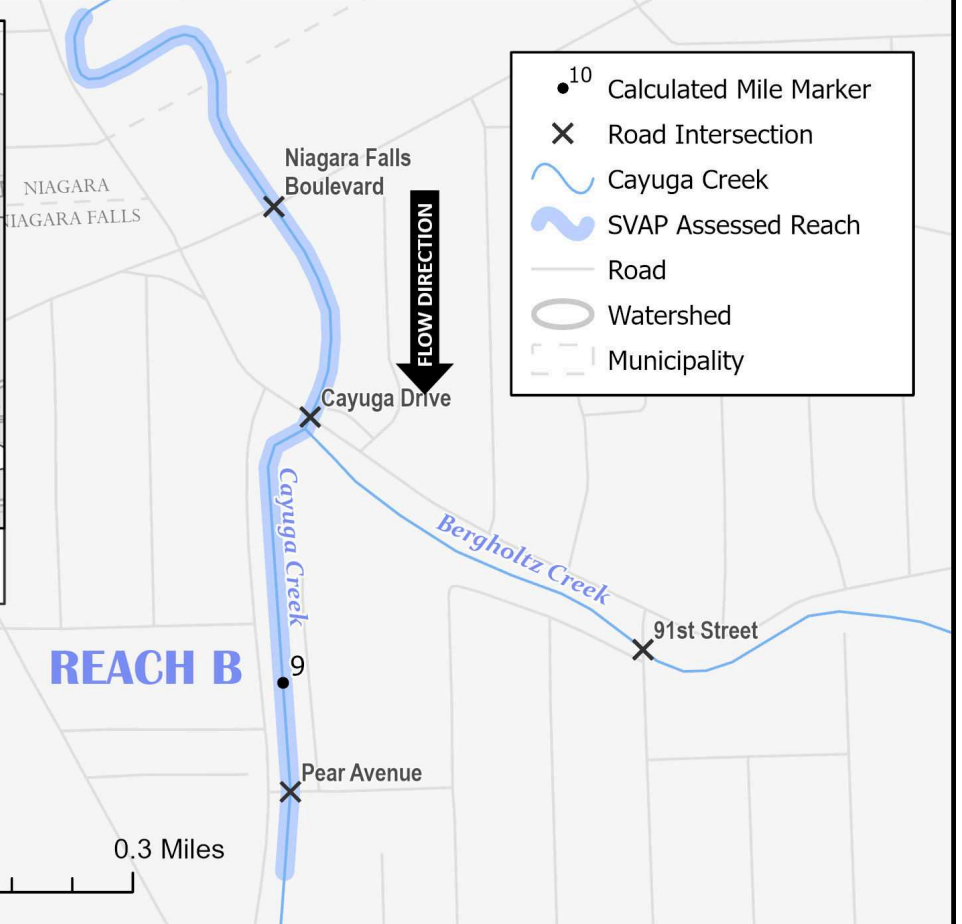
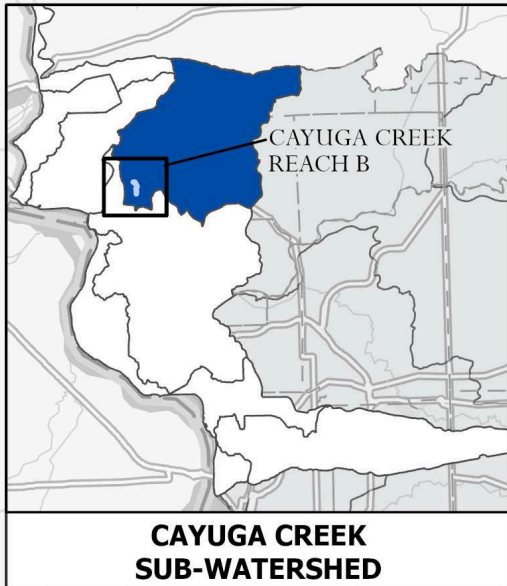


FLOW DIRECTION Creek Mile (10.03 at Tailwater, 9.10 at Headwater) FLOW DIRECTION

CAYUGA CREEK

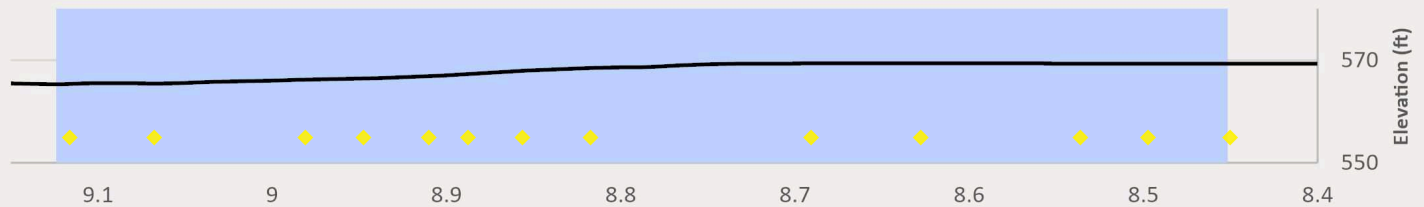
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH B

AVERAGE OVERALL SVAP RATING: **5.1**



0 0.07 0.15 0.3 Miles

Elevation Profile Substrate Silt/Clay

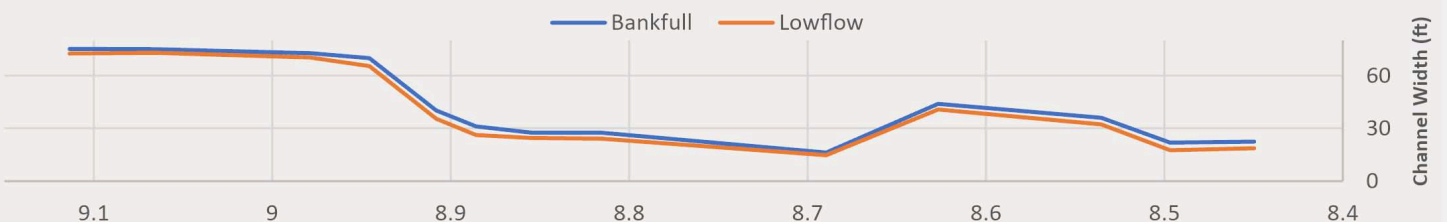


REACH B

Channel Depth



Channel Width



← FLOW DIRECTION

Creek Mile (9.11 at Tailwater, 8.45 at Headwater)

← FLOW DIRECTION

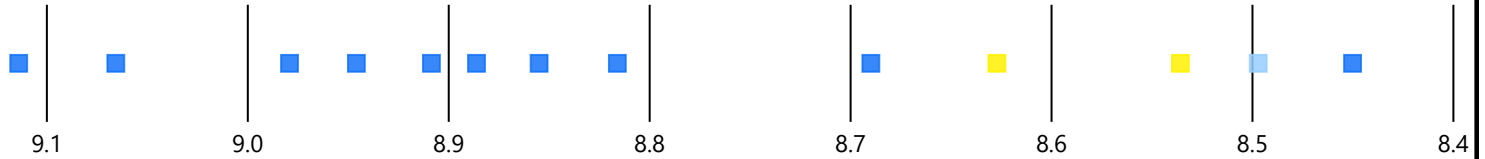
Classification Scheme for SVAP Parameters

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



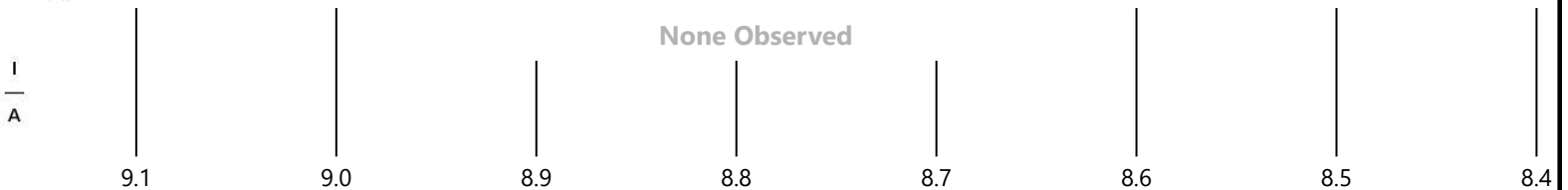
Stream Bank Hardening

■ No ■ Yes



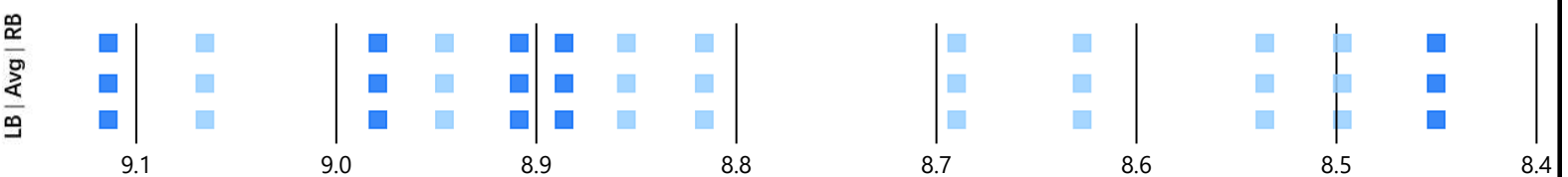
Aggradation/Incision

■ Aggradation ▲ Incision



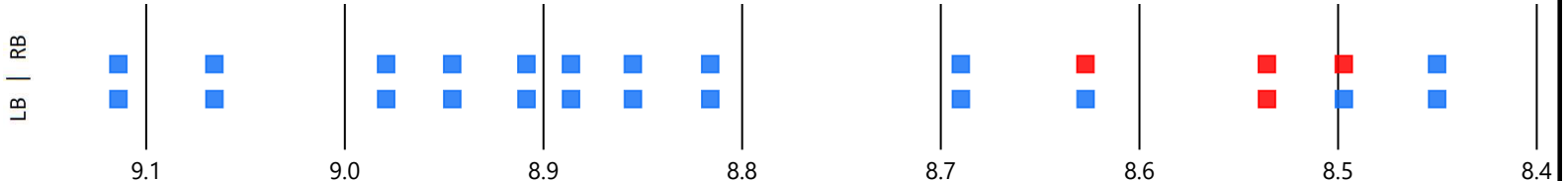
Bank Stability

Score ■ Excellent ■ Good



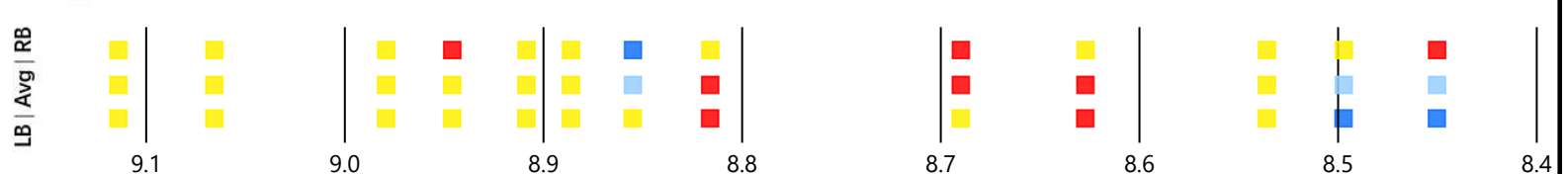
Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



← FLOW DIRECTION Creek Mile (9.11 at Tailwater, 8.45 at Headwater) ← FLOW DIRECTION

REACH B

Water Appearance

Score ■ Mediocre ■ Poor



Nutrient Enrichment

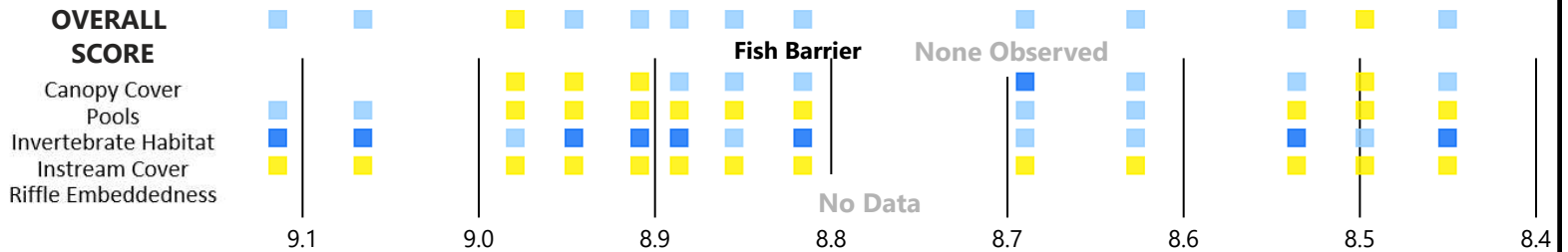
■ Moderate ■ Severe



Fish Habitat

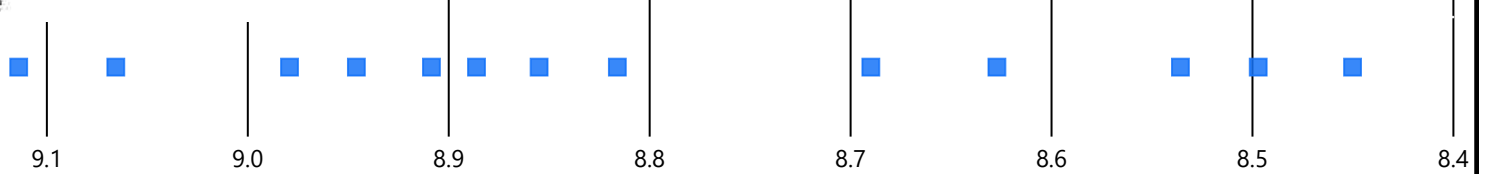
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

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



Manure Presence

■ None



Invasive Species

● Japanese Knotweed



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

CAYUGA CREEK

Score ■ Good ■ Mediocre



Creek Mile (9.11 at Tailwater, 8.45 at Headwater)

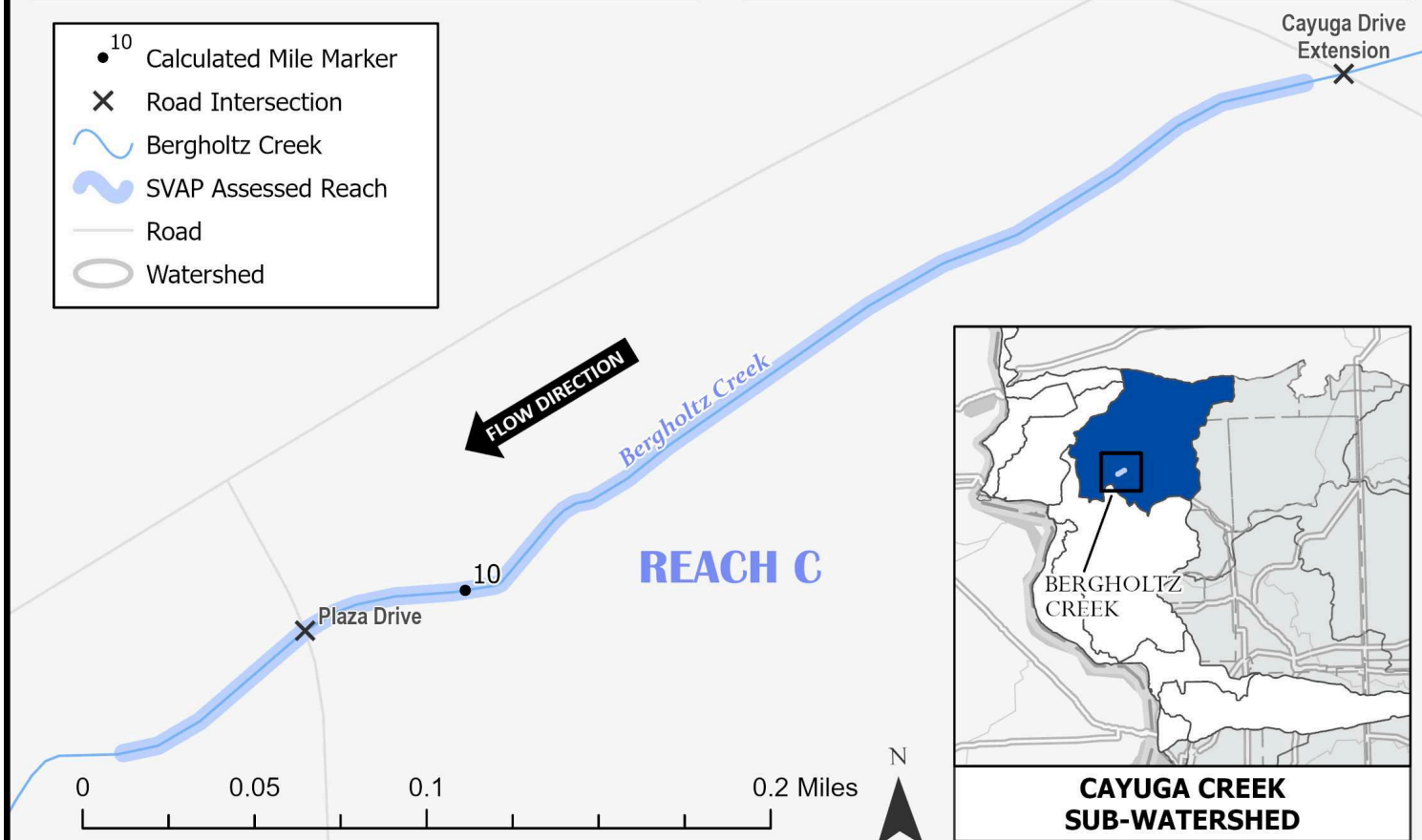


BERGHOLTZ CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH C

AVERAGE OVERALL SVAP RATING: **4.6**

- ¹⁰ Calculated Mile Marker
- ✕ Road Intersection
- ~ Bergholtz Creek
- ~ SVAP Assessed Reach
- Road
- Watershed



Elevation Profile

Substrate ◆ Cobble ◆ Gravel ◆ Silt/Clay

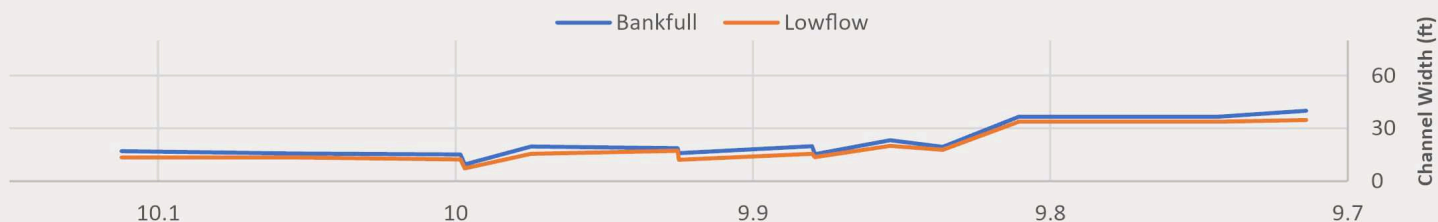


REACH C

Channel Depth



Channel Width



← FLOW DIRECTION

Creek Mile (10.11 at Tailwater, 9.71 at Headwater)

← FLOW DIRECTION

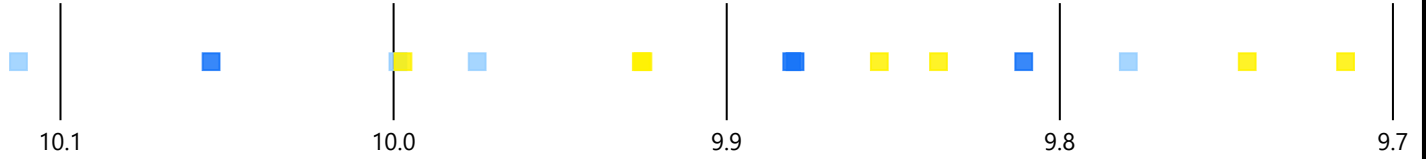
Classification Scheme for SVAP Parameters

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

REACH C

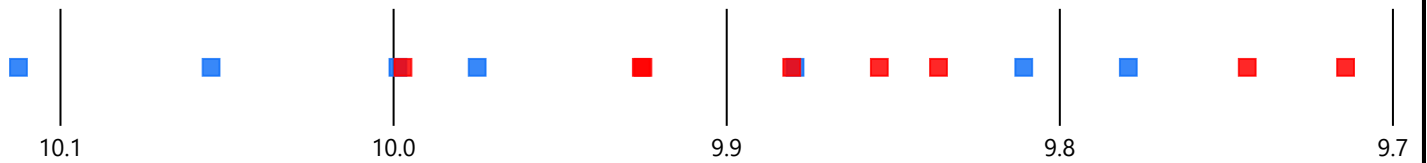
Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre



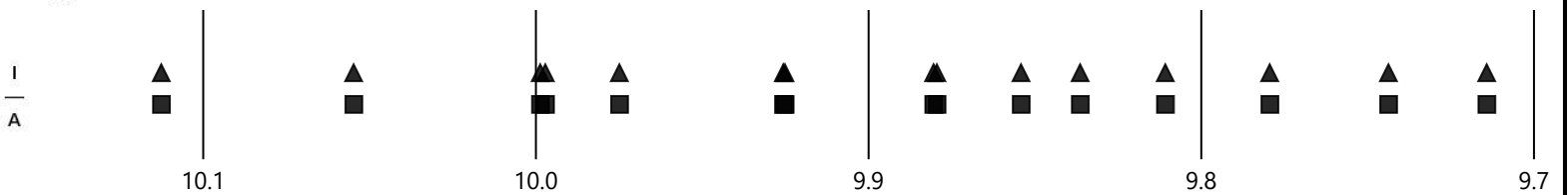
Stream Bank Hardening

■ No ■ Yes



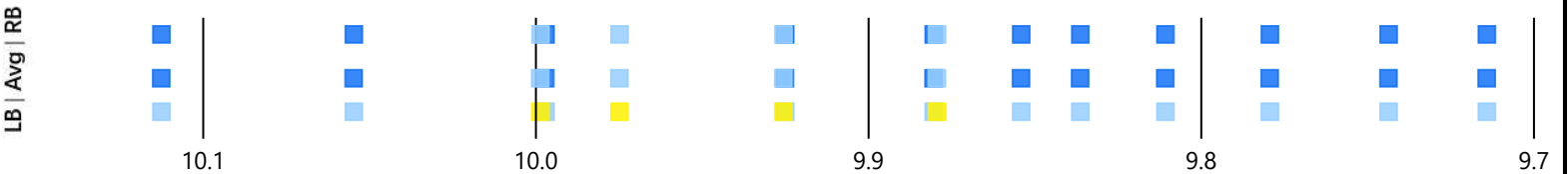
Aggradation/Incision

■ Aggradation ▲ Incision



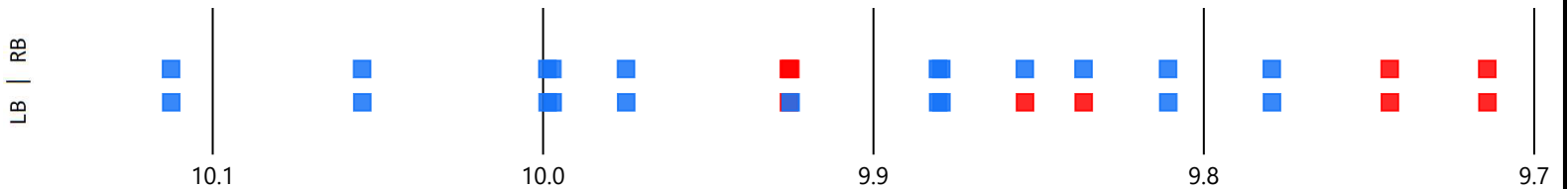
Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

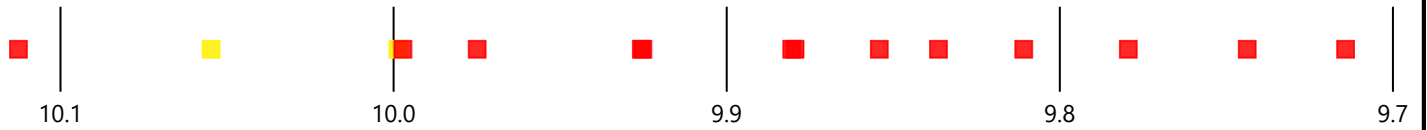


← FLOW DIRECTION Creek Mile (10.11 at Tailwater, 9.71 at Headwater) ← FLOW DIRECTION

REACH C

Water Appearance

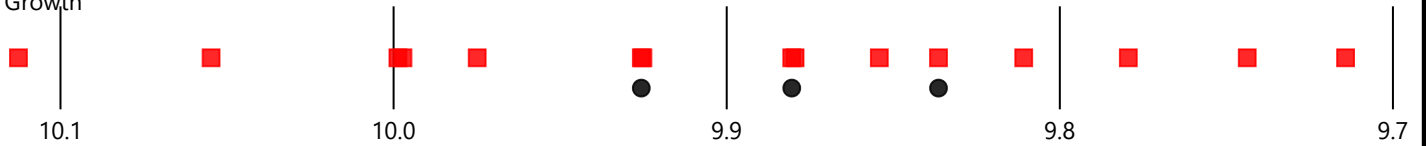
Score ■ Mediocre ■ Poor



Nutrient Enrichment

■ Severe

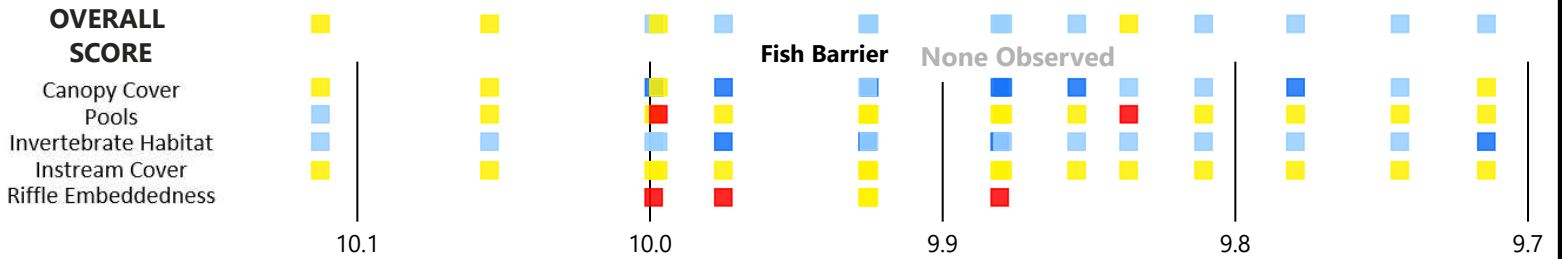
Notes ● Algal Growth



Fish Habitat

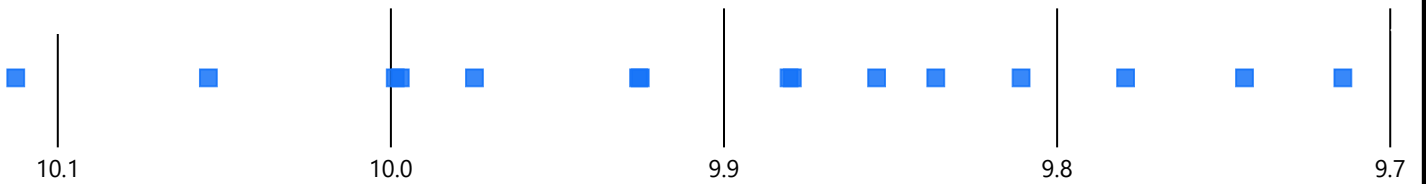
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

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



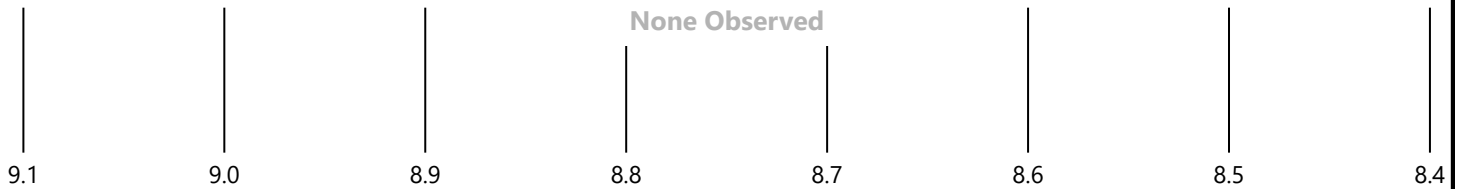
Manure Presence

■ None



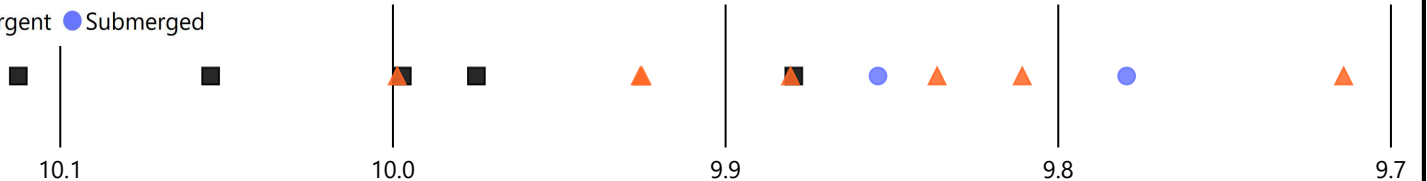
Invasive Species

None Observed



Aquatic Vegetation

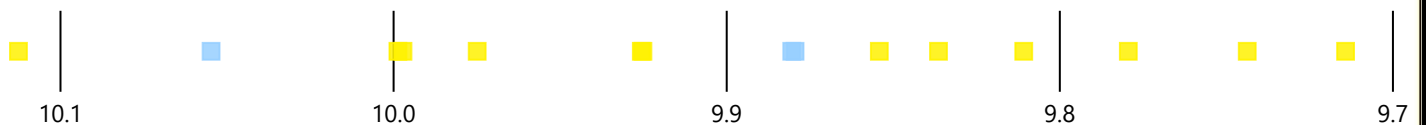
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

BERGHOLTZ CREEK

Score ■ Good ■ Mediocre

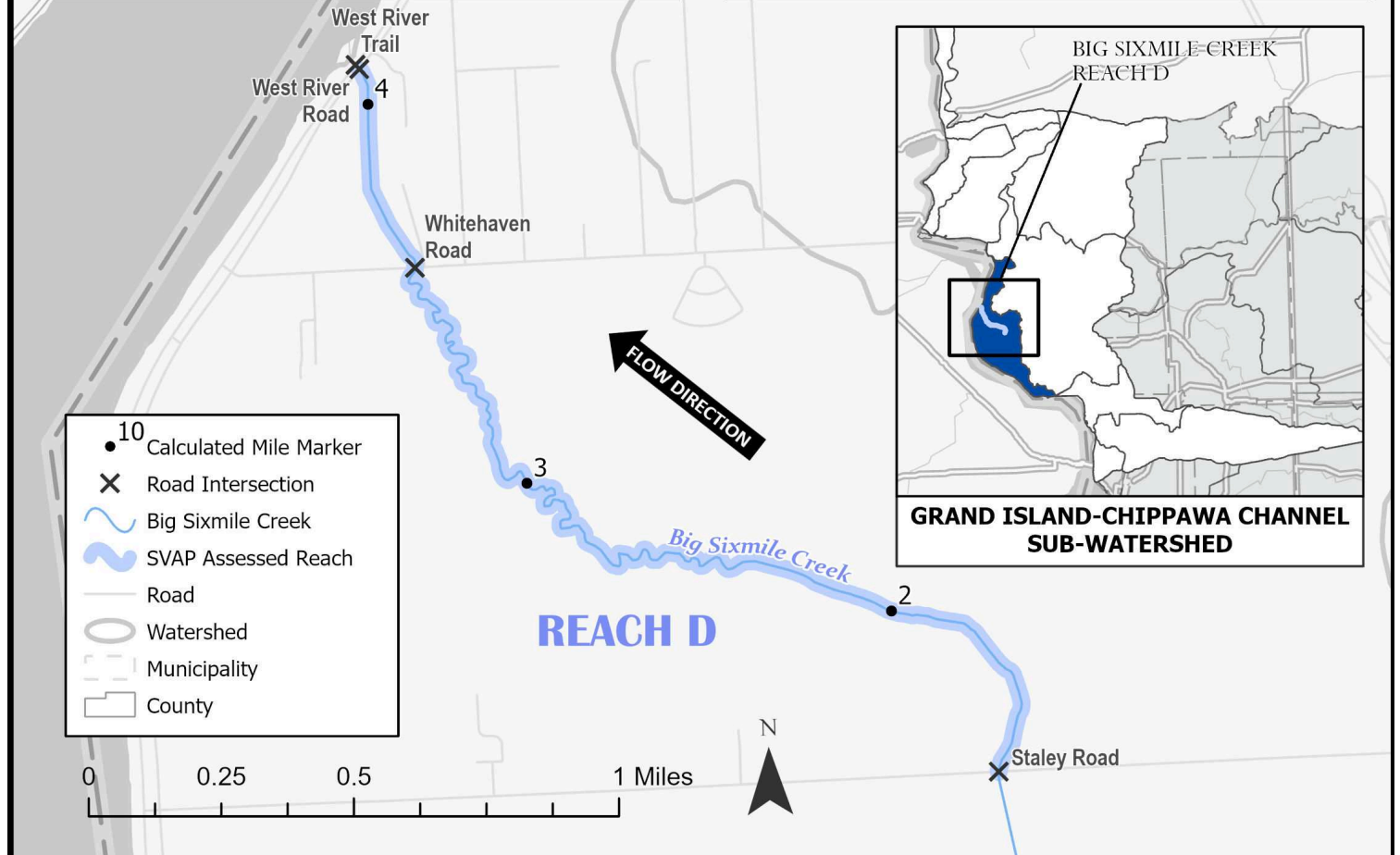


← FLOW DIRECTION Creek Mile (10.11 at Tailwater, 9.71 at Headwater) FLOW DIRECTION ←

BIG SIXMILE CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH D

AVERAGE OVERALL SVAP RATING: **6.6**

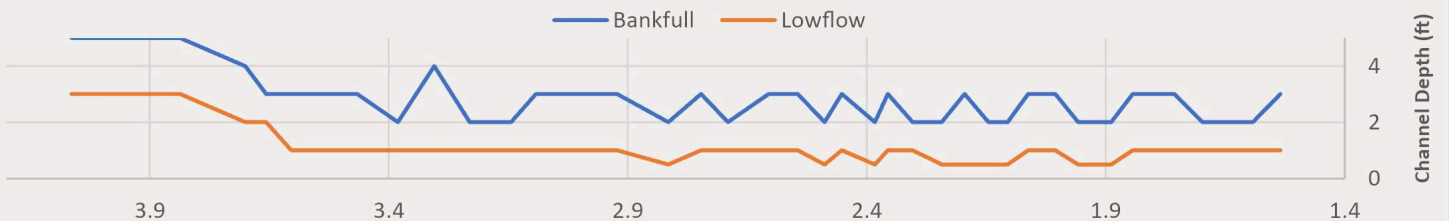


Elevation Profile Substrate ♦ Silt/Clay

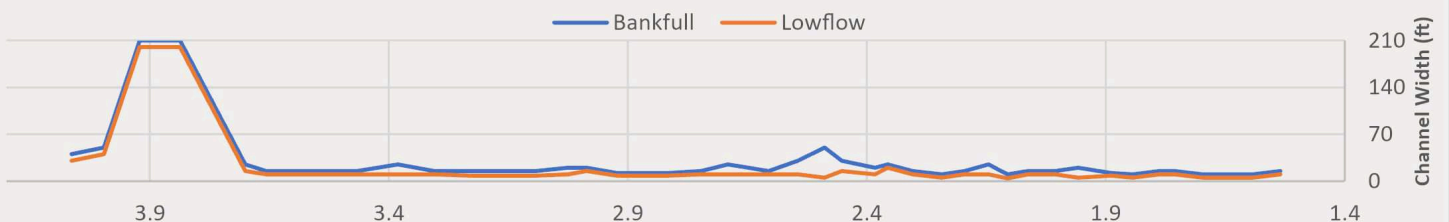


REACH D

Channel Depth



Channel Width



← FLOW DIRECTION

Creek Mile (4.06 at Tailwater, 1.53 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



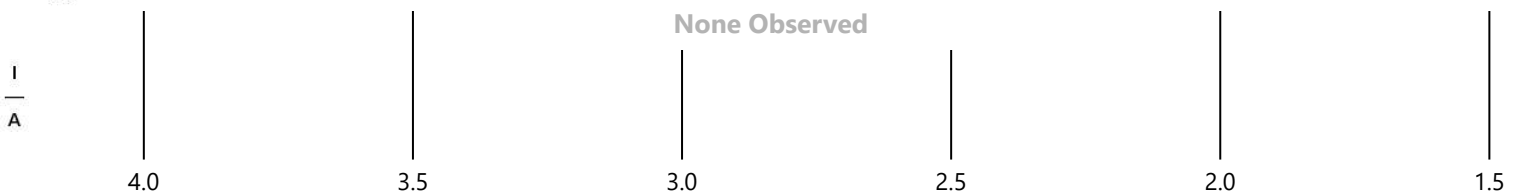
Stream Bank Hardening

■ No ■ Yes



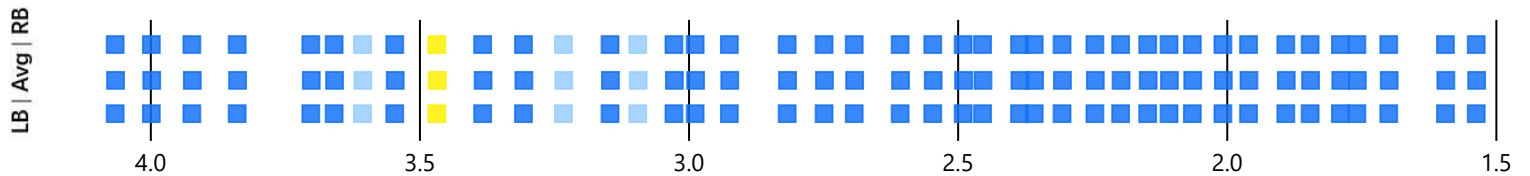
Aggradation/Incision

■ Aggradation ▲ Incision



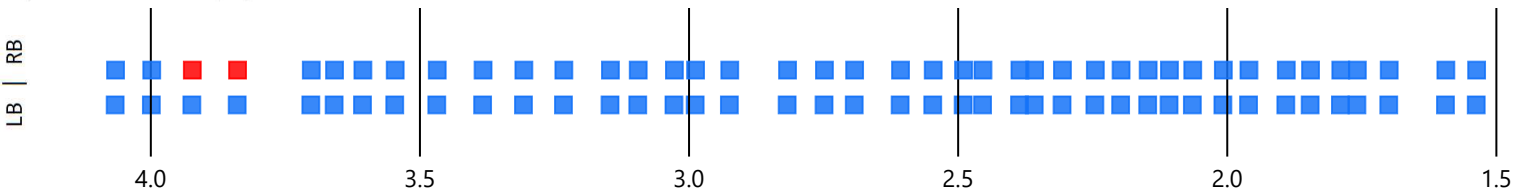
Bank Stability

Score ■ Excellent ■ Good ■ Mediocre



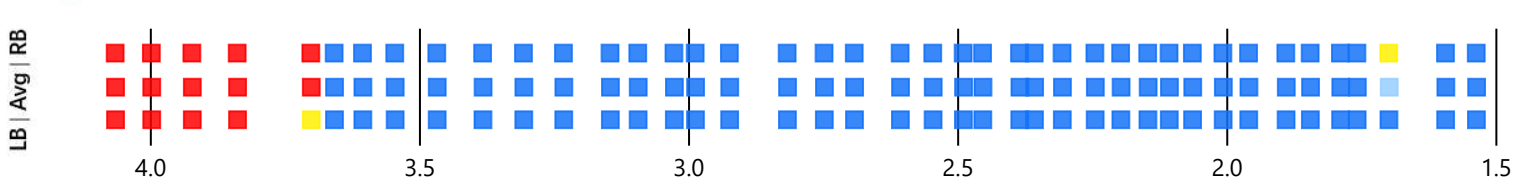
Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Creek Mile (4.06 at Tailwater, 1.53 at Headwater)



REACH D

Water Appearance

Score ■ Excellent ■ Good ■ Mediocre



Nutrient Enrichment

■ Low ■ Mild ■ Moderate

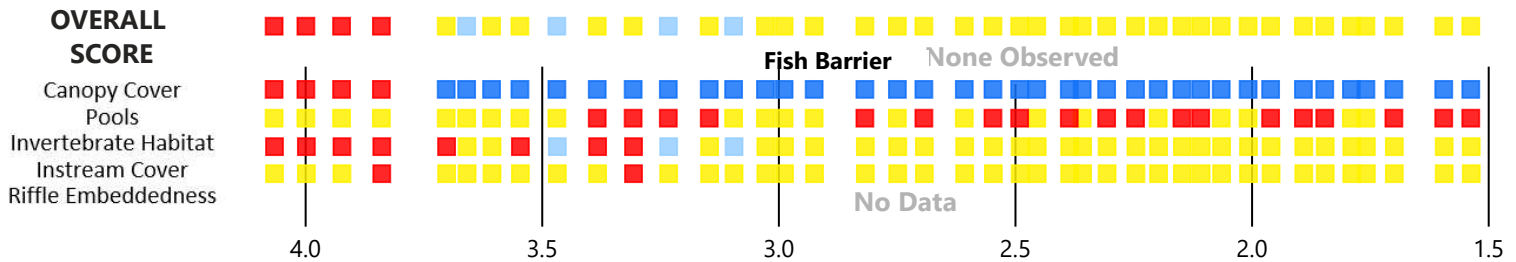
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



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

None Observed



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

BIG SIXMILE CREEK

Score ■ Excellent ■ Good ■ Mediocre



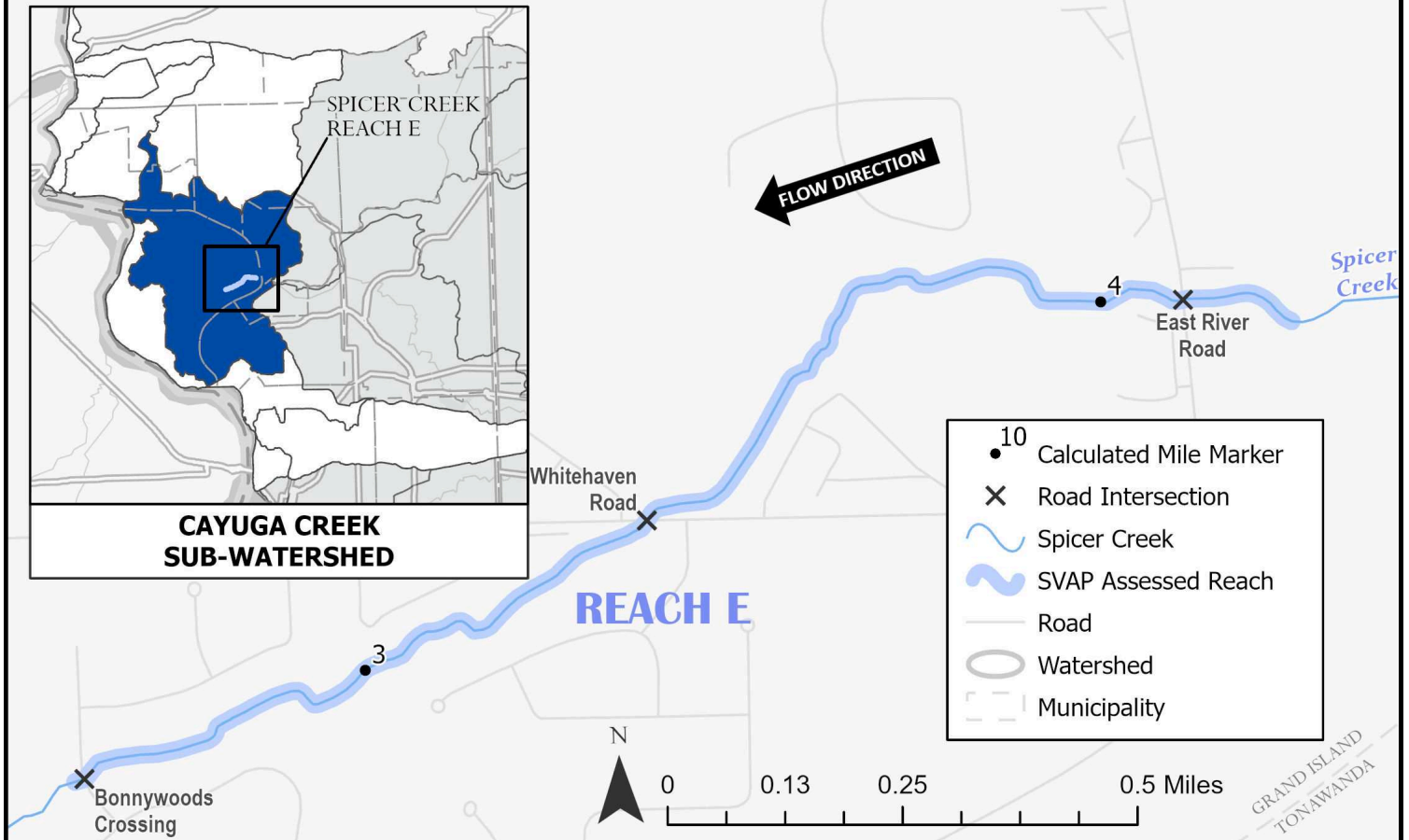
Creek Mile (4.06 at Tailwater, 1.53 at Headwater)



SPICER CREEK

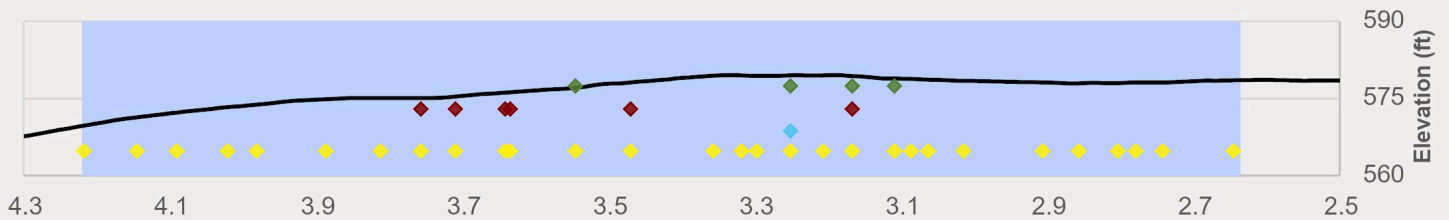
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH E

AVERAGE OVERALL SVAP RATING: **6.4**



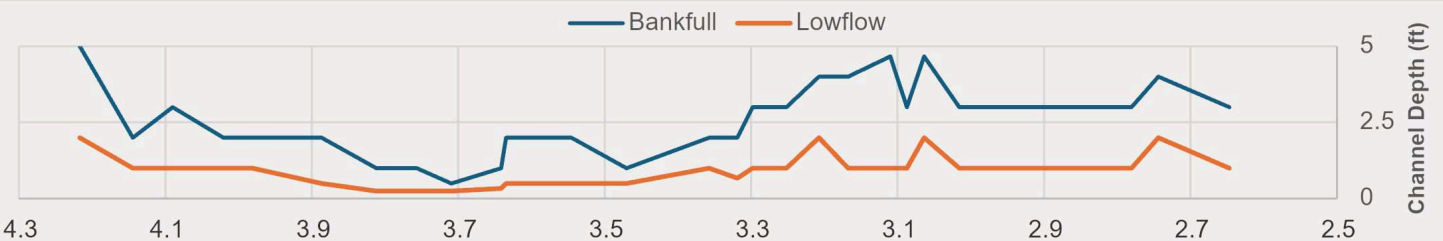
Elevation Profile

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



REACH E

Channel Depth



Channel Width



← FLOW DIRECTION

Creek Mile (4.22 at Tailwater, 2.65 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



Stream Bank Hardening

■ No ■ Yes



Aggradation/Incision

■ Aggradation ▲ Incision



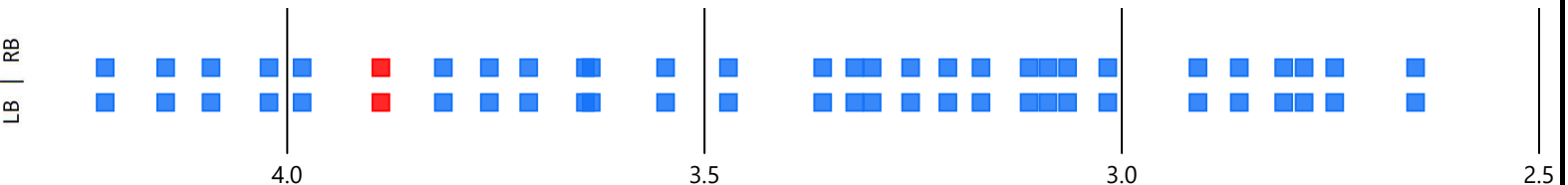
Bank Stability

Score ■ Excellent ■ Good



Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



← FLOW DIRECTION Creek Mile (4.22 at Tailwater, 2.65 at Headwater) ← FLOW DIRECTION

REACH E

Water Appearance

Score ■ Excellent ■ Good ■ Mediocre



Nutrient Enrichment

■ Mild ■ Moderate

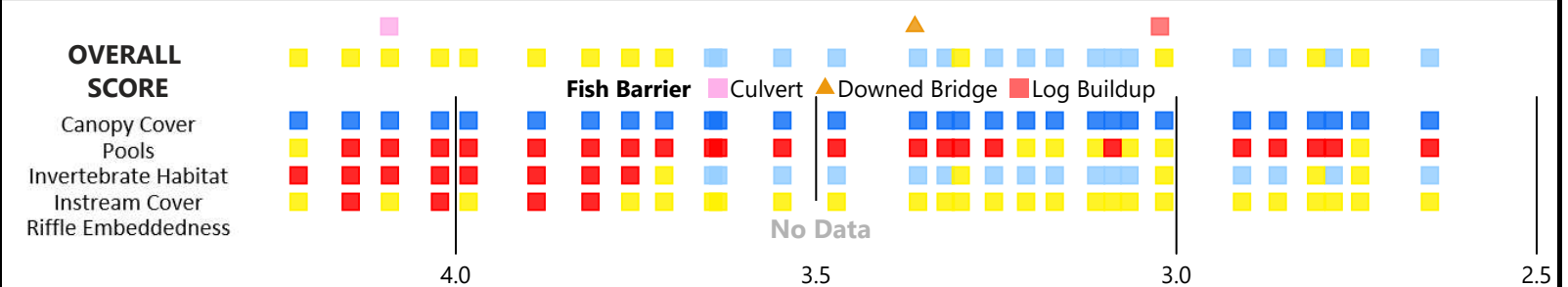
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



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

None Observed



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

SPICER CREEK

Score ■ Good ■ Mediocre



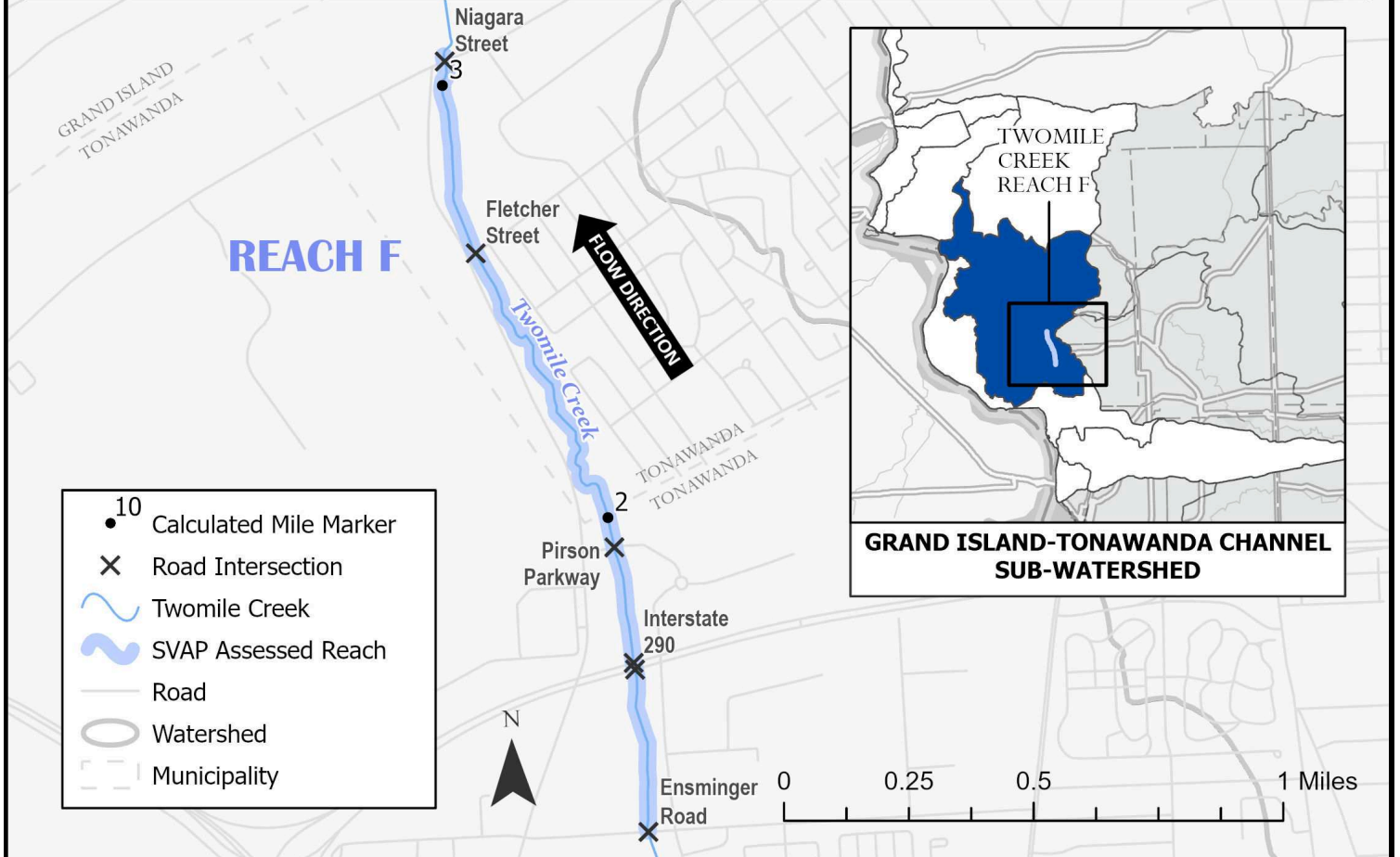
Creek Mile (4.22 at Tailwater, 2.65 at Headwater)



TWOMILE CREEK

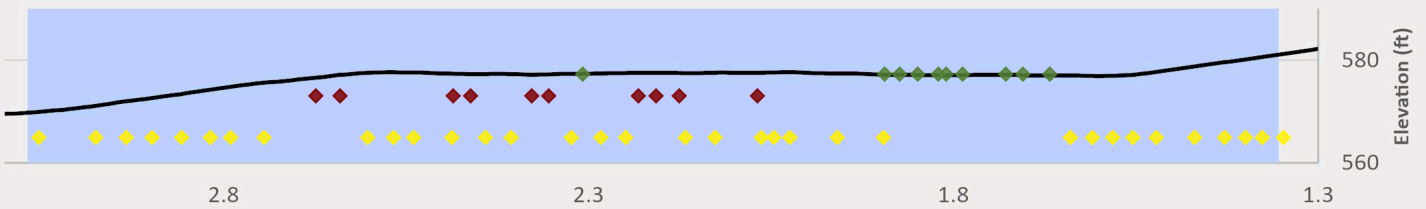
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH F

AVERAGE OVERALL SVAP RATING: **4.6**



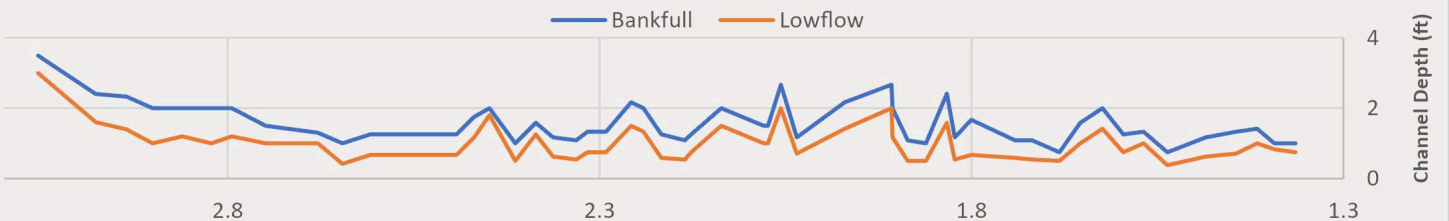
Elevation Profile

Substrate ◆ Cobble ◆ Gravel ◆ Silt/Clay



REACH F

Channel Depth



Channel Width



← FLOW DIRECTION

Creek Mile (3.05 at Tailwater, 1.36 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 F

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



← FLOW DIRECTION

Creek Mile (3.05 at Tailwater, 1.36 at Headwater)

← FLOW DIRECTION

REACH F

Water Appearance

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

■ Mild ■ Moderate ■ Severe

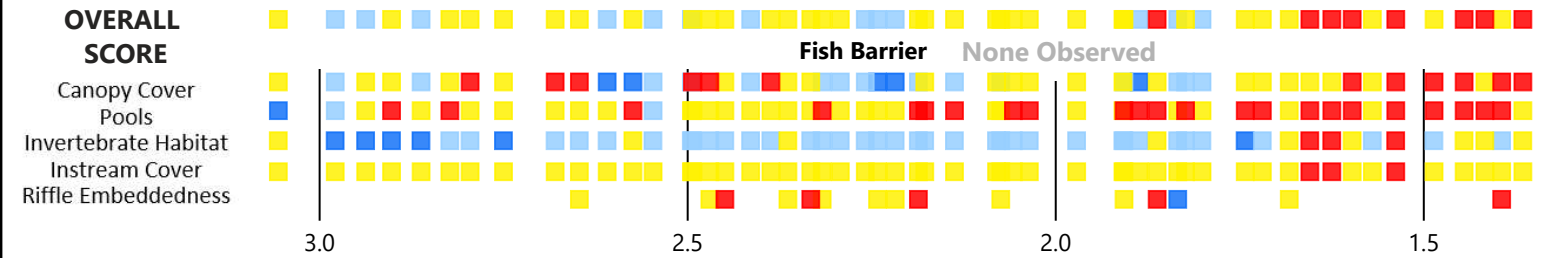
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Bed



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

● Japanese Knotweed



Aquatic Vegetation

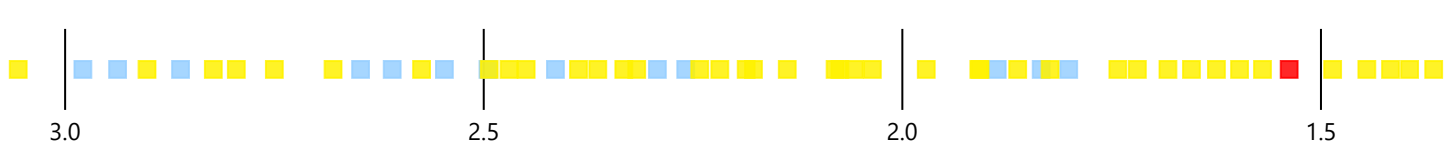
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

TWOMILE CREEK

Score ■ Good ■ Mediocre ■ Poor



← FLOW DIRECTION

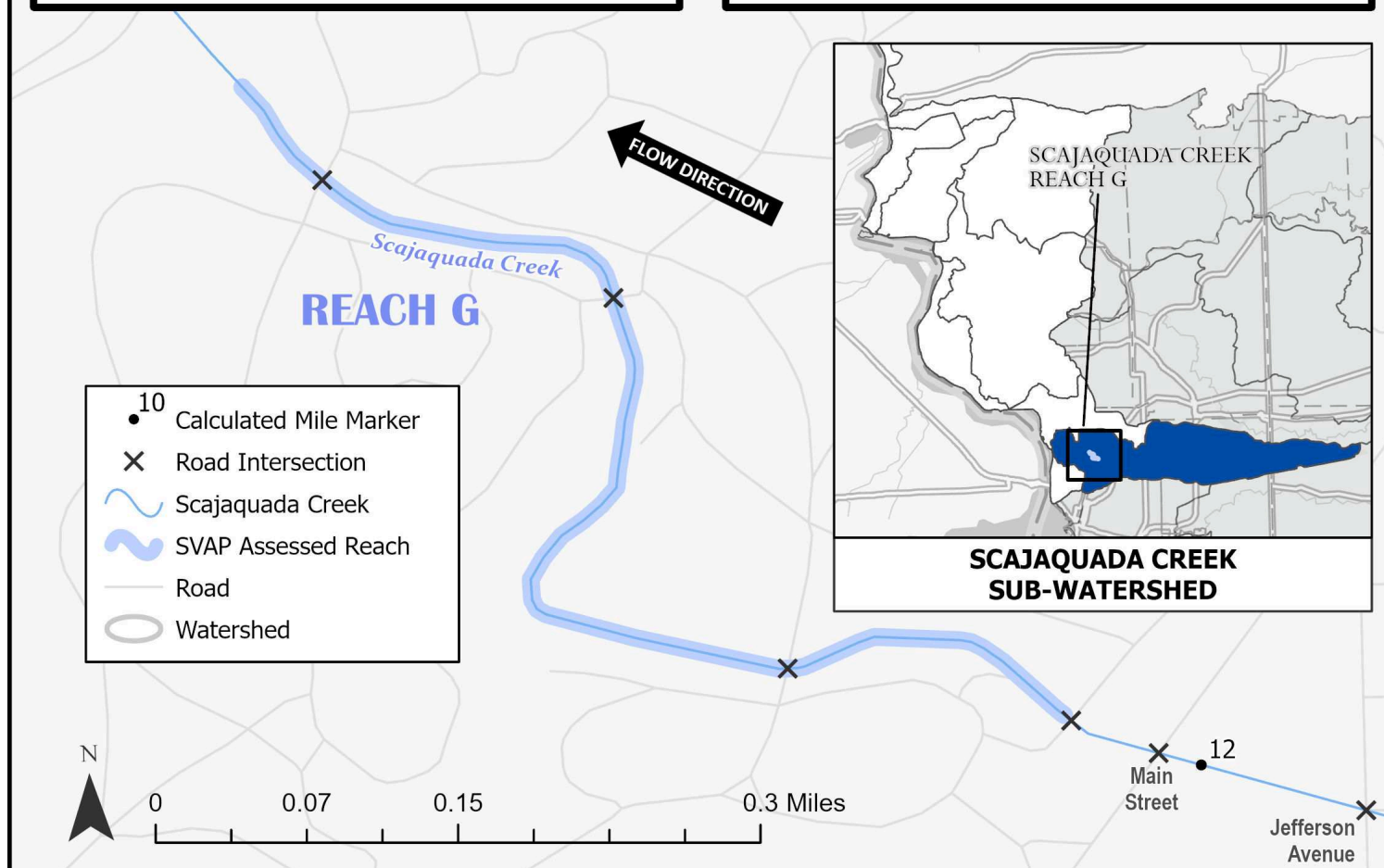
Creek Mile (3.05 at Tailwater, 1.36 at Headwater)

← FLOW DIRECTION

SCAJAQUADA CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH G

AVERAGE OVERALL SVAP RATING: **4.2**



Elevation Profile

Substrate ◆ Bedrock/Concrete ◆ Boulder



REACH G

Channel Depth



Channel Width



← **FLOW DIRECTION** Creek Mile (12.75 at Tailwater, 12.08 at Headwater) **FLOW DIRECTION** →

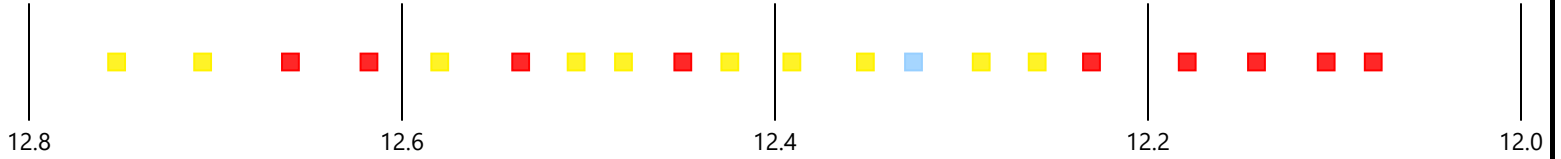
Classification Scheme for SVAP Parameters

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

REACH G

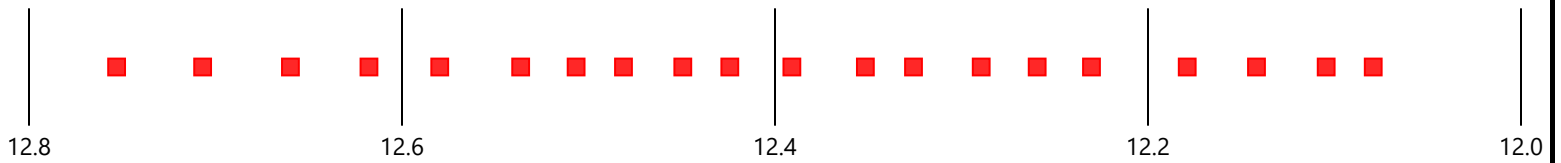
Channel Conditions

Score Good Mediocre Poor



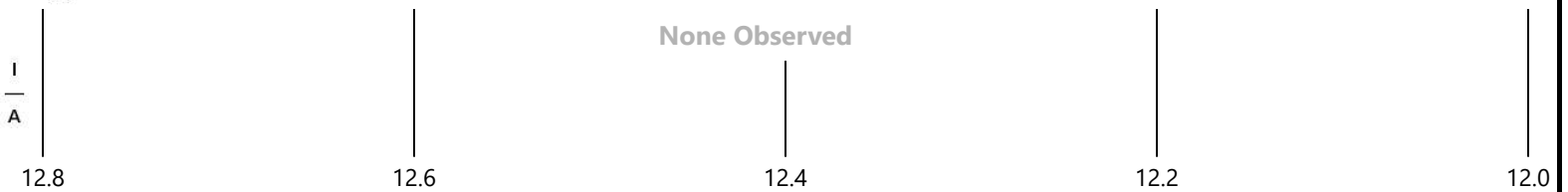
Stream Bank Hardening

Yes



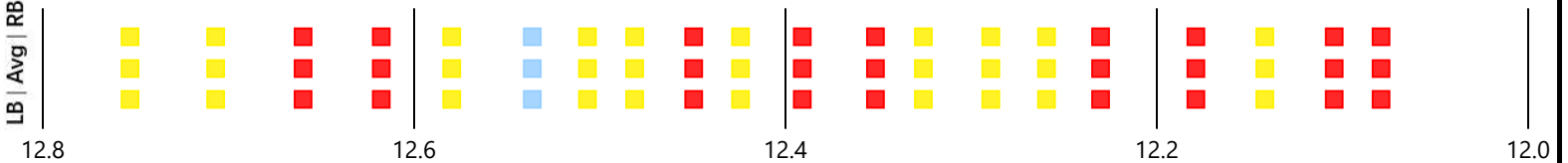
Aggradation/Incision

Aggradation Incision



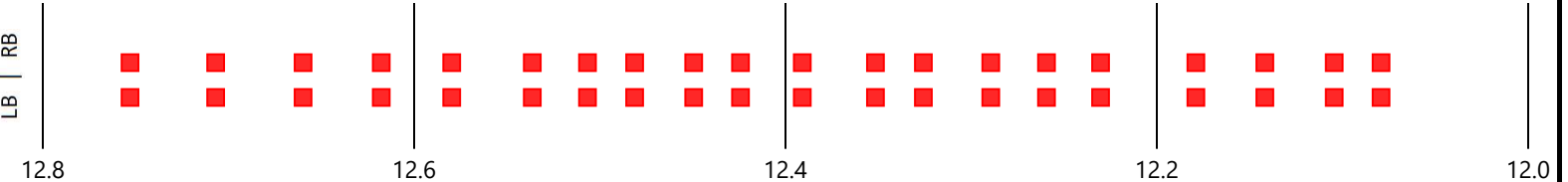
Bank Stability

Score Good Mediocre Poor



Bank Condition

Hardened Structure Natural



Riparian Zone

Score Mediocre Poor

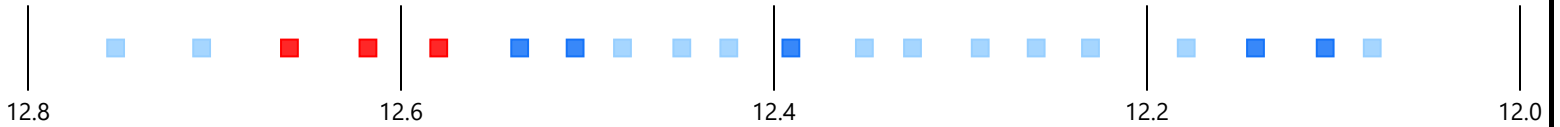


FLOW DIRECTION Creek Mile (12.75 at Tailwater, 12.08 at Headwater) FLOW DIRECTION

REACH G

Water Appearance

Score ■ Excellent ■ Good ■ Poor



Nutrient Enrichment

■ Low ■ Mild ■ Moderate ■ Severe

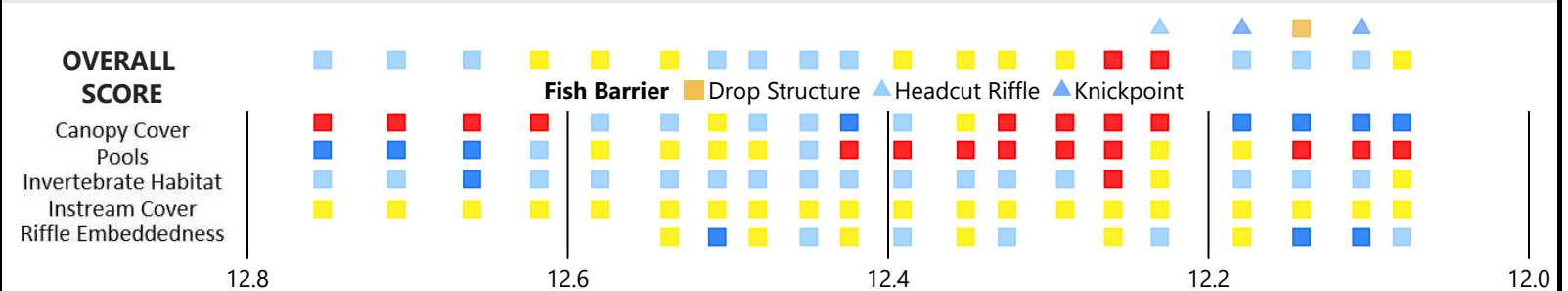
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

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



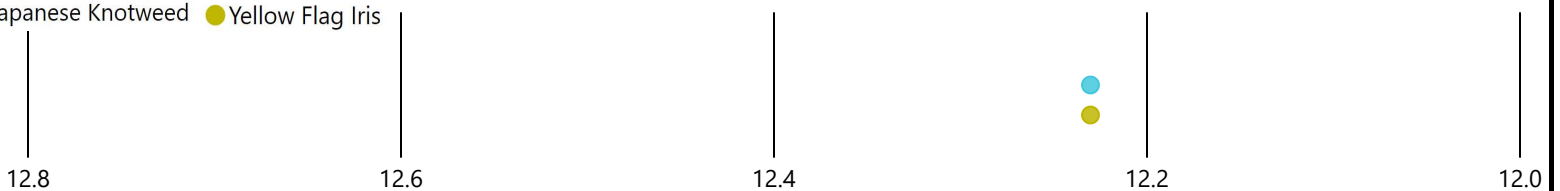
Manure Presence

■ Manure Present ■ None



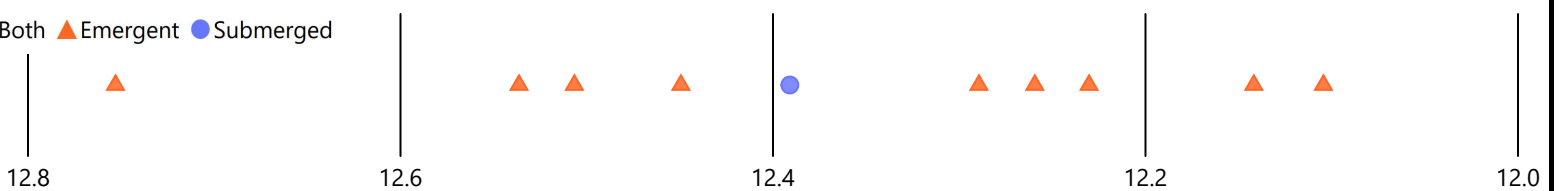
Invasive Species

● Japanese Knotweed ● Yellow Flag Iris



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

SCAJAQUADA CREEK

Score ■ Good ■ Mediocre



← FLOW DIRECTION Creek Mile (12.75 at Tailwater, 12.08 at Headwater) FLOW DIRECTION ←

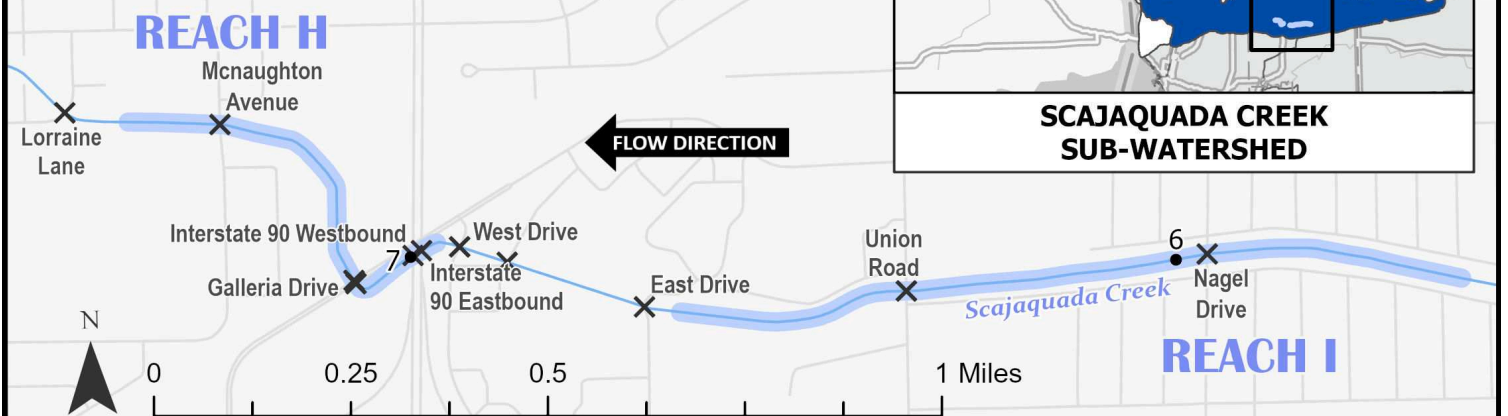
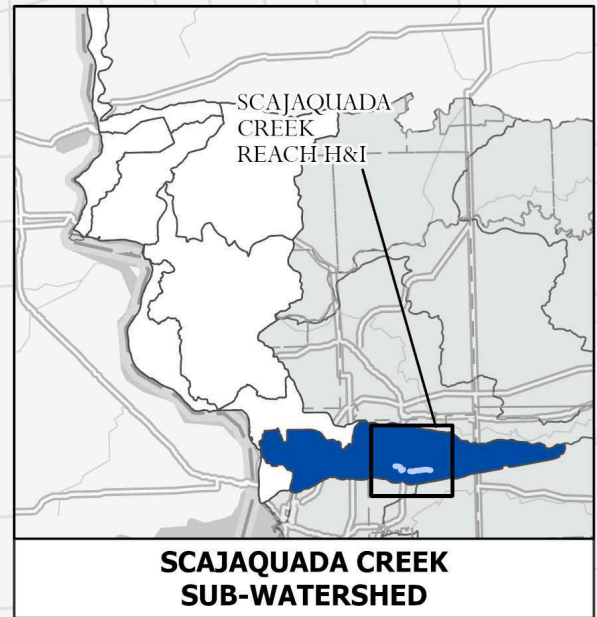
SCAJAQUADA CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS
FOR REACH H&I

AVERAGE OVERALL SVAP RATING

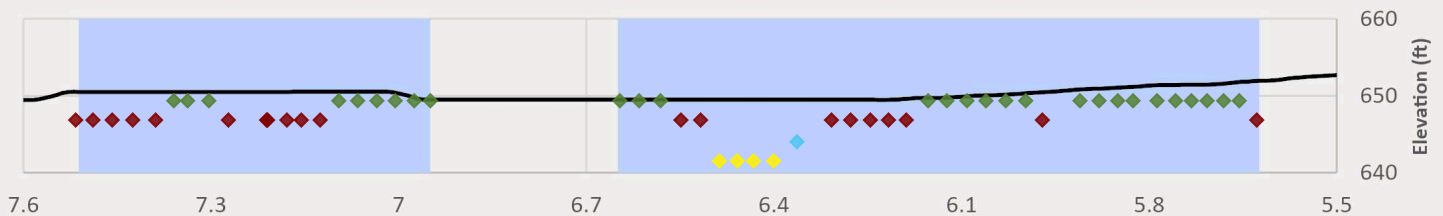
REACH H: **5.3** REACH I: **5.8**

- 10 Calculated Mile Marker
- ✕ Road Intersection
- ~ Scajaquada Creek
- ~ SVAP Assessed Reach
- Road
- Watershed



Elevation Profile

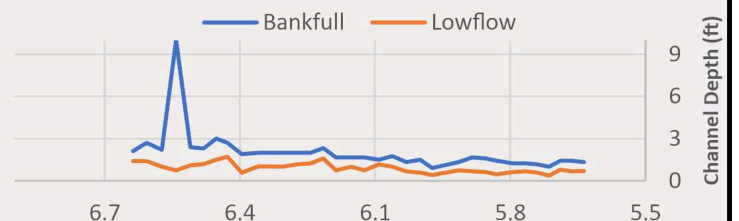
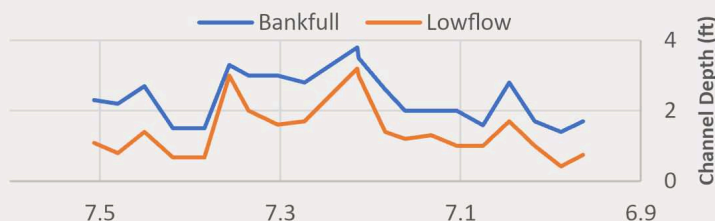
Substrate ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



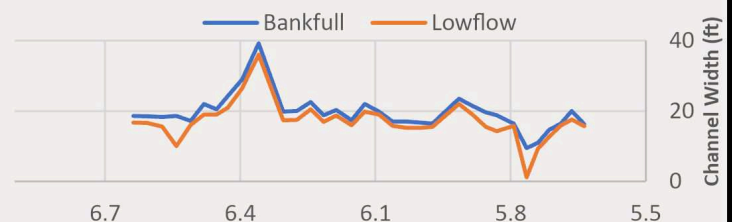
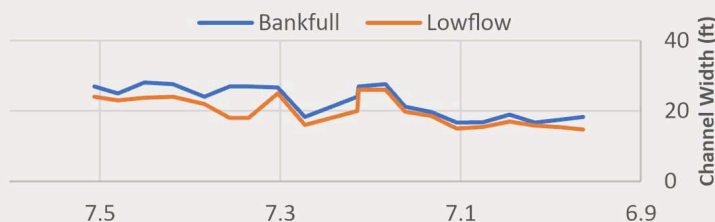
REACH H

REACH I

Channel Depth

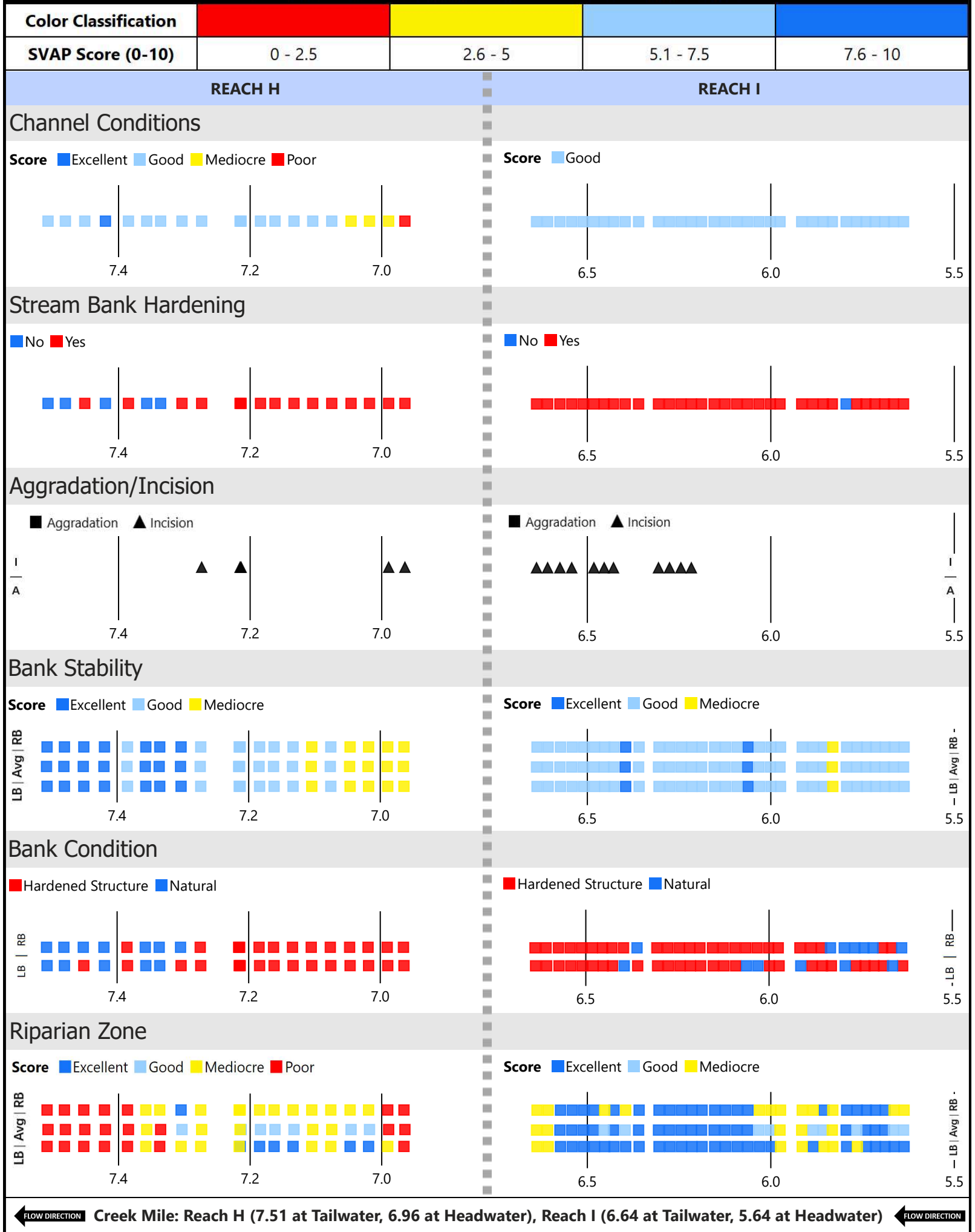


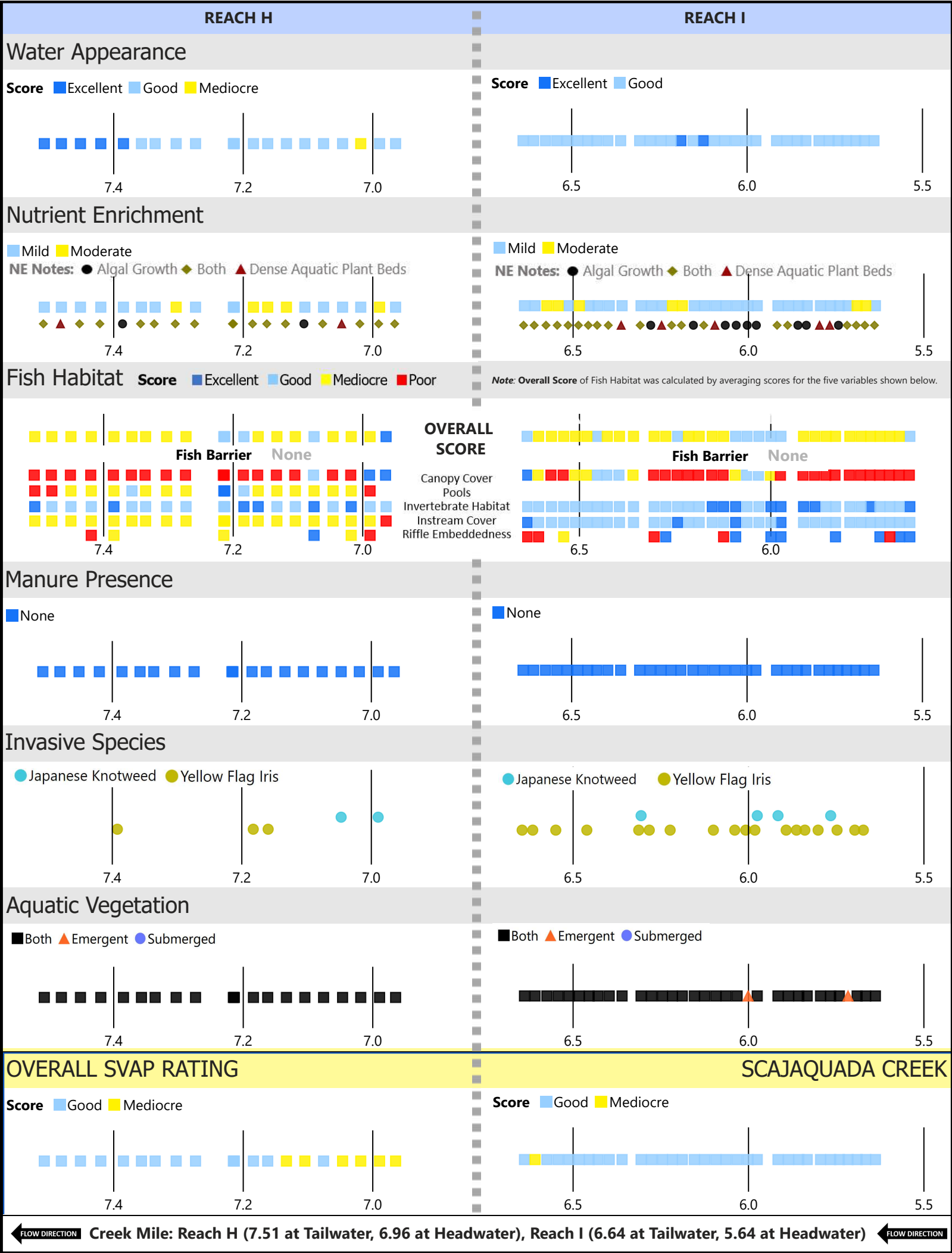
Channel Width



FLOW DIRECTION Creek Mile (Reach H: 7.51 at Tailwater, 6.96 at Headwater; Reach I: 6.64 at Tailwater, 5.64 at Headwater) FLOW DIRECTION

Classification Scheme for SVAP Parameters



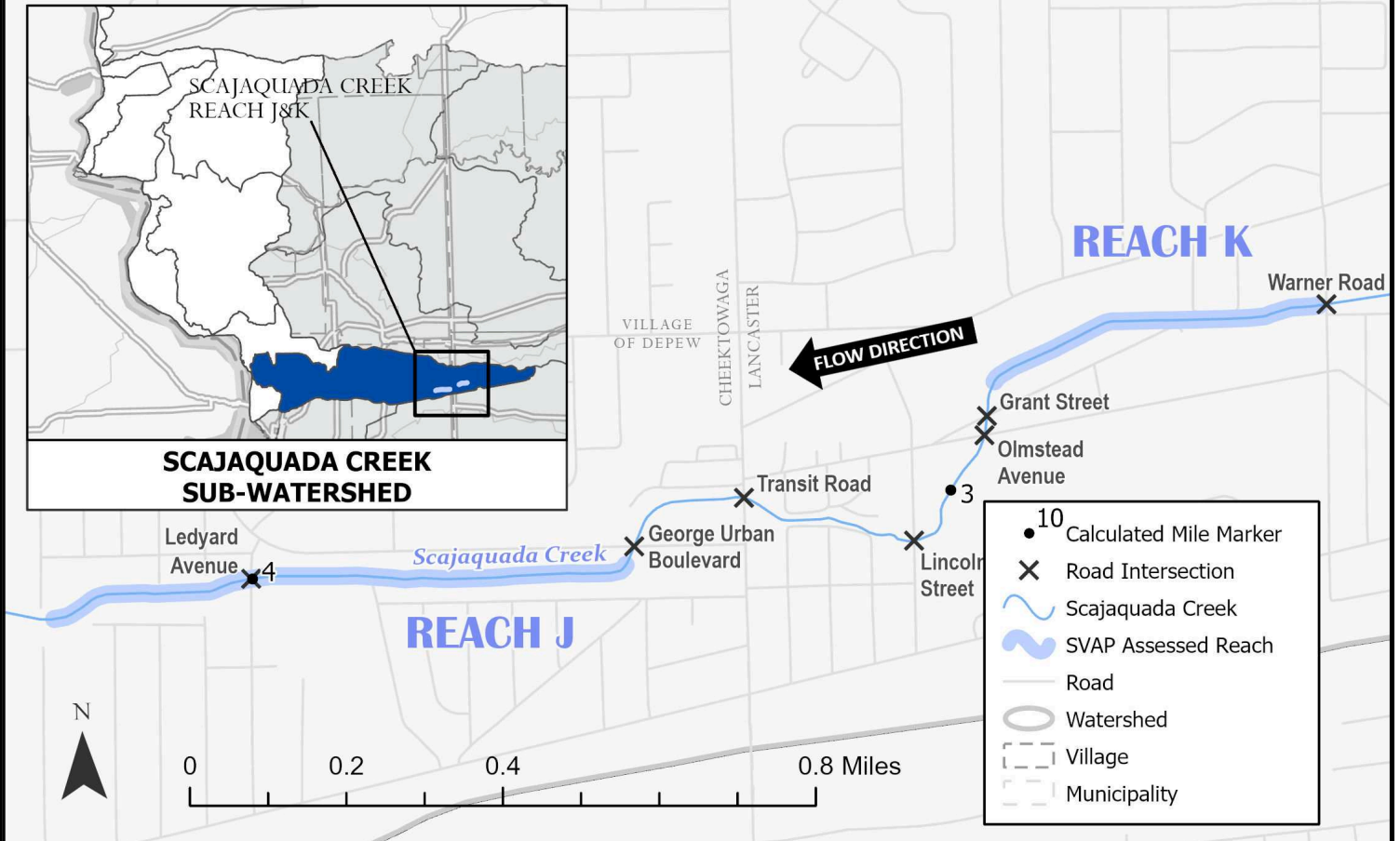
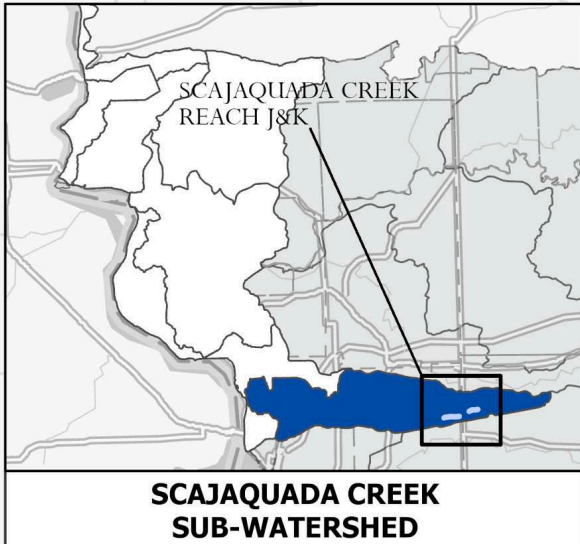


SCAJAQUADA CREEK

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

AVERAGE OVERALL SVAP RATING

REACH J: **5.6** REACH K: **6.3**



Elevation Profile

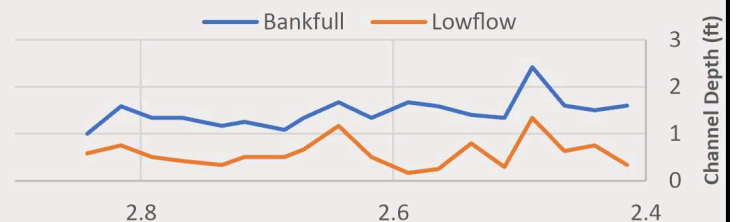
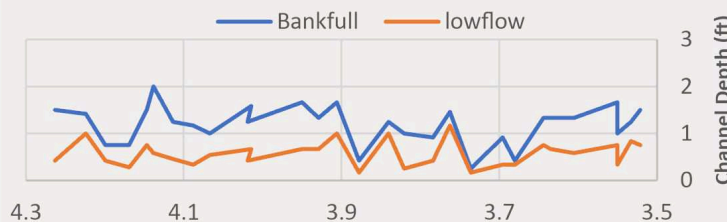
Substrate ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



REACH J

REACH K

Channel Depth



Channel Width



Flow DIRECTION Creek Mile (Reach J: 4.26 at Tailwater, 3.52 at Headwater; Reach K: 2.84 at Tailwater, 2.41 at Headwater) Flow DIRECTION

Classification Scheme for SVAP Parameters

