

MURDER CREEK SUB-WATERSHED SVAP MILEAGE 2022

Stream Visual Assessment Protocol - SVAP

- 10 Calculated Mile Marker
-  Ledge Creek
-  Murder Creek
-  HUC 12 Sub-Watershed
-  Waterway
-  Municipality
-  County

SVAP Assessment Reach ID

A
BCDE

NOTE: Waterway reaches were assessed using a modified SVAP procedure from the USDA Natural Resources Conservation Service. 21.28 miles of waterways were assessed out of a total of 225.0 miles of waterways.

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. Sources: Esri, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community. Esri, Airbus DS, N Robinson, NCEAS, NLS, OS, NMA, Geodata styrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community



0 1 2 4 Miles



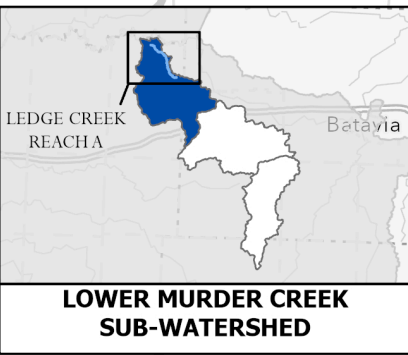
LEDGE CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH A

AVERAGE OVERALL SVAP RATING: **6.2**

REACH A

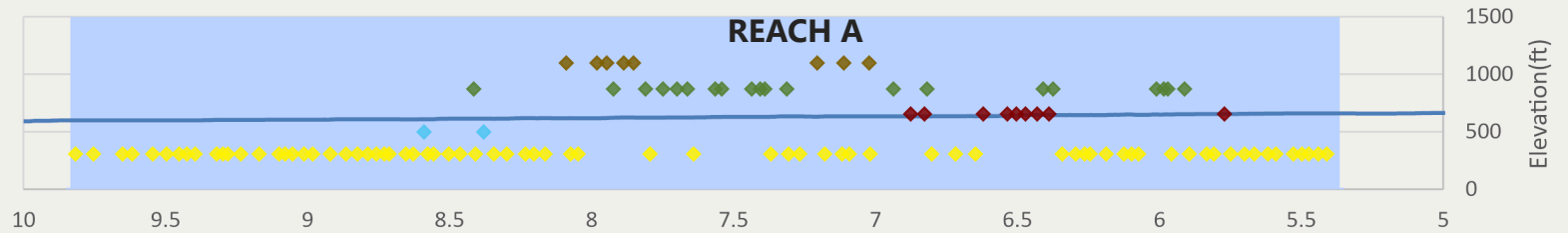
- 10 Calculated Mile Marker
- X Road Intersection
- Ledge Creek
- SVAP Assessed Reach
- Road
- Watershed
- Village
- Municipality
- County



0 0.25 0.5 1 Miles

Elevation Profile

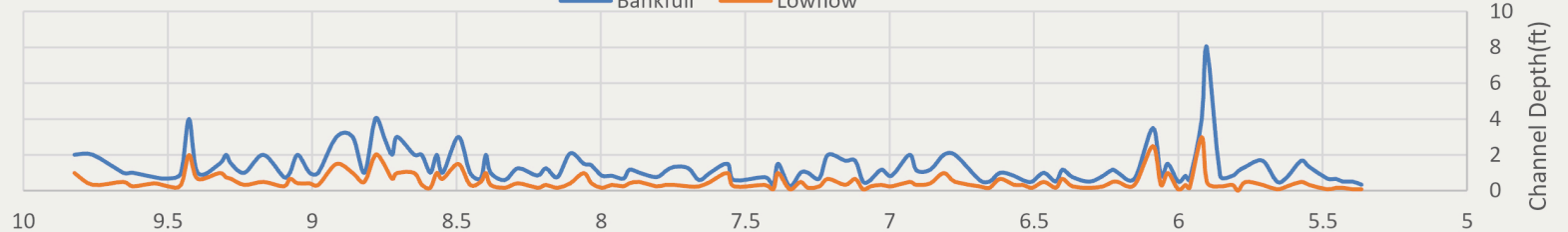
Substrate ◆ Bedrock/Concrete ◆ Boulder ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



Channel Depth

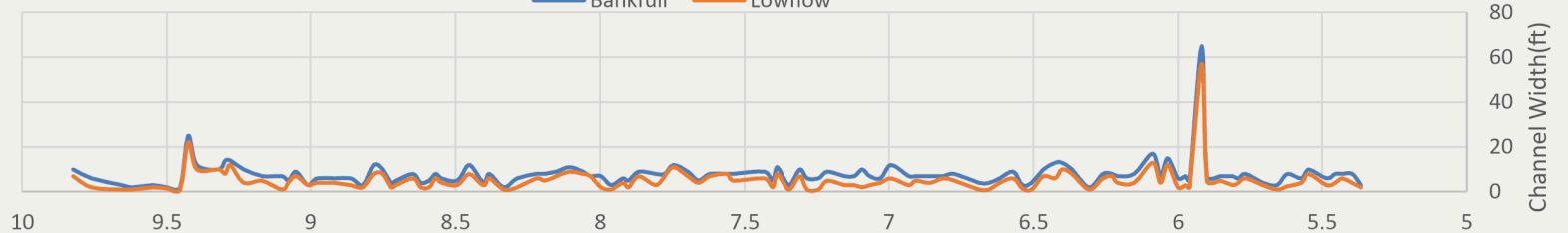
REACH A

— Bankfull — Lowflow



Channel Width

— Bankfull — Lowflow



← FLOW DIRECTION

Creek Mile: Reach A (9.82 at Tailwater, 5.36 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 ■ Poor



Stream Bank Hardening

■ NO ■ YES



Aggradation/Incision

■ Aggradation ▲ Incision



Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

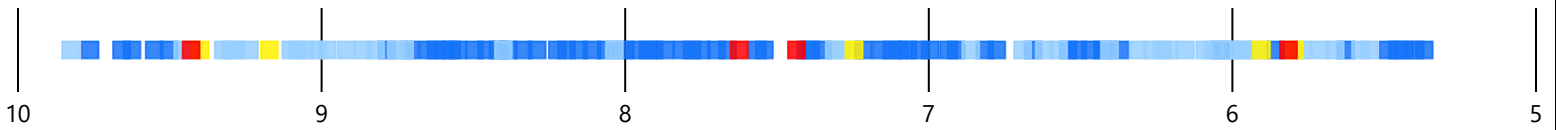
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH A

Water Appearance

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

■ Low ■ Mild ■ Moderate ■ Severe
NE Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



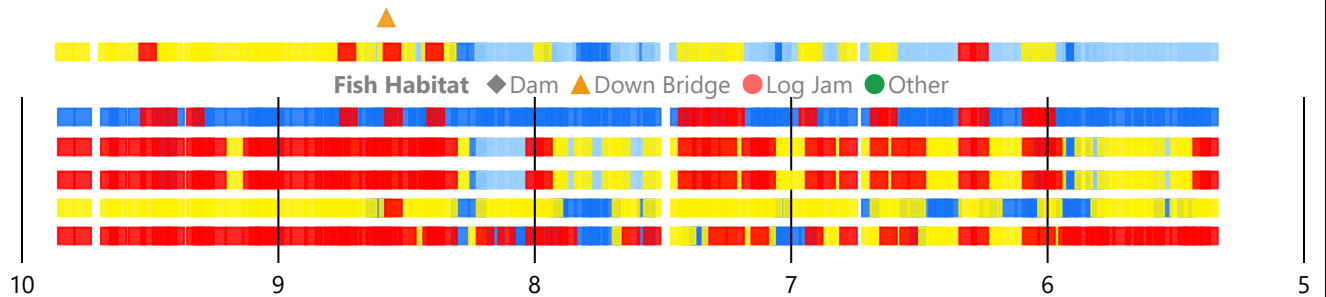
Fish Habitat

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

■ Extensive Manure/CFO Pipe ■ None



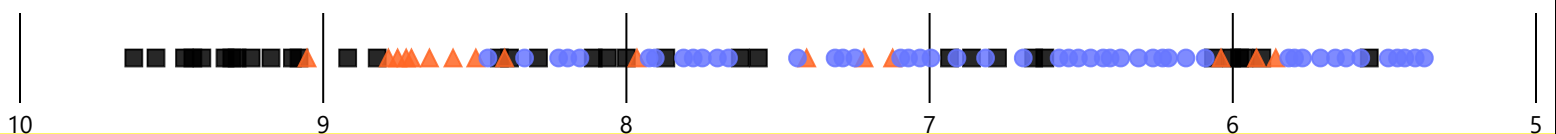
Invasive Species

● Japanese Knotweed



Aquatic Vegetation

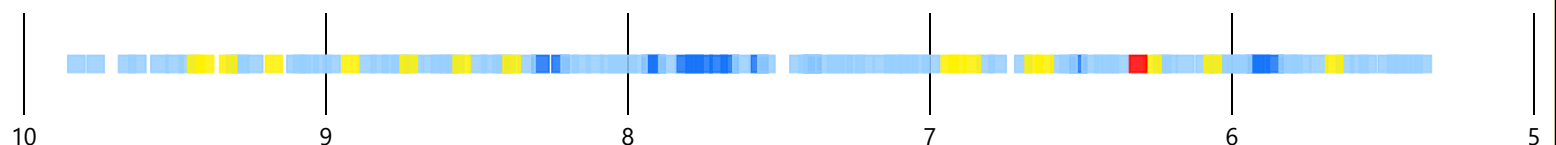
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

LEDGE CREEK

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



FLOW DIRECTION

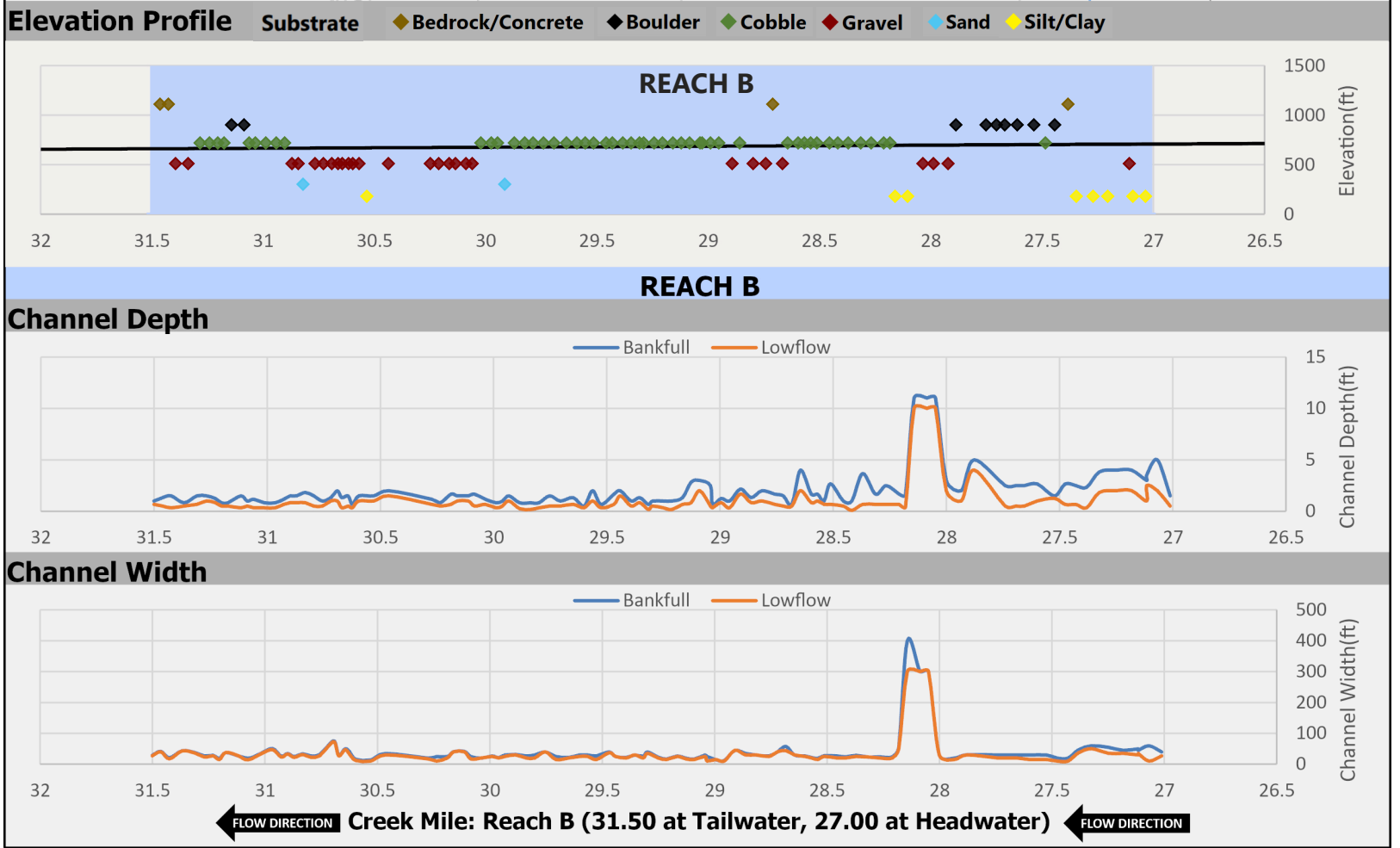
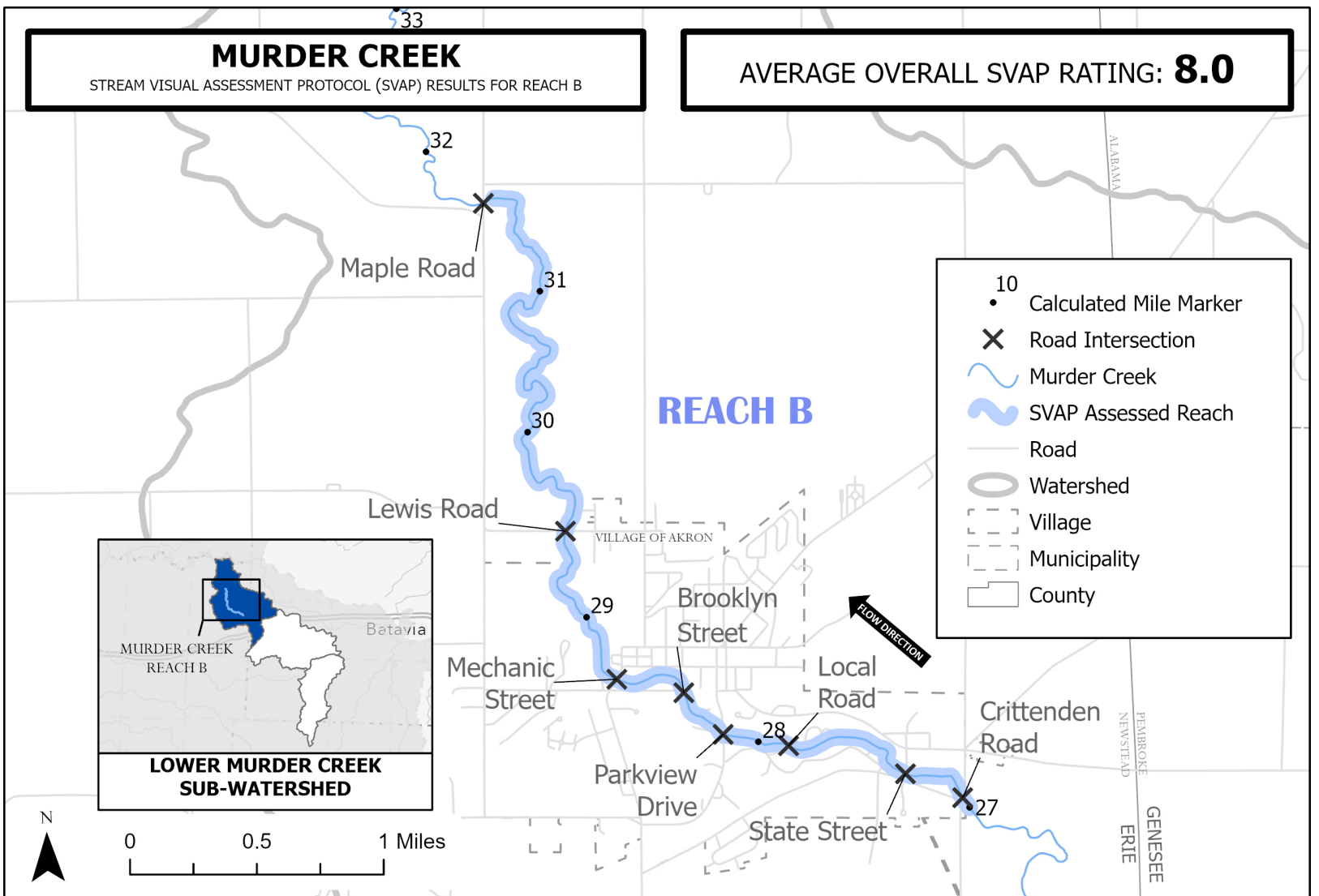
Creek Mile (9.82 at Tailwater, 5.36 at Headwater)

FLOW DIRECTION

MURDER CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH B

AVERAGE OVERALL SVAP RATING: **8.0**



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

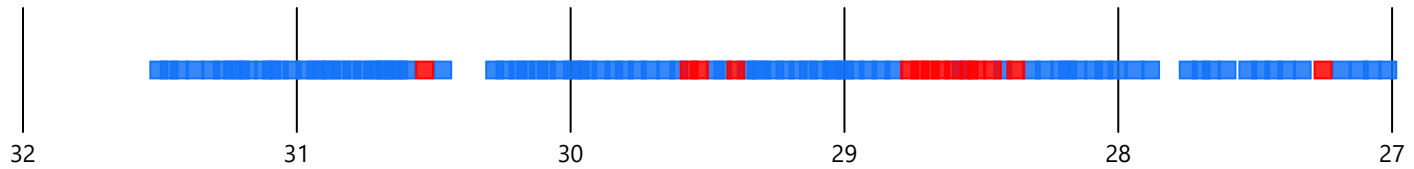
Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Stream Bank Hardening

■ NO ■ YES



Aggradation/Incision

■ Aggradation ▲ Incision



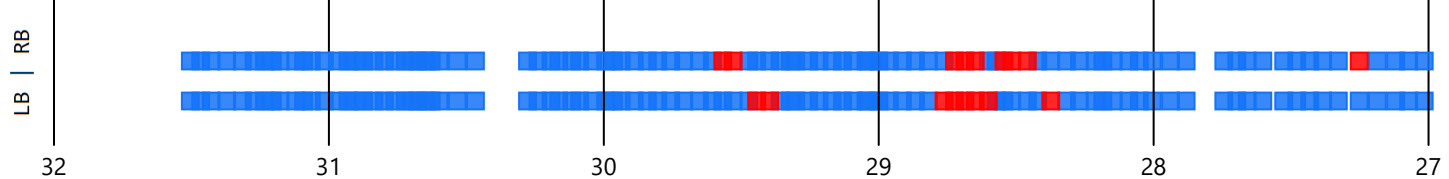
Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



← FLOW DIRECTION Creek Mile (31.50 at Tailwater, 27.00 at Headwater) ← FLOW DIRECTION

REACH B

Water Appearance

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

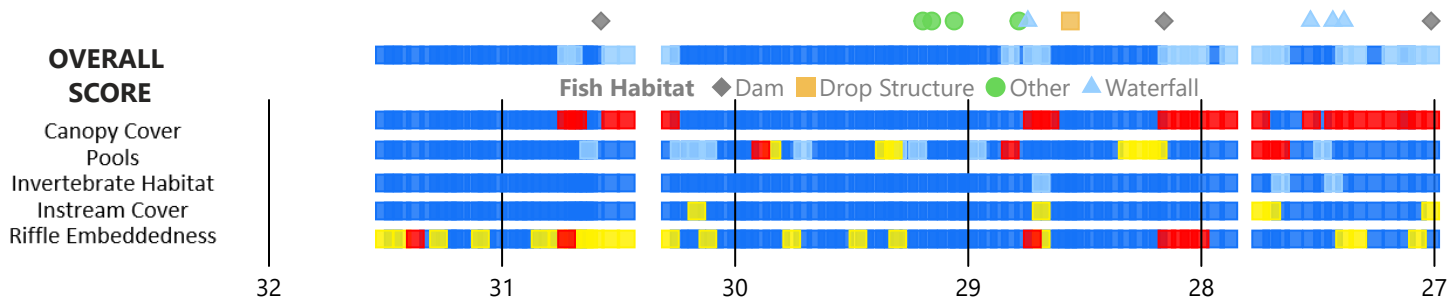
■ Low ■ Mild ■ Moderate ■ Severe
NE Notes ● Algal Growth ◆ Both ◆ Dense Aquatic Plant Beds



Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

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



Manure Presence

■ Extensive Manure/CFO Pipe ■ Manure Present ■ Evidence of Animals in Zone ■ None



Invasive Species

None Observed



Aquatic Vegetation

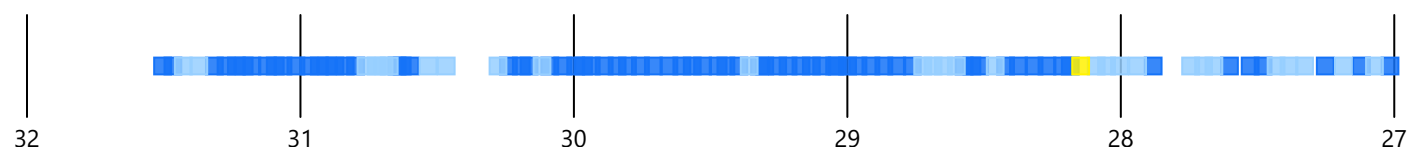
▲ Emergent ● Submerged



OVERALL SVAP RATING

MURDER CREEK

Score ■ Excellent ■ Good ■ Mediocre

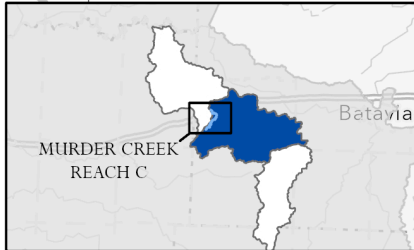


← FLOW DIRECTION Creek Mile (31.50 at Tailwater, 27.00 at Headwater) ← FLOW DIRECTION

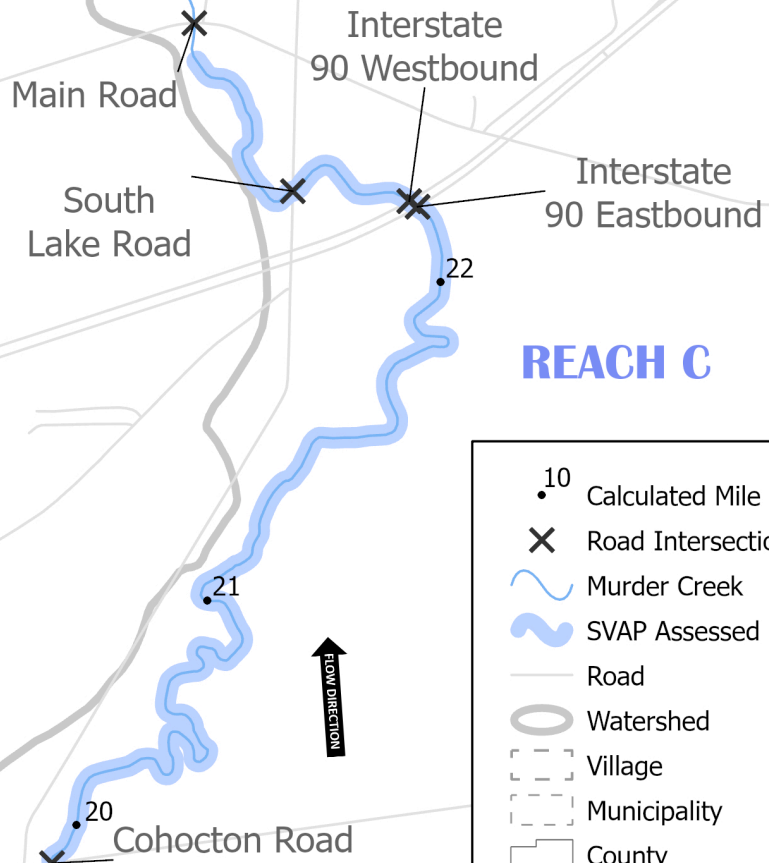
MURDER CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH C

AVERAGE OVERALL SVAP RATING: **6.6**



MIDDLE MURDER CREEK
SUB-WATERSHED



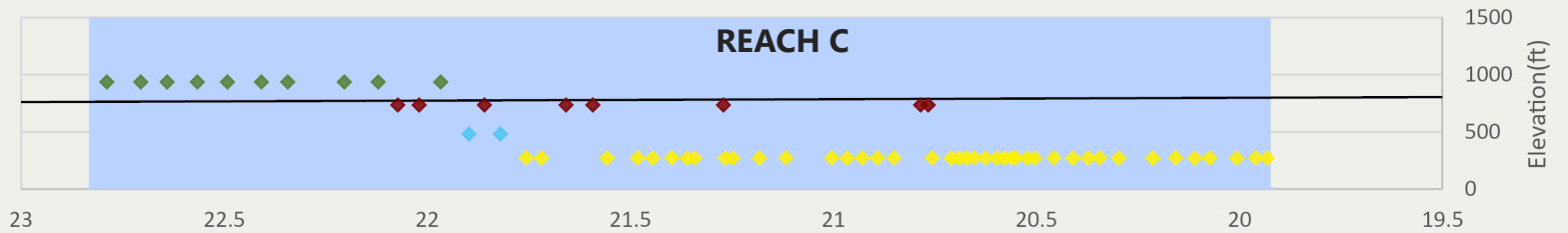
REACH C

- 10 Calculated Mile Marker
- X Road Intersection
- Murder Creek
- SVAP Assessed Reach
- Road
- Watershed
- Village
- Municipality
- County

Elevation Profile

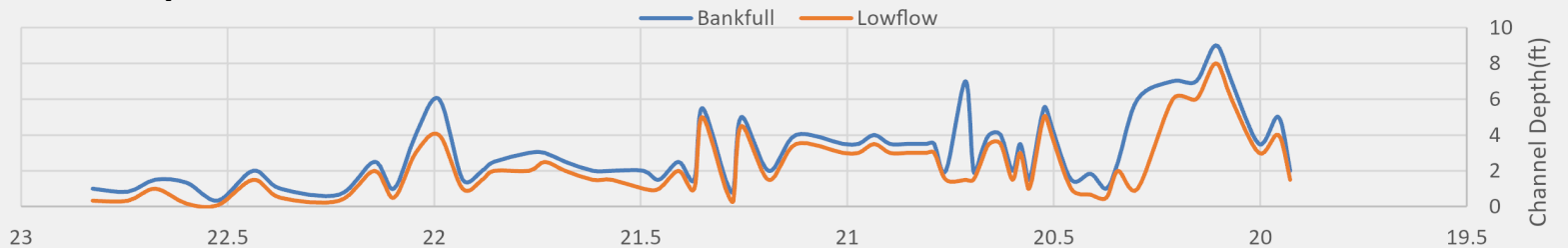
Substrate: ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay

REACH C

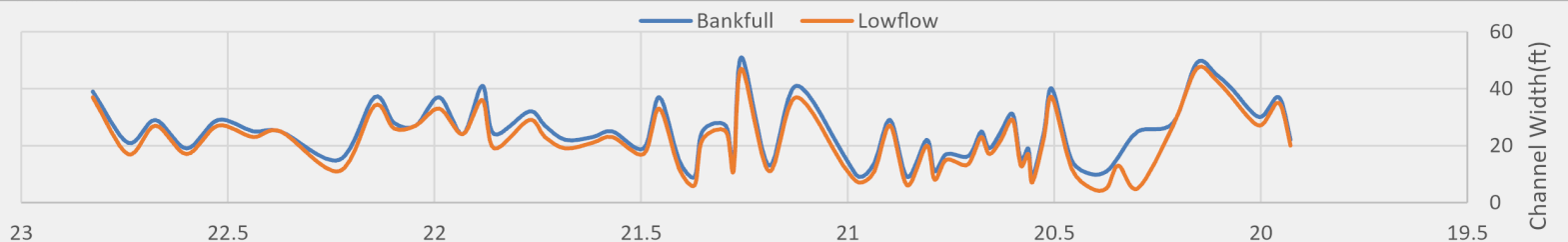


Channel Depth

REACH C



Channel Width



← FLOW DIRECTION

Creek Mile: Reach C (22.83 at Tailwater, 19.93 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 ■ Poor



Stream Bank Hardening

■ NO ■ YES



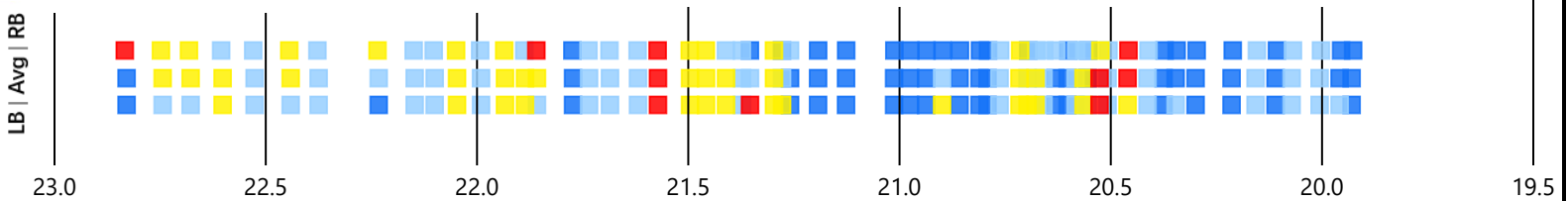
Aggradation/Incision

■ Aggradation ▲ Incision



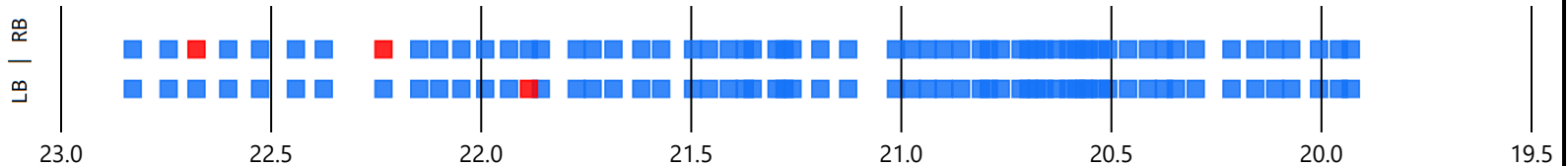
Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



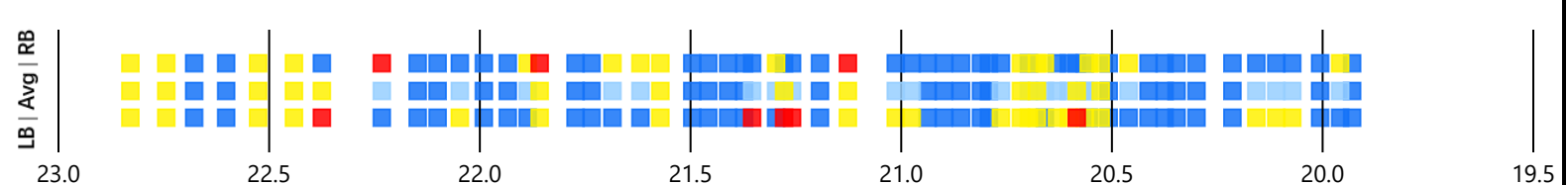
Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

Score ■ Excellent ■ Good ■ Mediocre



REACH C

Water Appearance

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



Nutrient Enrichment

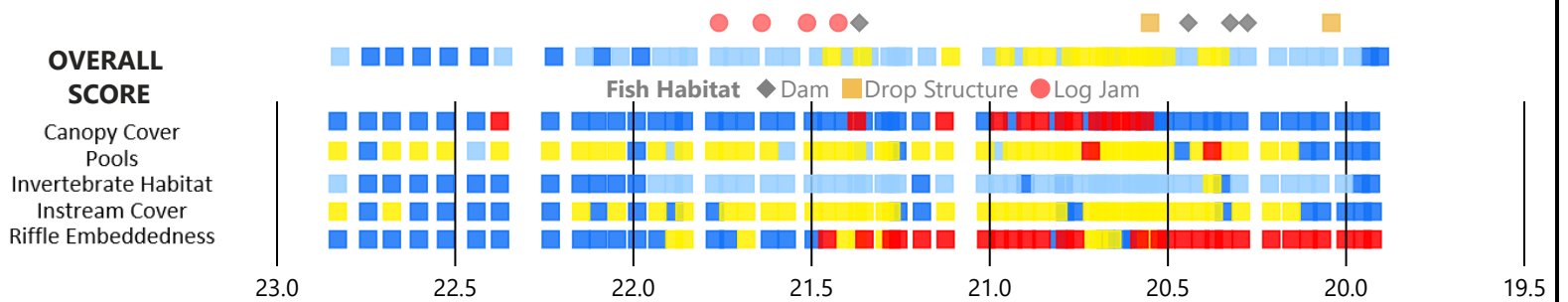
■ Low ■ Mild ■ Moderate
 Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds



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

■ Evidence of Animals in Zone ■ None



Invasive Species

● Japanese Knotweed



Aquatic Vegetation

■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

MURDER CREEK

Score ■ Excellent ■ Good ■ Mediocre

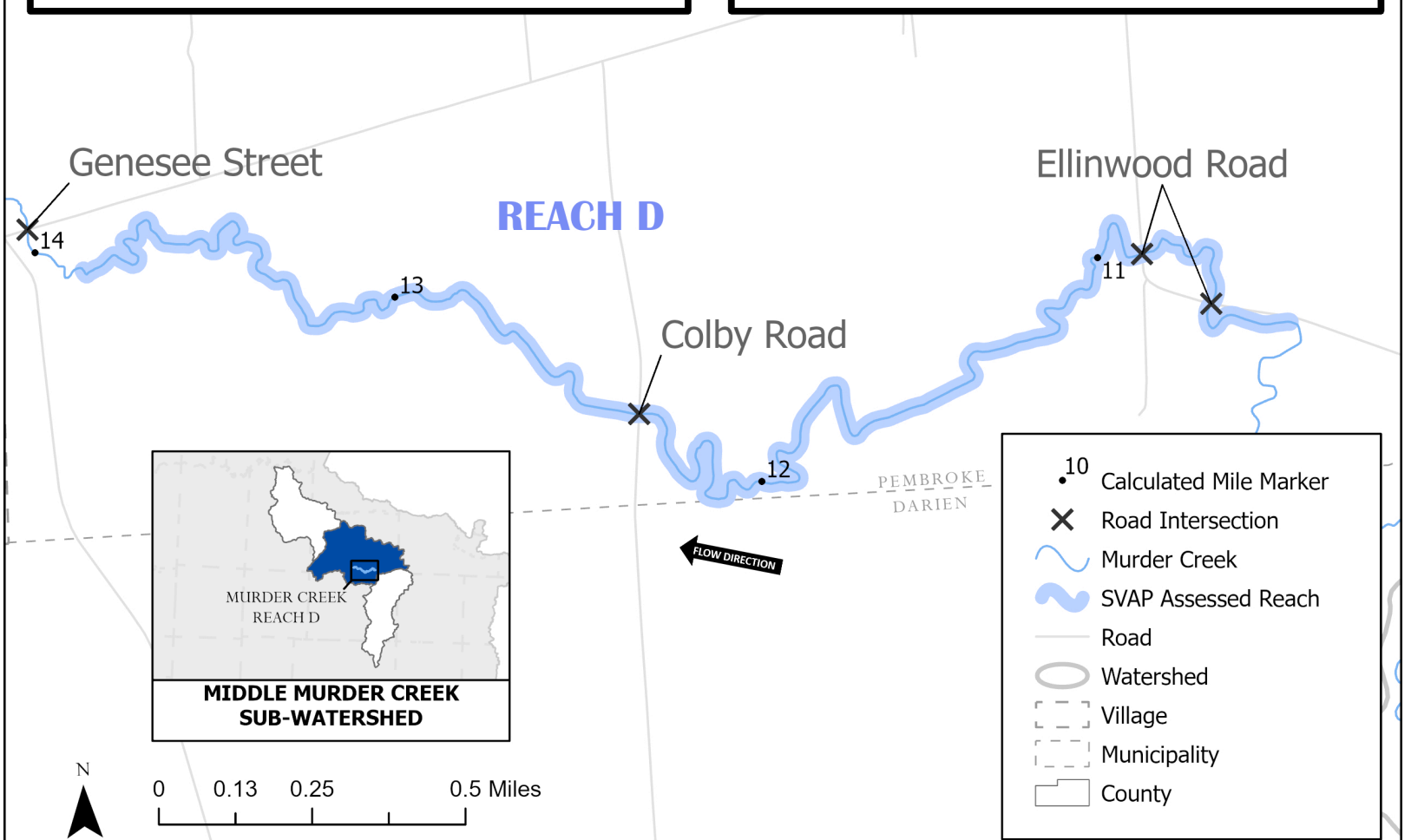


← FLOW DIRECTION Creek Mile (22.83 at Tailwater, 19.93 at Headwater) ← FLOW DIRECTION

MURDER CREEK

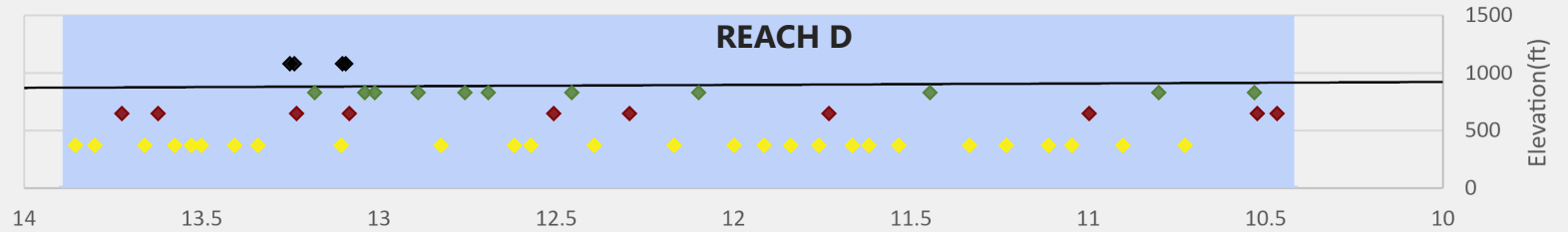
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH D

AVERAGE OVERALL SVAP RATING: **6.5**



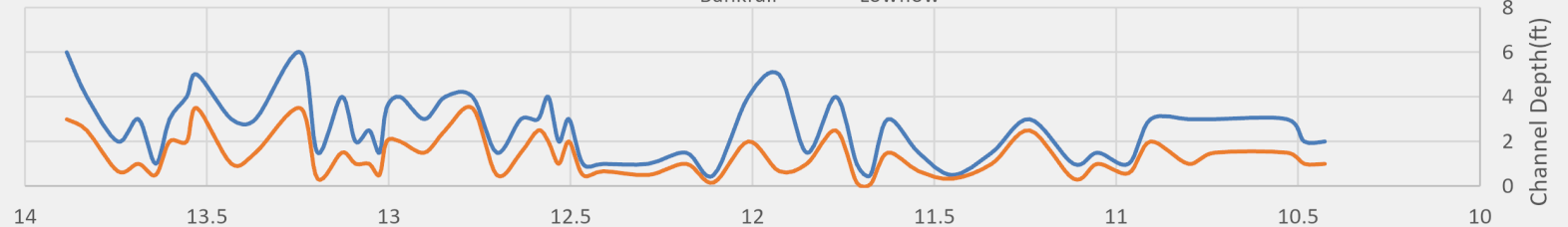
Elevation Profile

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



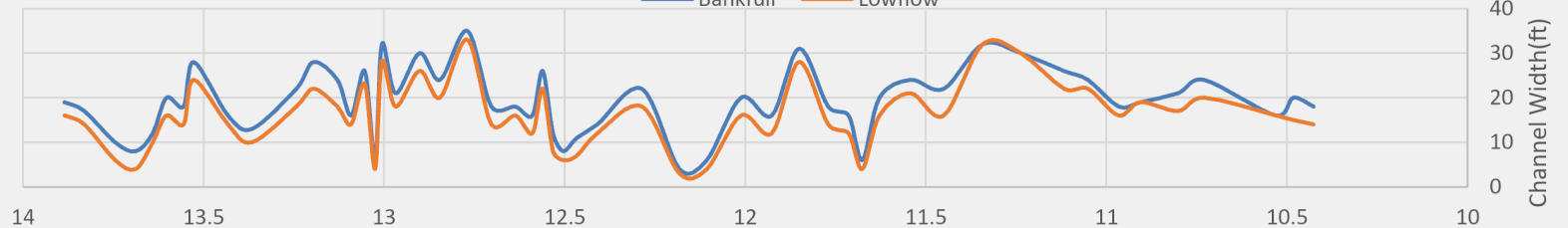
Channel Depth

Bankfull Lowflow



Channel Width

Bankfull Lowflow



← FLOW DIRECTION Creek Mile: Reach D (13.88 at Tailwater, 10.42 at Headwater) FLOW DIRECTION →

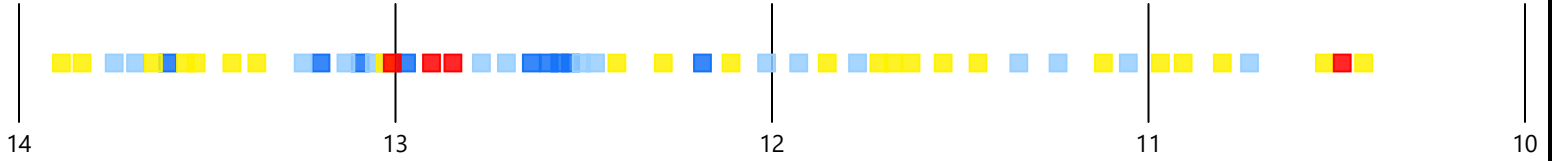
Classification Scheme for SVAP Parameters

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

REACH D

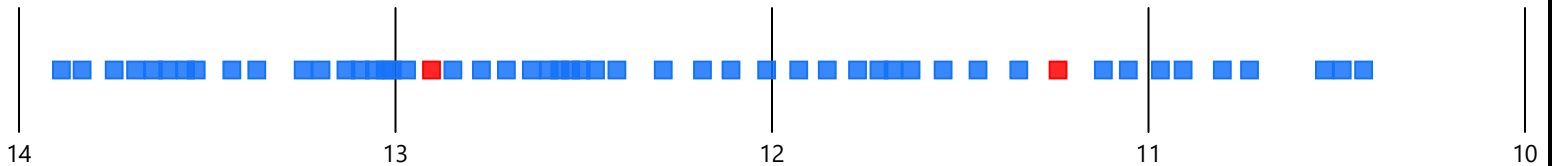
Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



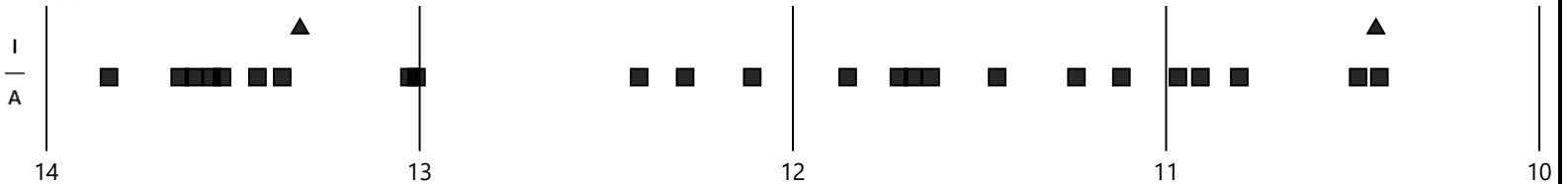
Stream Bank Hardening

■ NO ■ YES



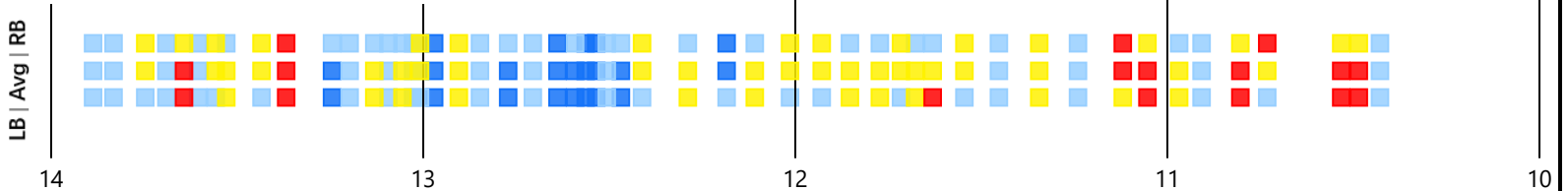
Aggradation/Incision

■ Aggradation ▲ Incision



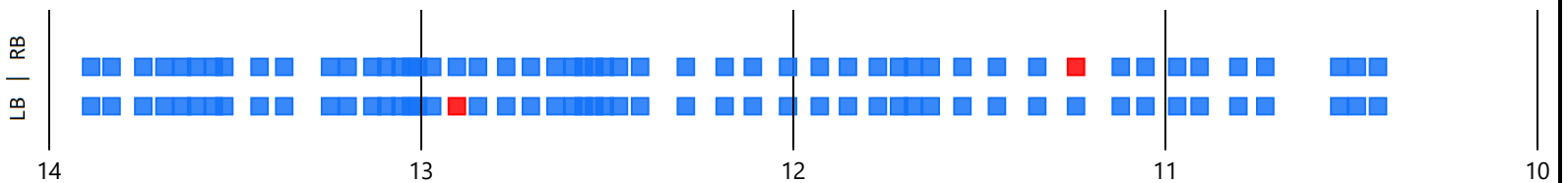
Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



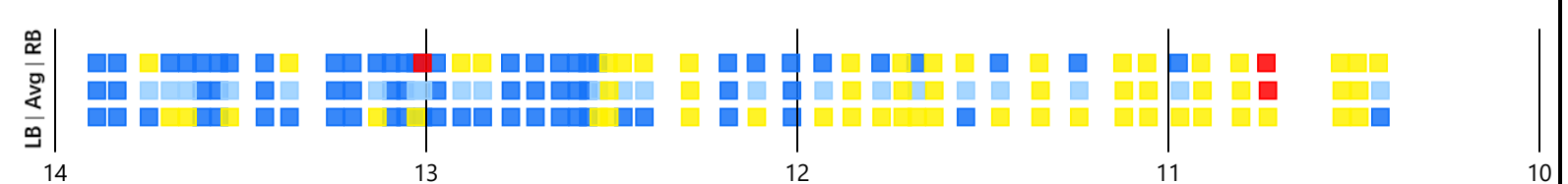
Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

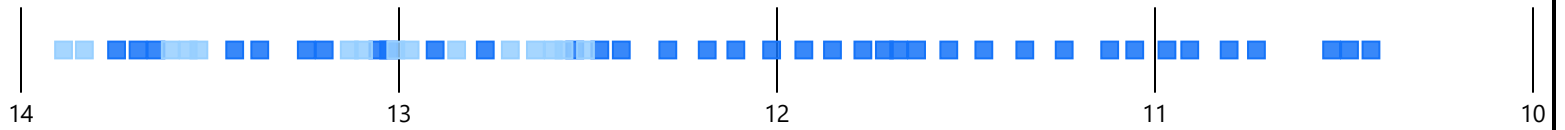
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH D

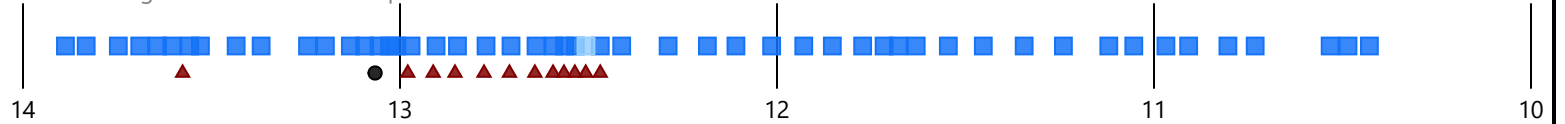
Water Appearance

Score ■ Excellent ■ Good



Nutrient Enrichment

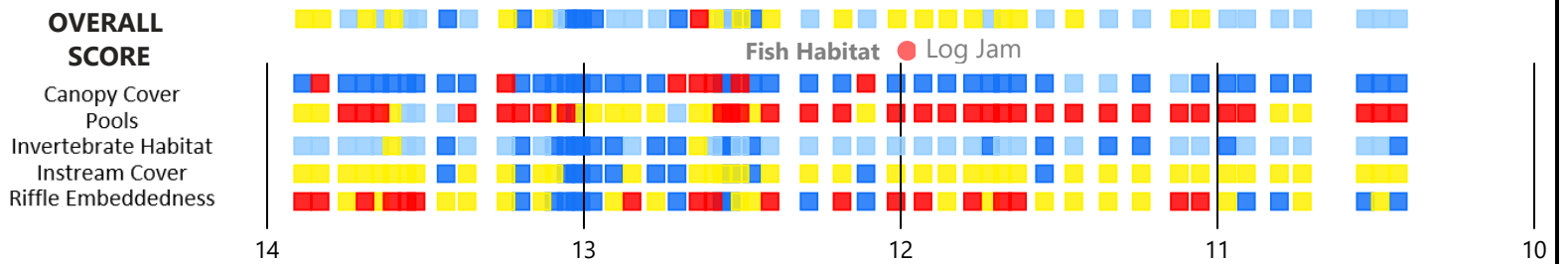
Score ■ Low ■ Mild
NE Notes ● Algal Growth ▲ Dense Aquatic Plant Beds



Fish Habitat

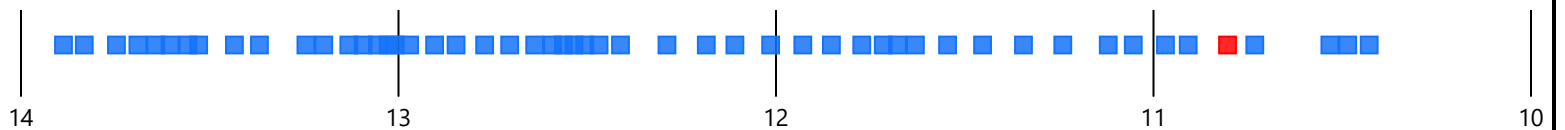
Score ■ Excellent ■ Good ■ Mediocre ■ Poor

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



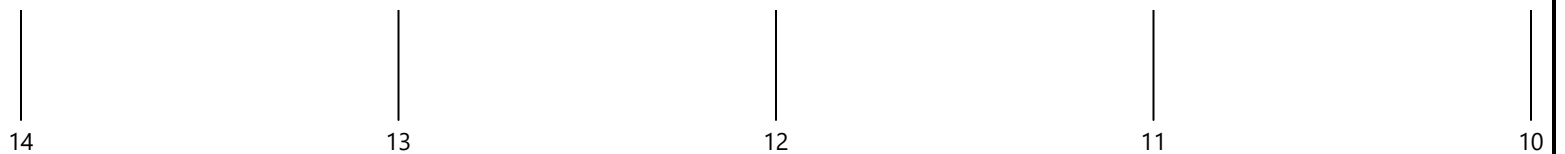
Manure Presence

■ Extensive Manure/CFO Pipe ■ Manure Present ■ Evidence of Animals in Zone ■ None



Invasive Species

None Observed



Aquatic Vegetation

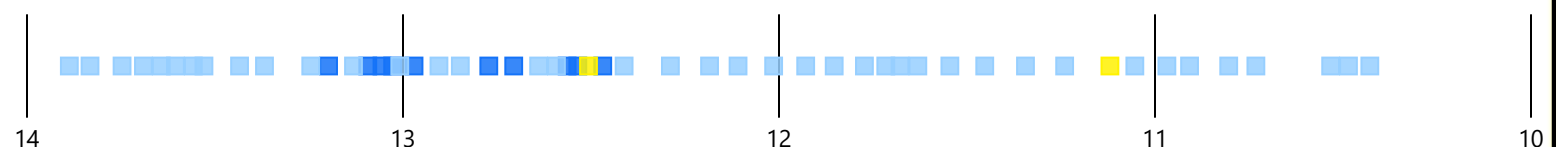
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

MURDER CREEK

Score ■ Excellent ■ Good ■ Mediocre



← FLOW DIRECTION Creek Mile (13.88 at Tailwater, 10.42 at Headwater) ← FLOW DIRECTION

MURDER CREEK

STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH E

AVERAGE OVERALL SVAP RATING: **6.5**

REACH E

Richley Road
Sumner Road
Harper Road
Sharrick Road
Broadway Road
Griswold Road

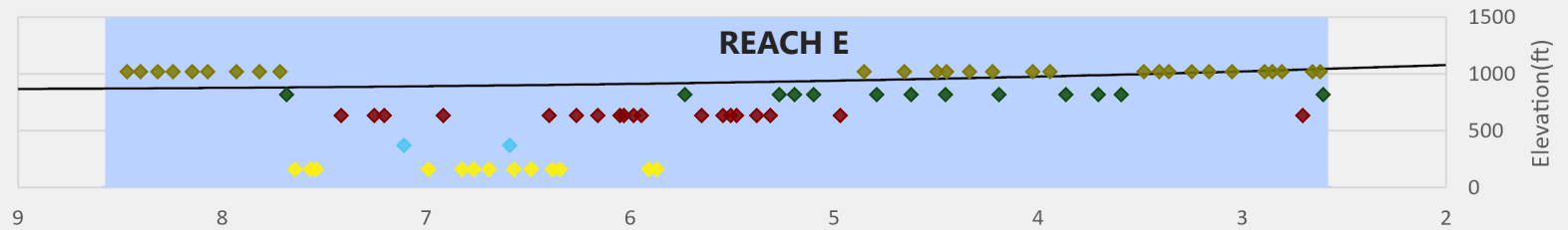
- 10 Calculated Mile Marker
- X Road Intersection
- Murder Creek
- SVAP Assessed Reach
- Road
- Watershed
- Village
- Municipality
- County

MURDER CREEK REACH E

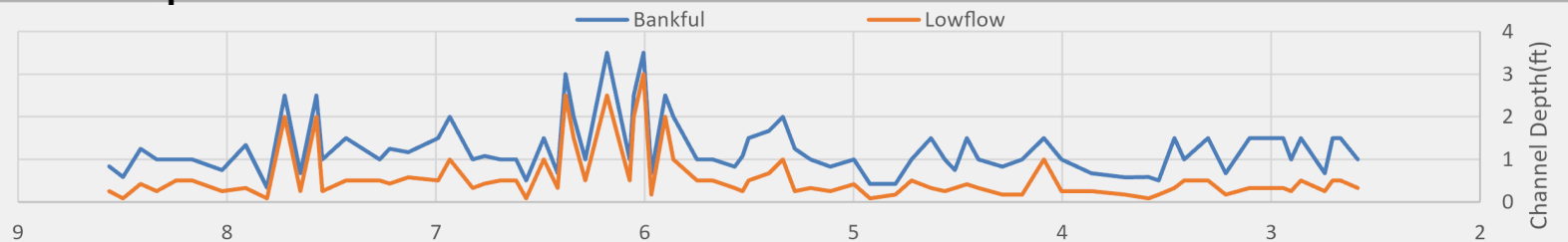
UPPER MURDER CREEK SUB-WATERSHED

Elevation Profile

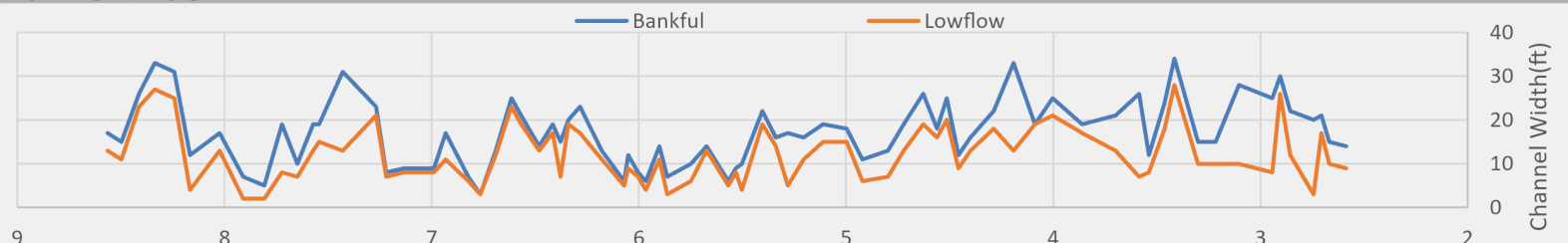
Substrate ◆ Bedrock/Concrete ◆ Cobble ◆ Gravel ◆ Sand ◆ Silt/Clay



Channel Depth



Channel Width



← FLOW DIRECTION Creek Mile (8.56 at Tailwater, 2.59 at Headwater) ← FLOW DIRECTION

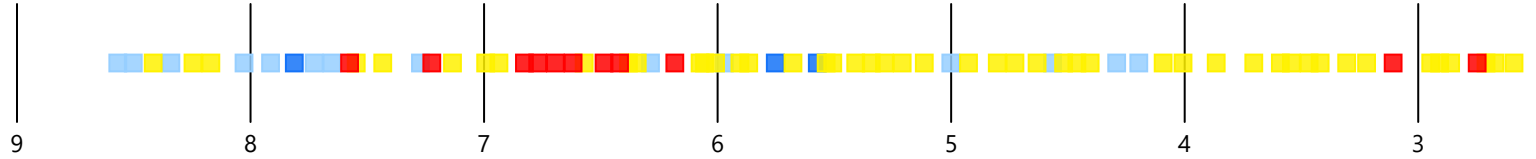
Classification Scheme for SVAP Parameters

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

REACH E

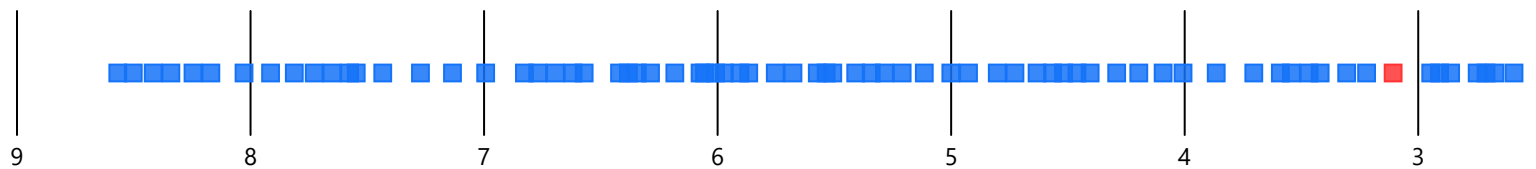
Channel Conditions

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



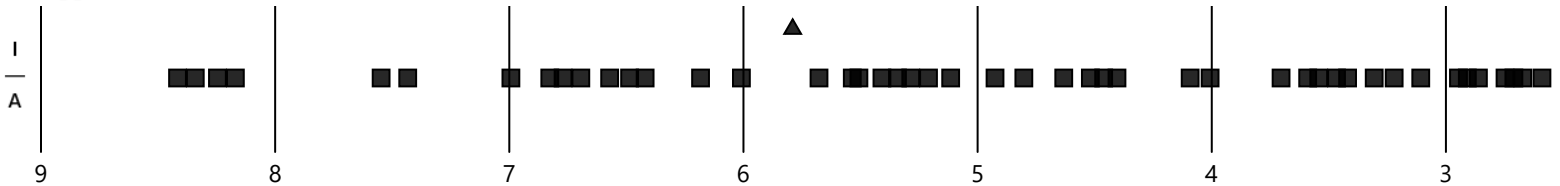
Stream Bank Hardening

■ NO ■ YES



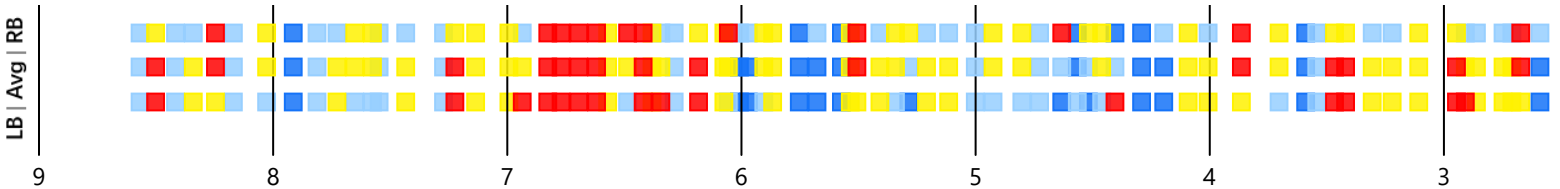
Aggradation/Incision

■ Aggradation ▲ Incision



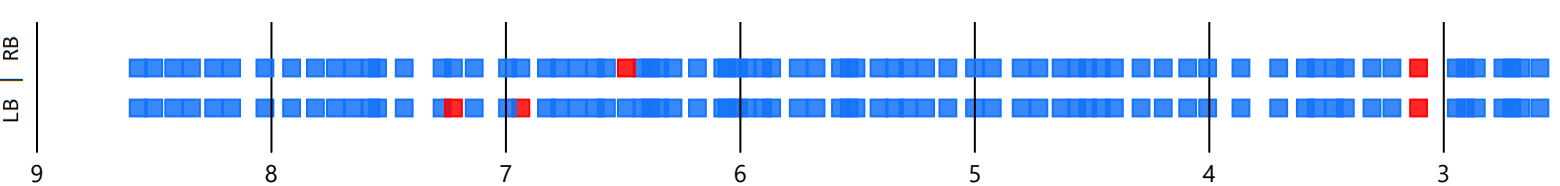
Bank Stability

Score ■ Excellent ■ Good ■ Mediocre ■ Poor



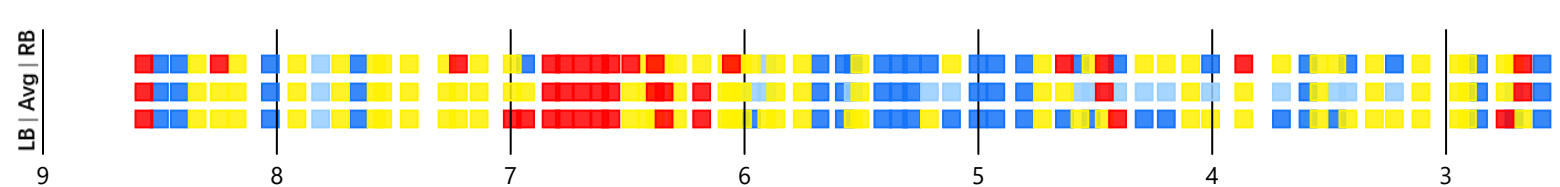
Bank Condition

■ Hardened Structure ■ Natural



Riparian Zone

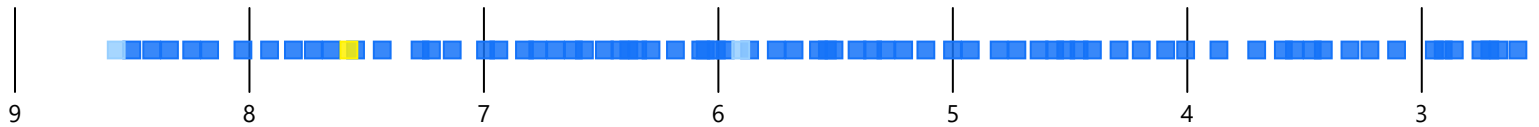
Score ■ Excellent ■ Good ■ Mediocre ■ Poor



REACH E

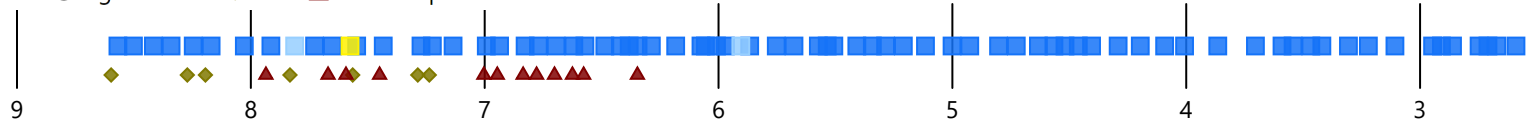
Water Appearance

Score ■ Excellent ■ Good ■ Mediocre



Nutrient Enrichment

■ Low ■ Mild ■ Moderate
Notes ● Algal Growth ◆ Both ▲ Dense Aquatic Plant Beds

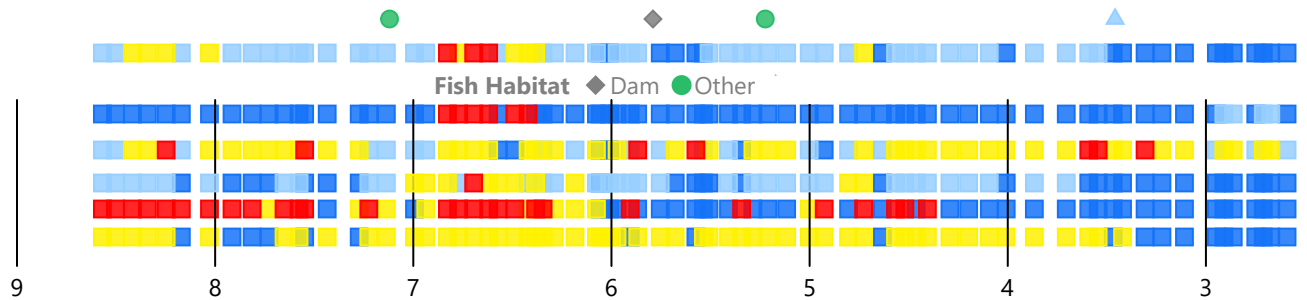


Fish Habitat

Score ■ Excellent ■ Good ■ Mediocre ■ Poor

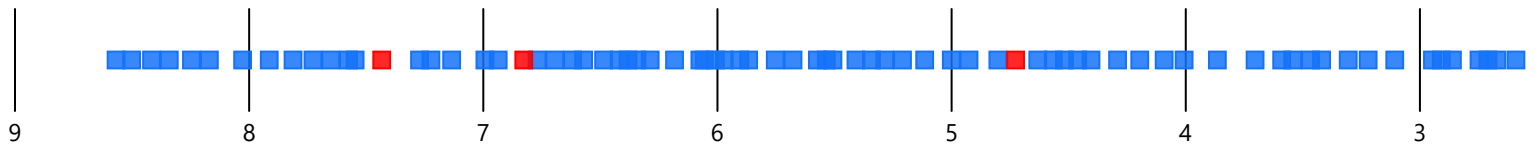
Note: Overall Score of Fish Habitat was calculated by averaging scores for the five variables shown below.

OVERALL SCORE
 Canopy Cover
 Pools
 Invertebrate Habitat
 Instream Cover
 Riffle Embeddedness



Manure Presence

■ Extensive Manure/CFO Pipe ■ Manure Present ■ Evidence of Animals in Zone ■ None



Invasive Species

None Observed



Aquatic Vegetation

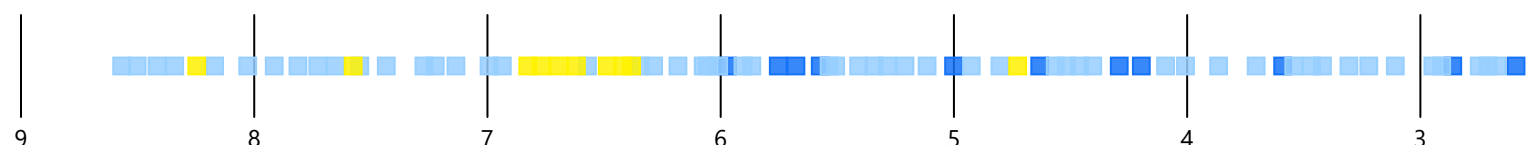
■ Both ▲ Emergent ● Submerged



OVERALL SVAP RATING

MURDER CREEK

Score ■ Excellent ■ Good ■ Mediocre



← FLOW DIRECTION Creek Mile (8.56 at Tailwater, 2.59 at Headwater) FLOW DIRECTION →