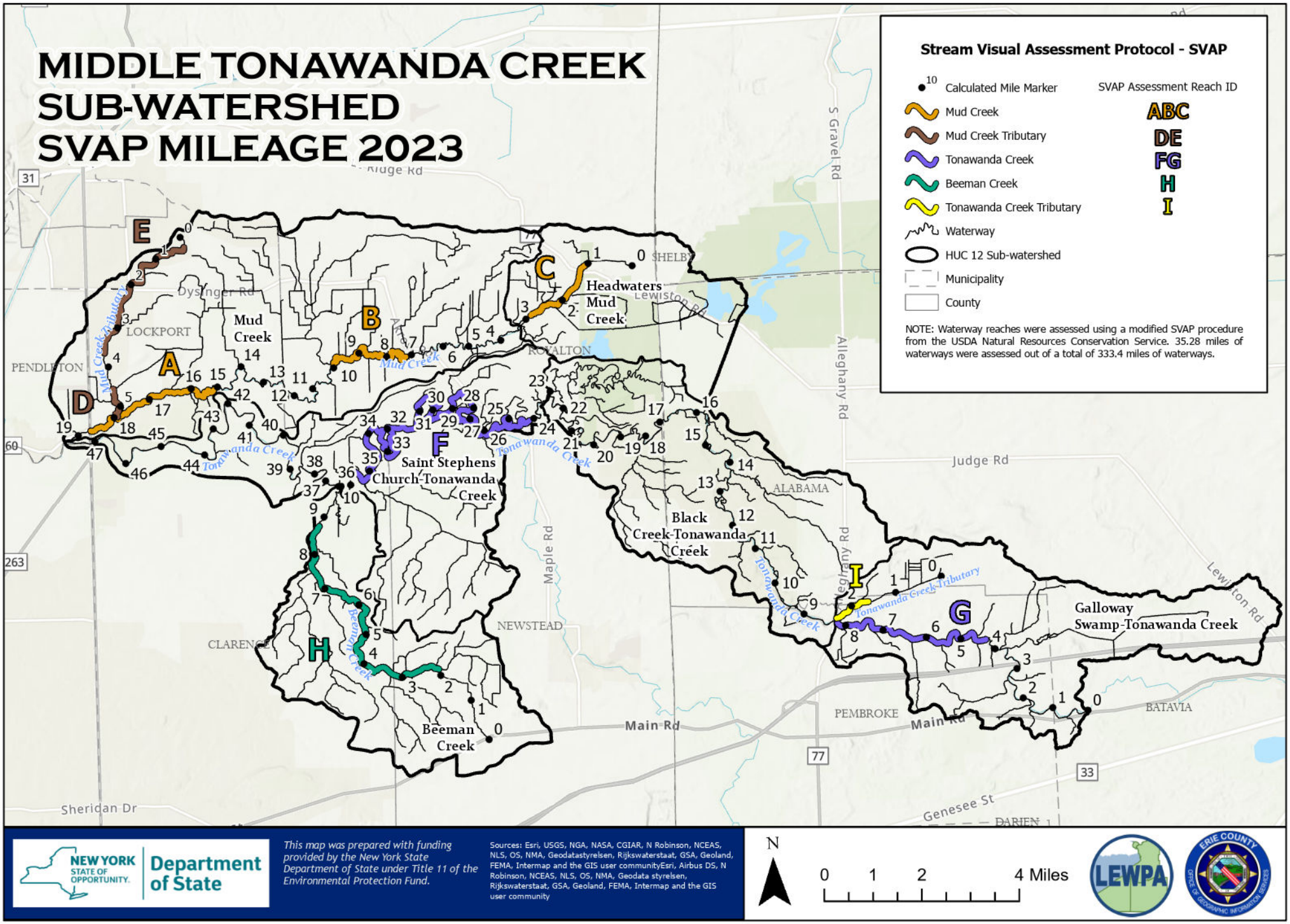
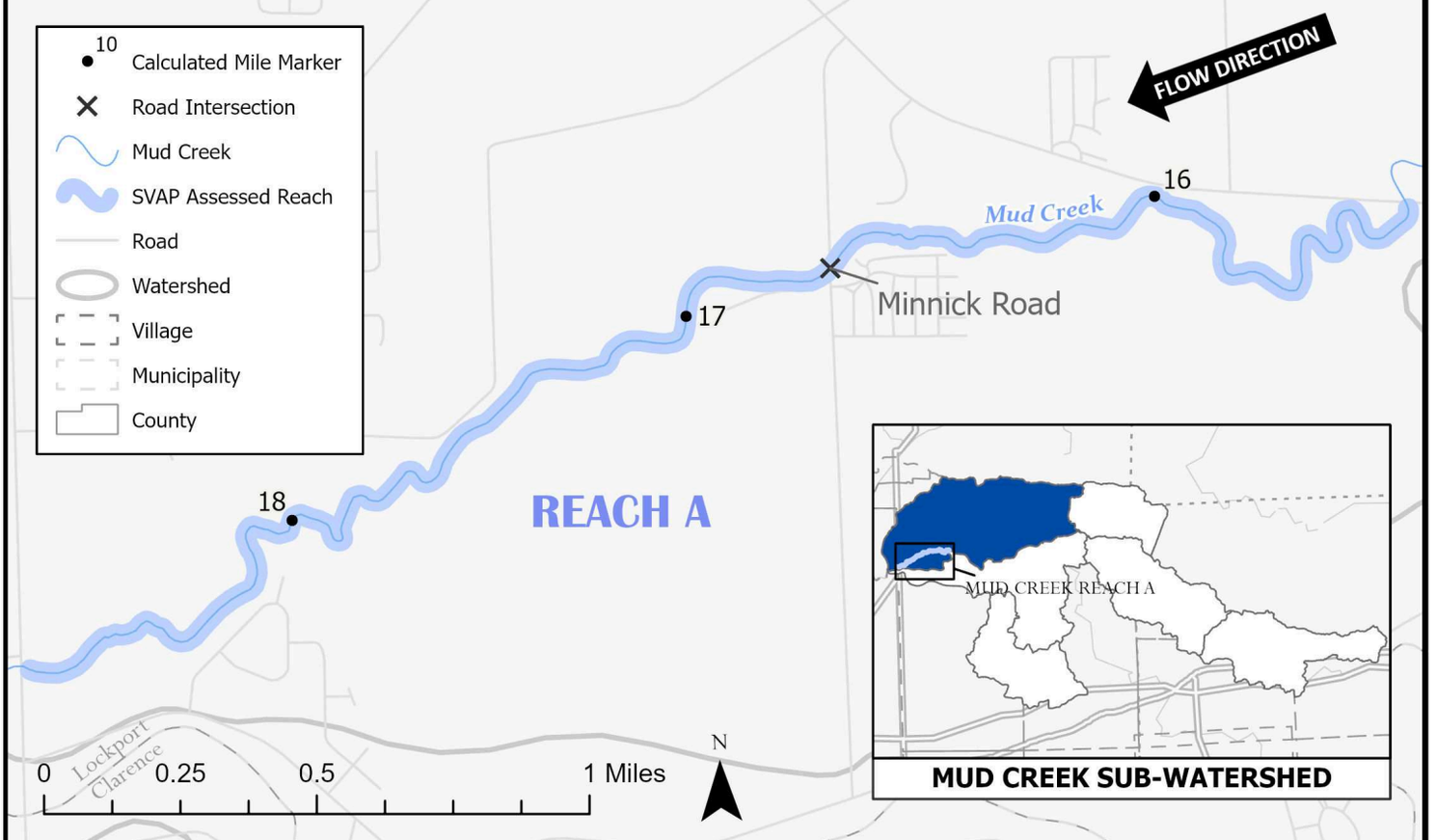

MIDDLE TONAWANDA CREEK
SUB-WATERSHED
SVAP MILEAGE 2023
Stream Visual Assessment Protocol - SVAP
Calculated Mile Marker
Mud Creek
Mud Creek Tributary
Tonawanda Creek
Beeman Creek
Tonawanda Creek Tributary
Waterway
HUC 12 Sub-watershed
Municipality
County
SVAP Assessment Reach ID
ABC
DE
FG
H
I
NOTE: Waterway reaches were assessed using a modified SVAP procedure from the USDA Natural Resources Conservation Service. 35.28 miles of waterways were assessed out of a total of 333.4 miles of waterways.
Headwaters Mud Creek
Mud Creek
Saint Stephens Church-Tonawanda Creek
Black Creek-Tonawanda Creek
Galloway Swamp-Tonawanda Creek
Beeman Creek
LOCKPORT
PENDLETON
ROYALTON
SHELBY
ALABAMA
NEWSTEAD
CLARENCE
PEMBROKE
BATAVIA
DARIEN
Dysinger Rd
Ridge Rd
Lewiston Rd
S Gravel Rd
Alleghany Rd
Judge Rd
Maple Rd
Main Rd
Genesee St
Sheridan Dr
Lewiston Rd
31
60
263
77
33
N
0 1 2 4 Miles
NEW YORK STATE OF OPPORTUNITY. 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.
Sources: Esri, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user communityEsri, Airbus DS, N Robinson, NCEAS, NLS, OS, NMA, Geodata styrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community
LEWPA
ERIE COUNTY

MUD CREEK

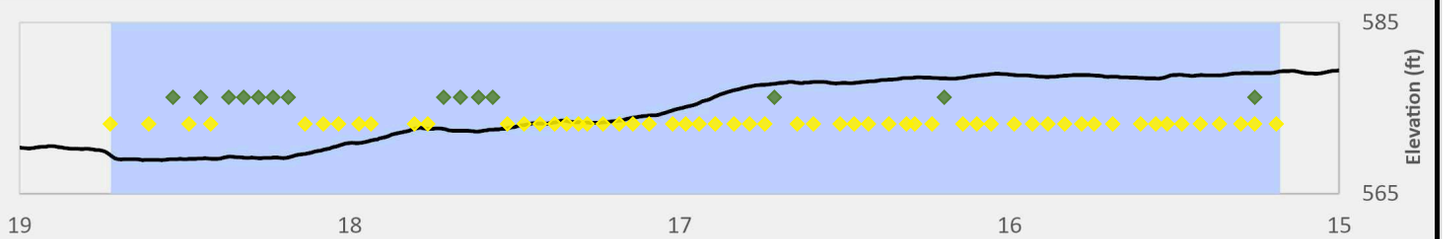
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH A

AVERAGE OVERALL SVAP RATING: **6.5**



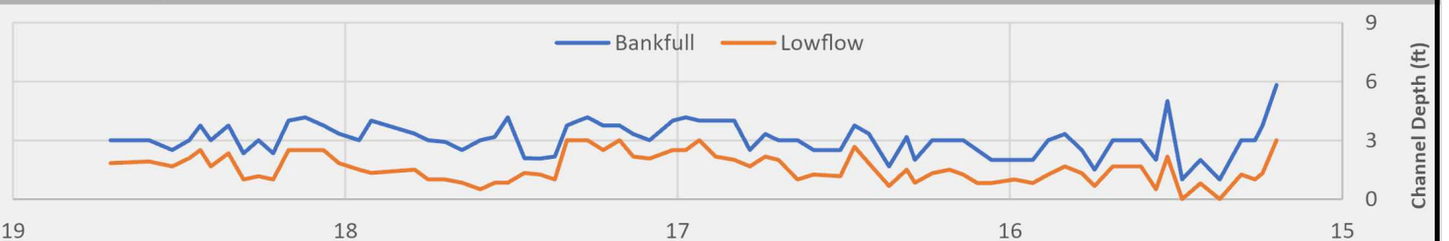
Elevation Profile

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

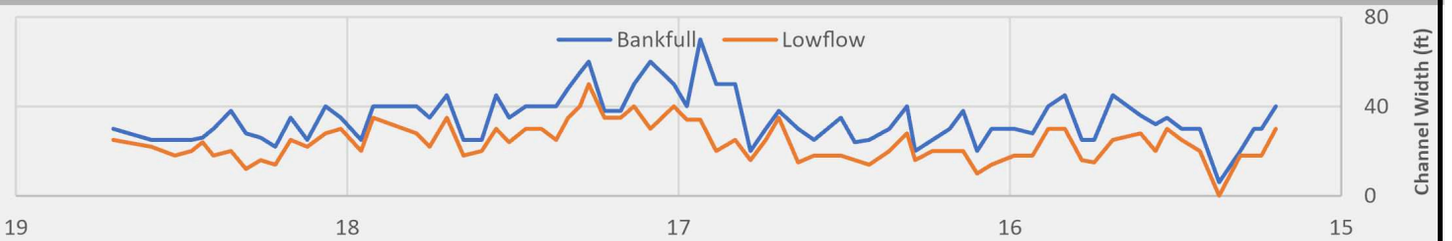


REACH A

Channel Depth



Channel Width



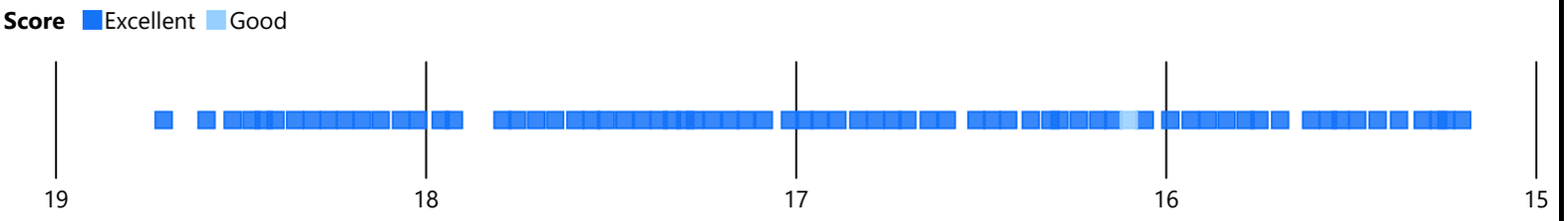
FLOW DIRECTION **Creek Mile (18.71 at Tailwater, 15.20 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

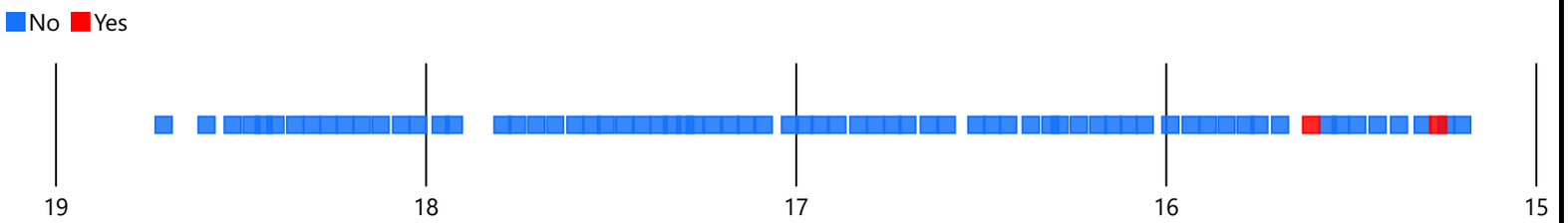
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH A

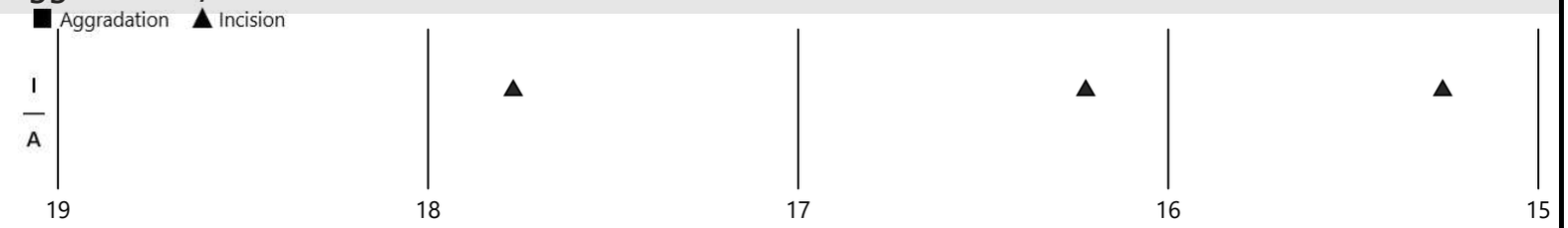
Channel Conditions



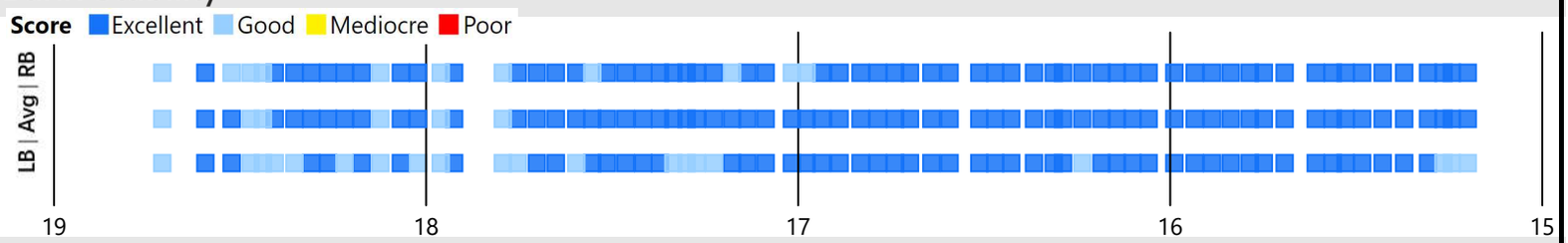
Stream Bank Hardening



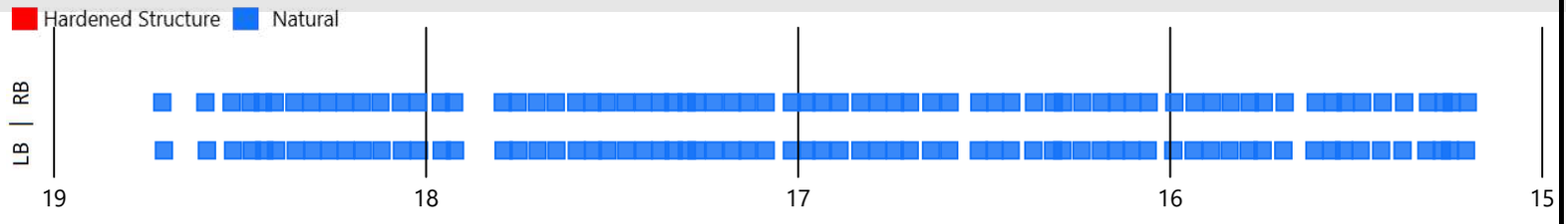
Aggradation/Incision



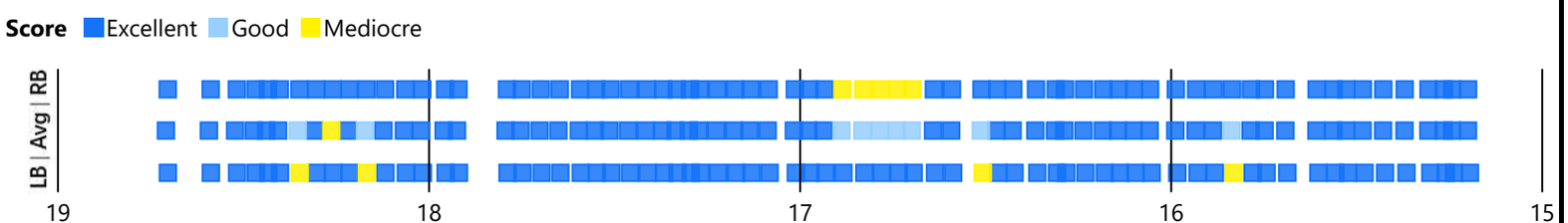
Bank Stability



Bank Condition



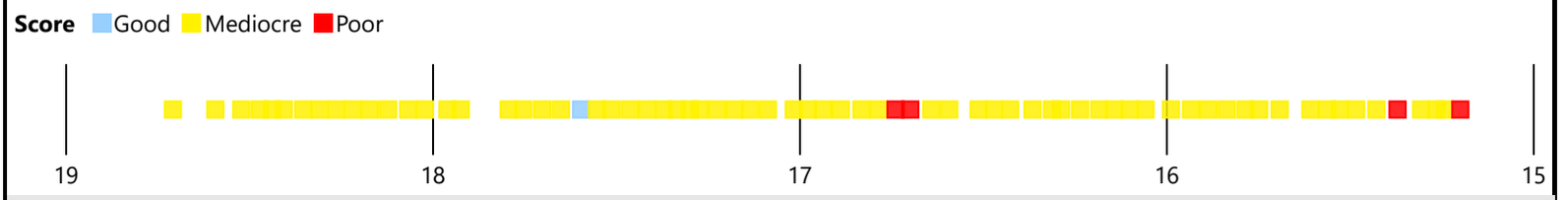
Riparian Zone



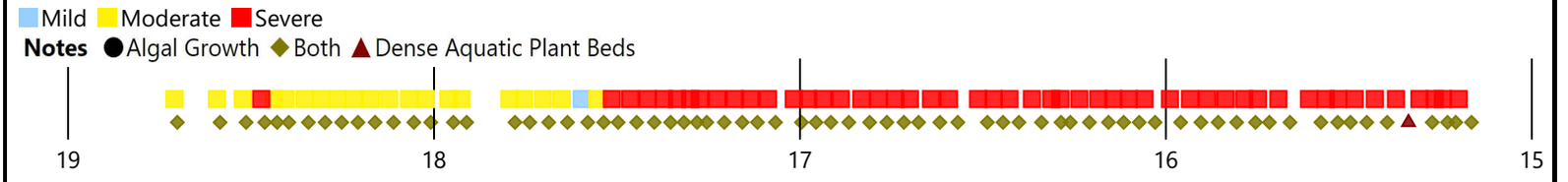
FLOW DIRECTION **Creek Mile (18.71 at Tailwater, 15.20 at Headwater)** FLOW DIRECTION

REACH A

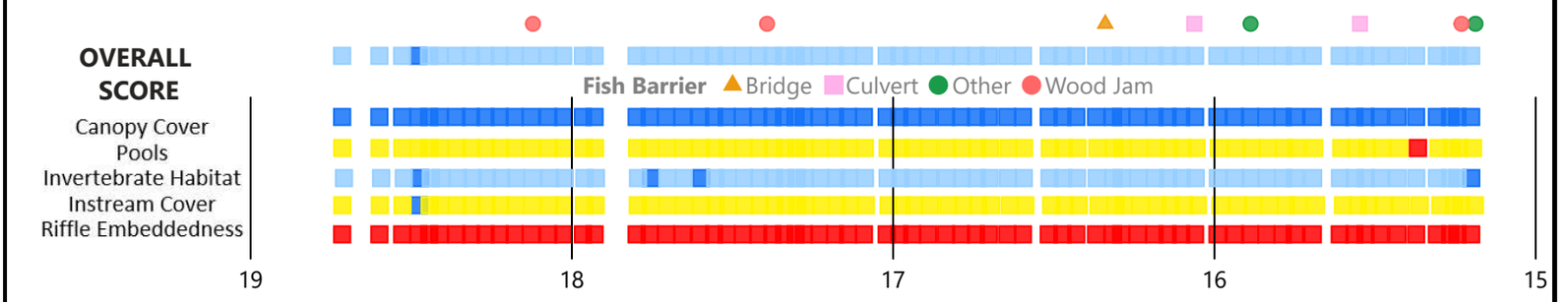
Water Appearance



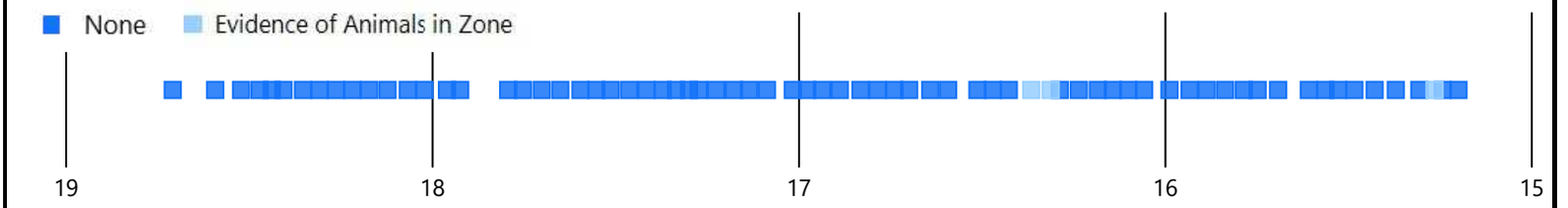
Nutrient Enrichment



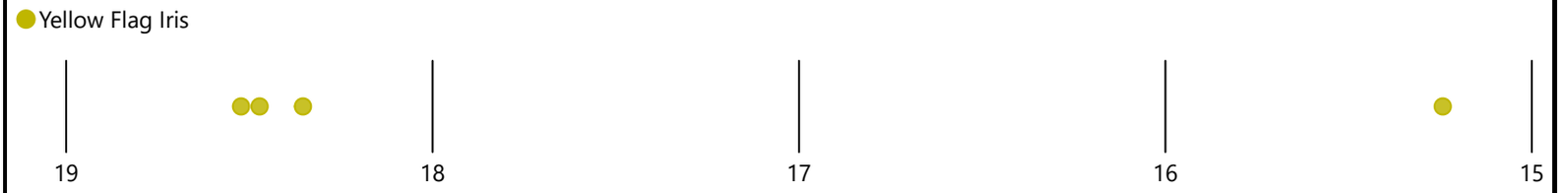
Fish Habitat



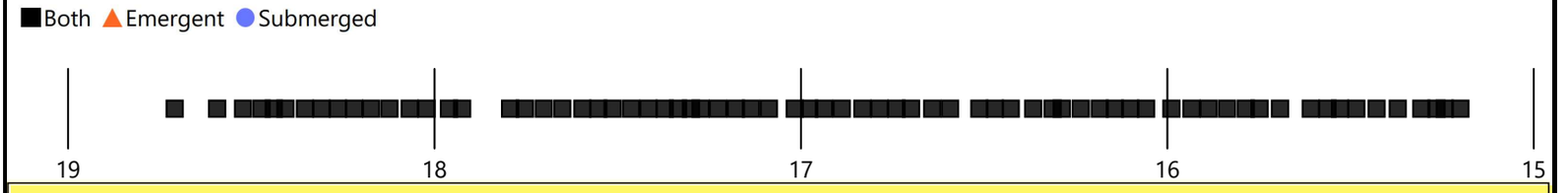
Manure Presence



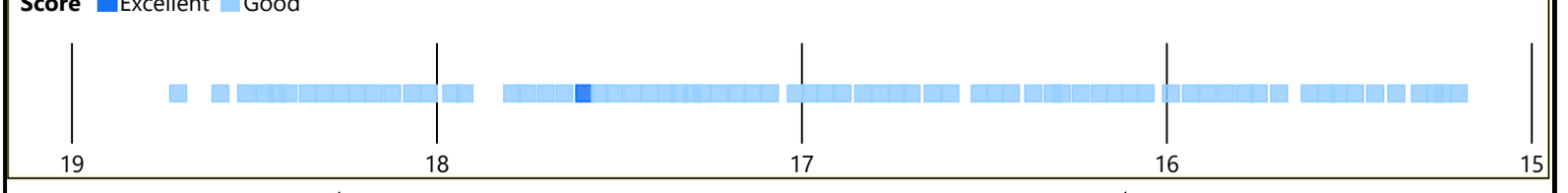
Invasive Species



Aquatic Vegetation



OVERALL SVAP RATING — MUD CREEK

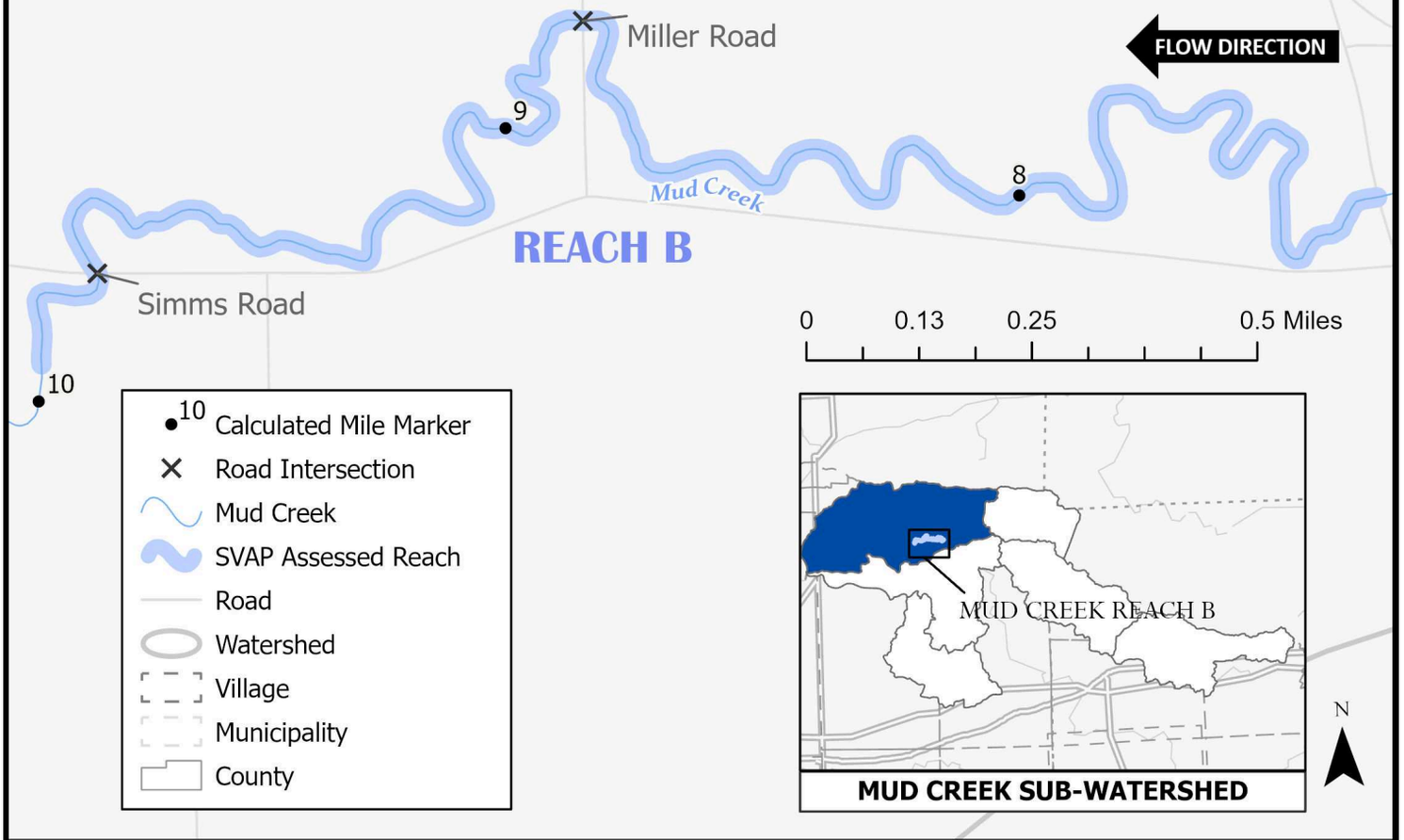


FLOW DIRECTION **Creek Mile (18.71 at Tailwater, 15.20 at Headwater)** FLOW DIRECTION

MUD CREEK

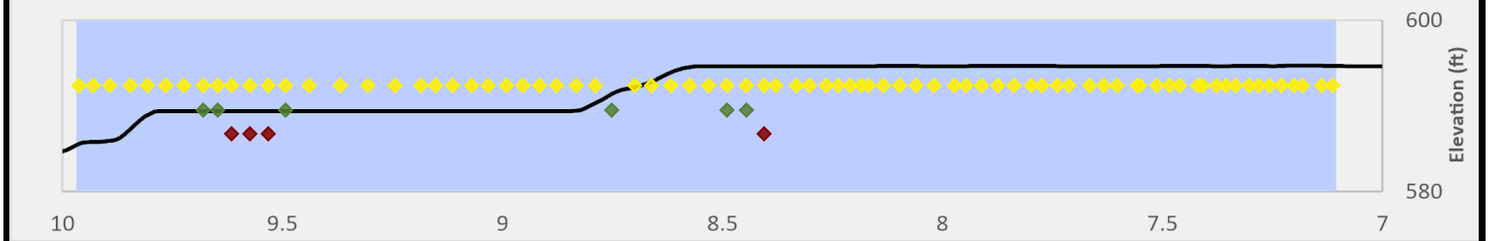
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH B

AVERAGE OVERALL SVAP RATING: **6.1**



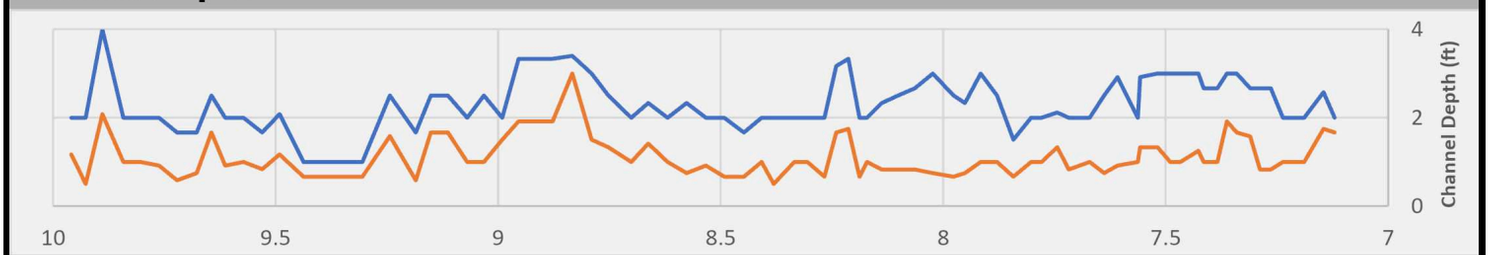
Elevation Profile

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

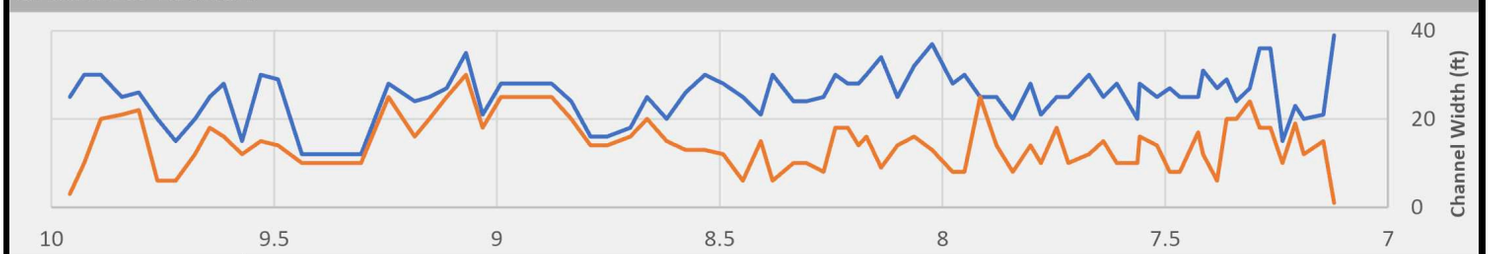


REACH B

Channel Depth



Channel Width



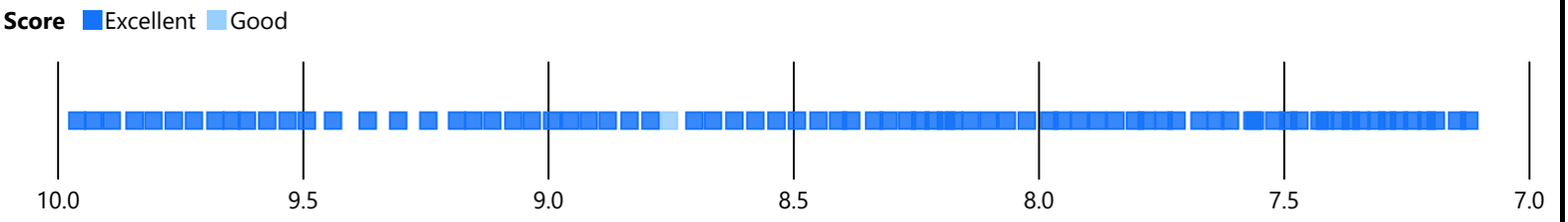
FLOW DIRECTION **Creek Mile (9.96 at Tailwater, 7.12 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

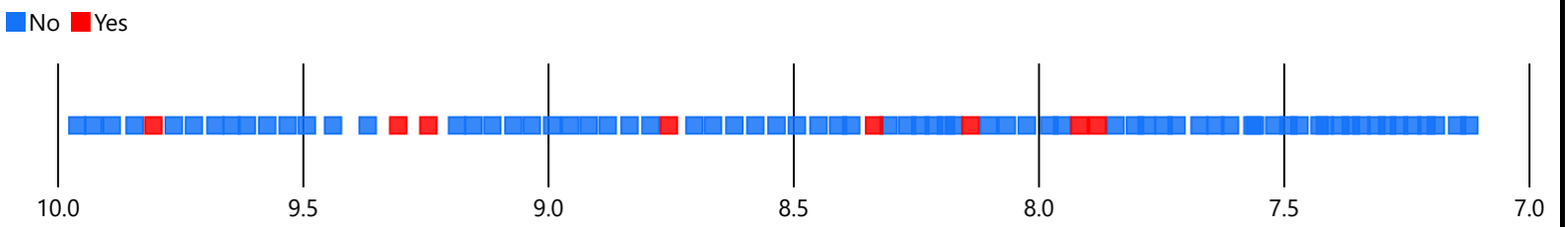
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH B

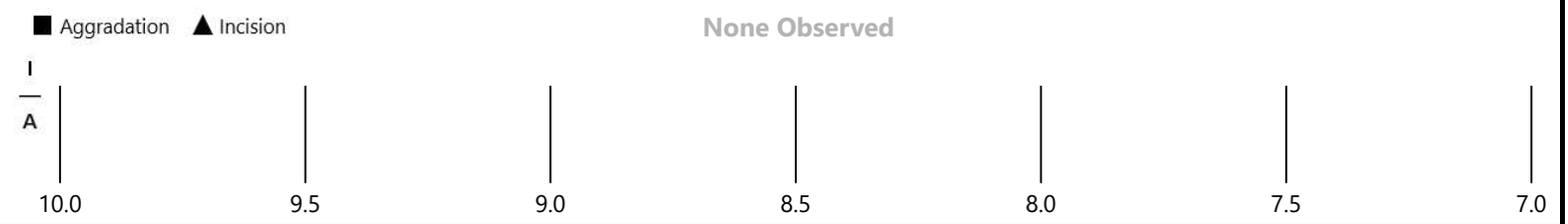
Channel Conditions



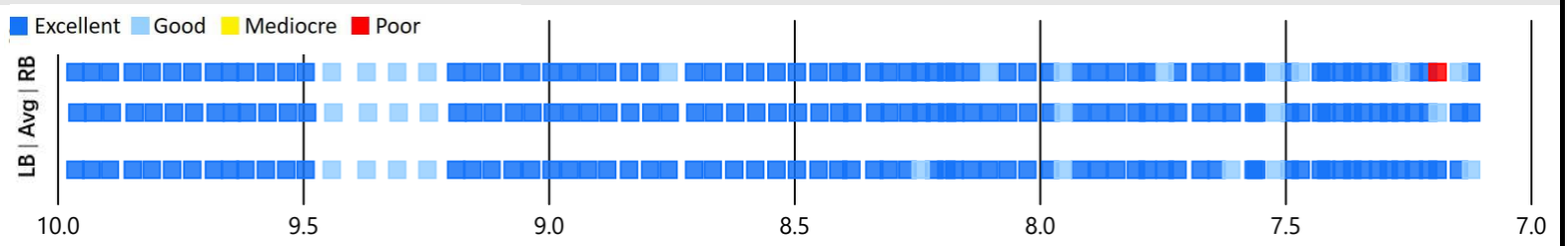
Stream Bank Hardening



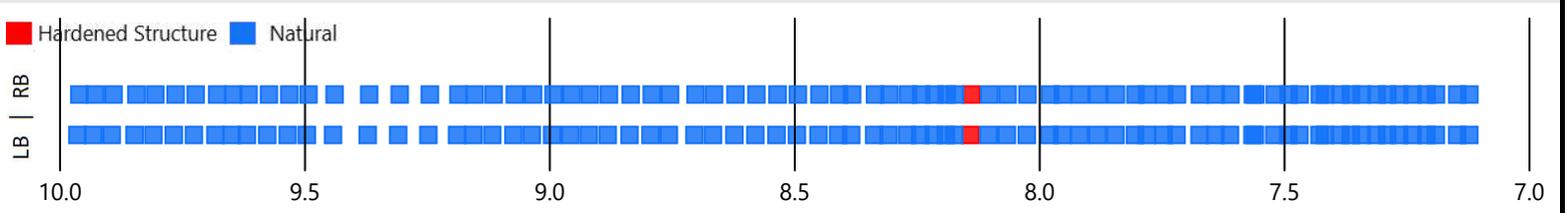
Aggradation/Incision



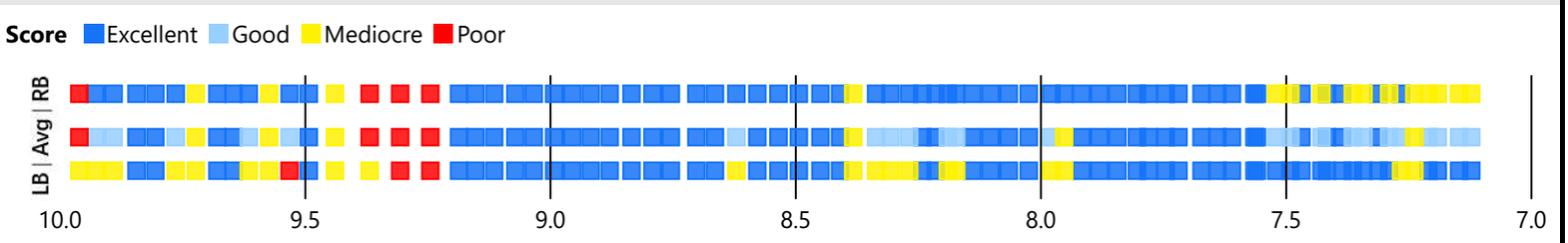
Bank Stability



Bank Condition



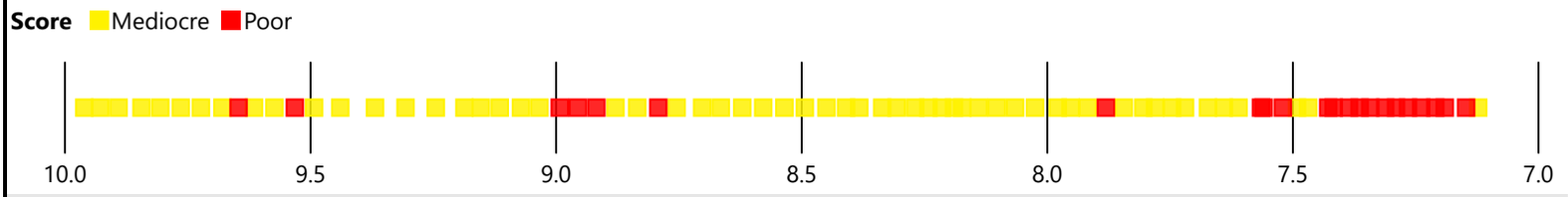
Riparian Zone



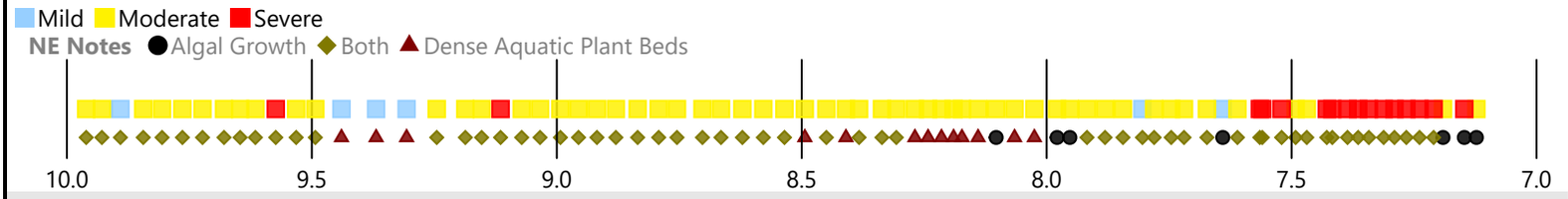
FLOW DIRECTION **Creek Mile (5.84 at Tailwater, 3.84 at Headwater)** FLOW DIRECTION

REACH B

Water Appearance



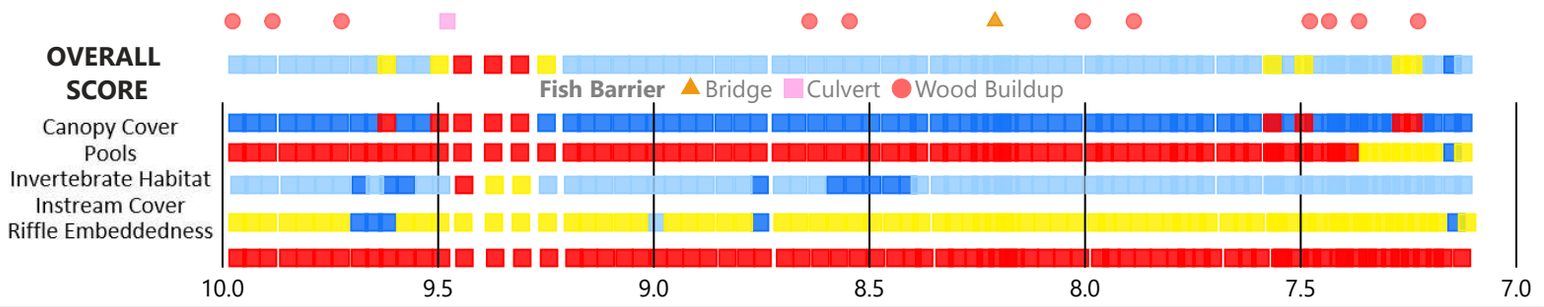
Nutrient Enrichment



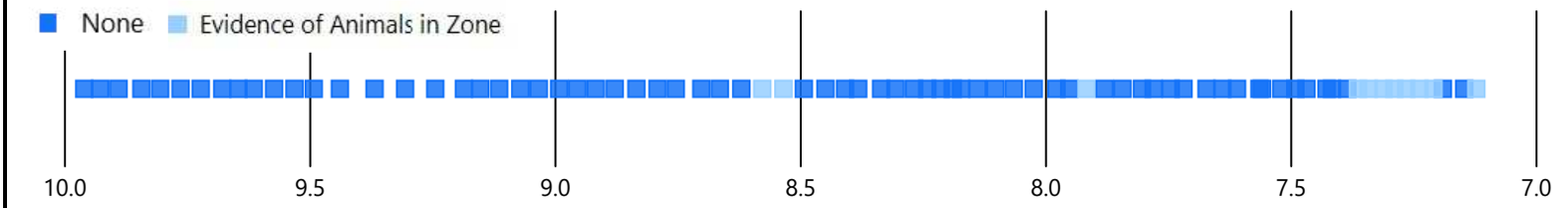
Fish Habitat

Score Excellent Good Mediocre Poor

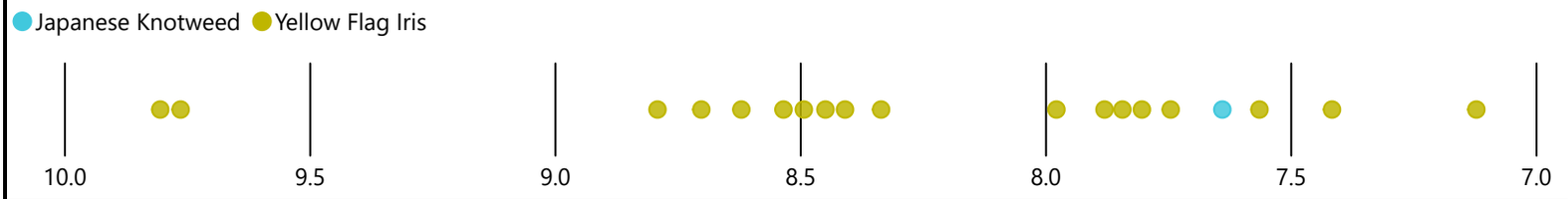
Note: **Overall Score** of Fish Habitat was calculated by averaging scores for the five variables shown below.



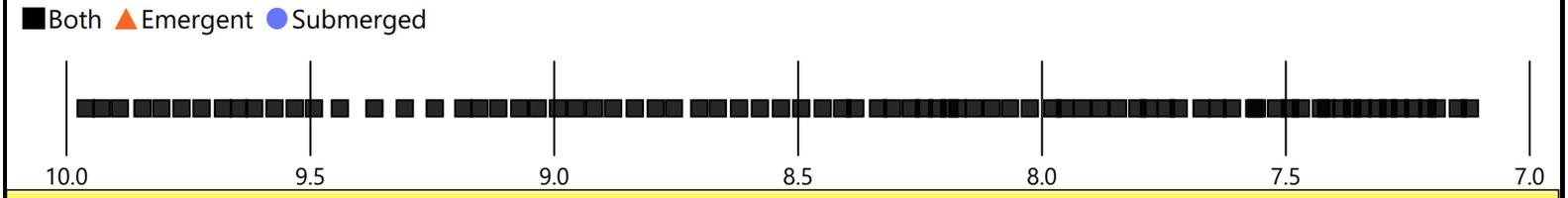
Manure Presence



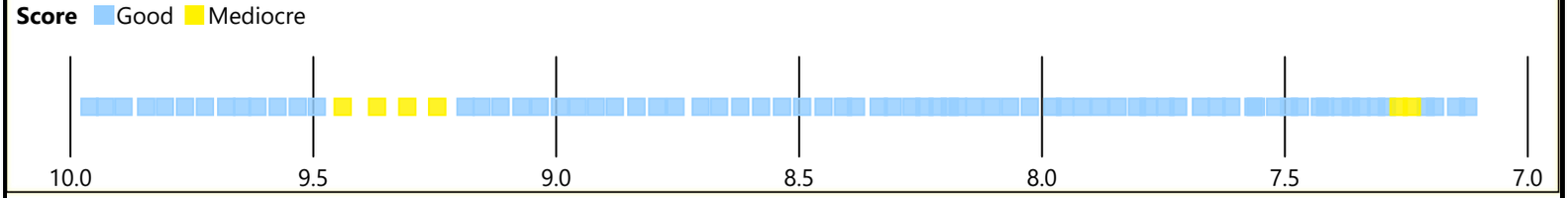
Invasive Species



Aquatic Vegetation



OVERALL SVAP RATING — MUD CREEK

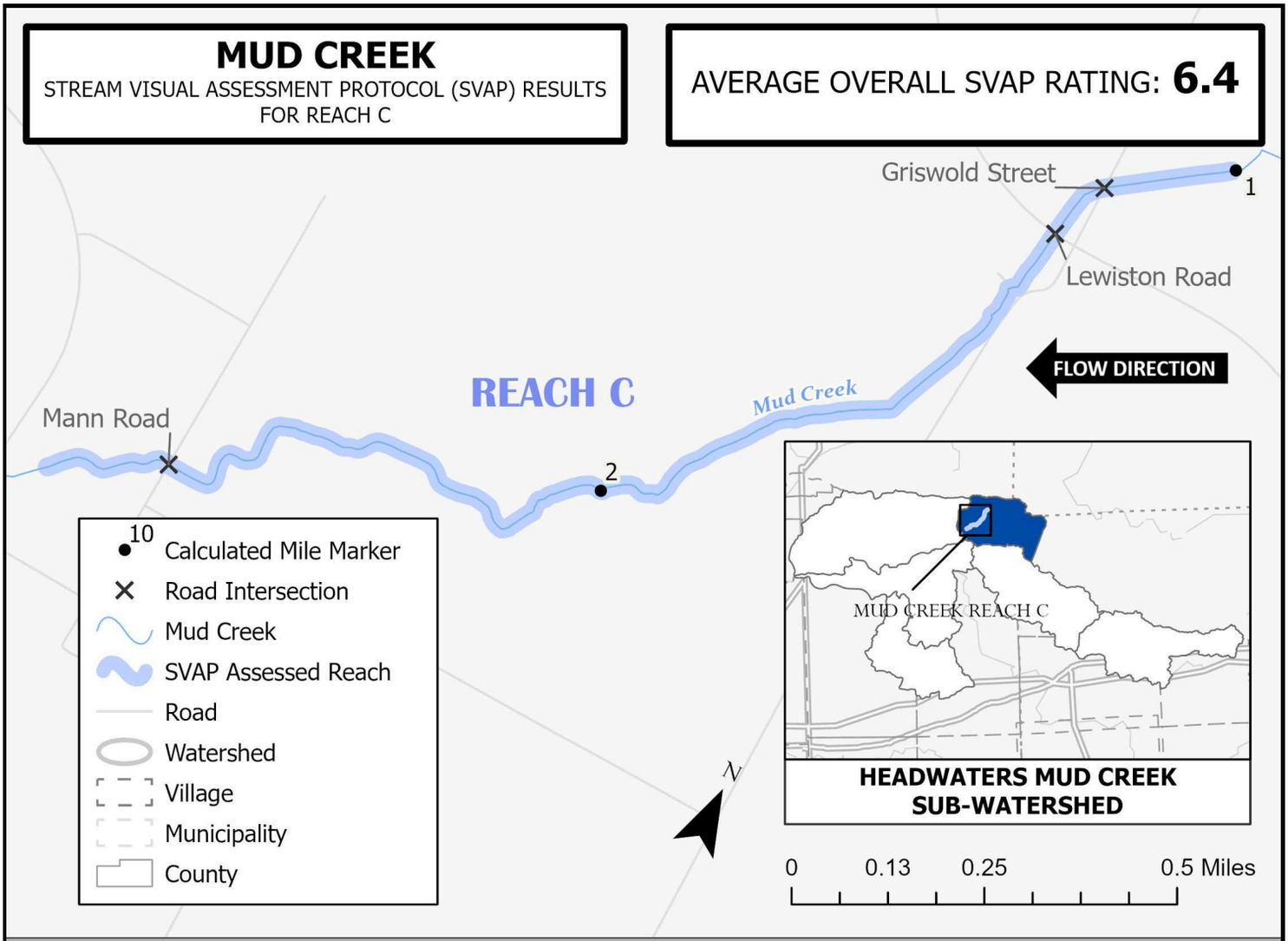


FLOW DIRECTION **Creek Mile (9.96 at Tailwater, 7.12 at Headwater)** FLOW DIRECTION

MUD CREEK

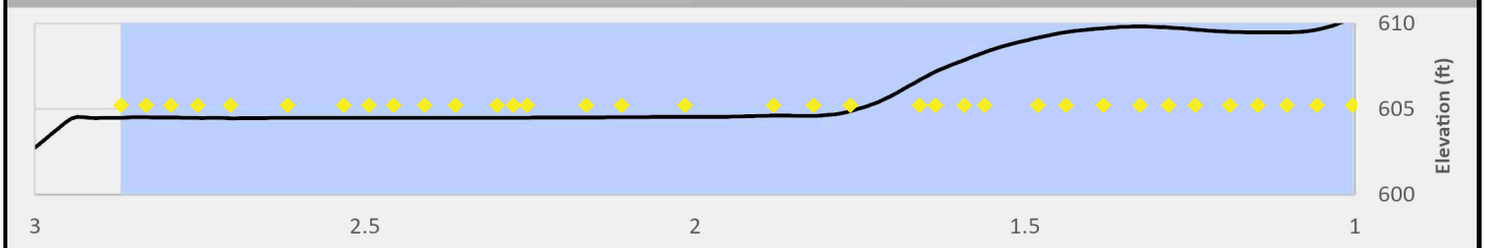
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH C

AVERAGE OVERALL SVAP RATING: **6.4**



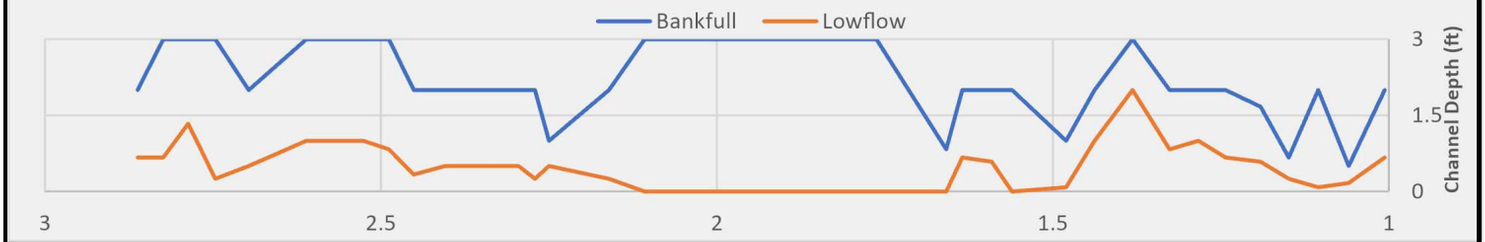
Elevation Profile

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

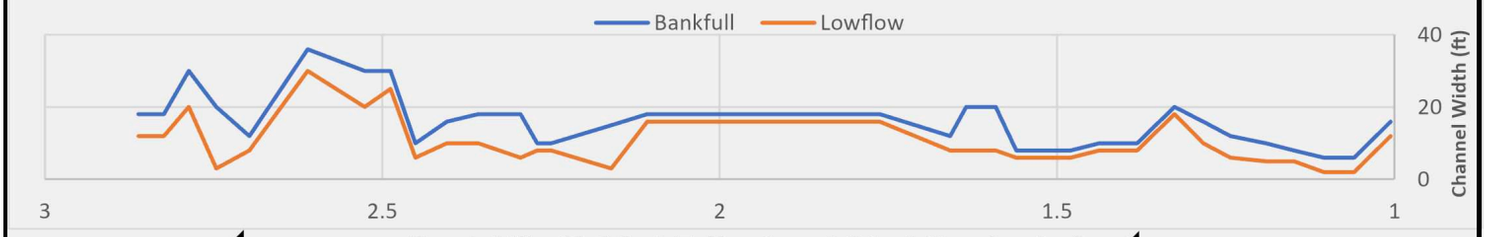


REACH C

Channel Depth



Channel Width



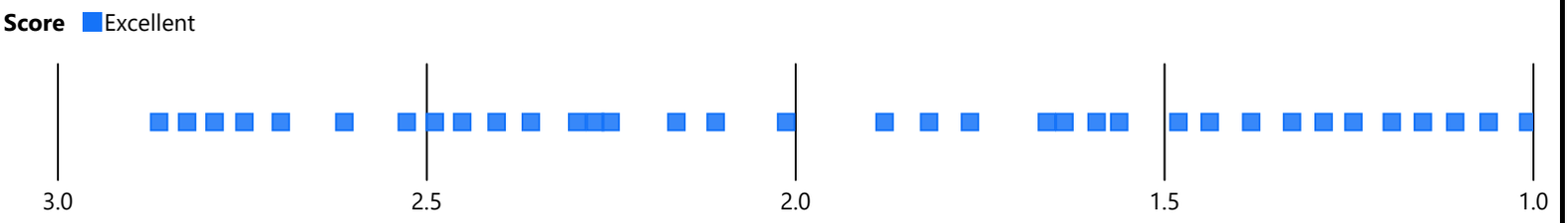
FLOW DIRECTION **Creek Mile (2.86 at Tailwater, 1.01 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

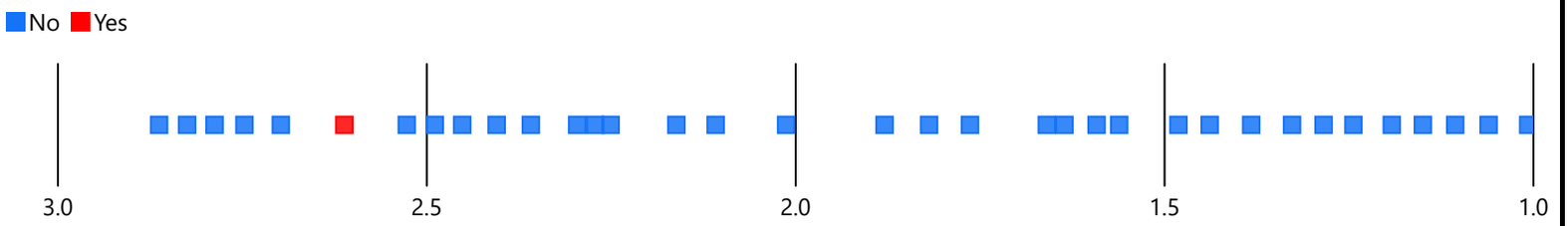
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH C

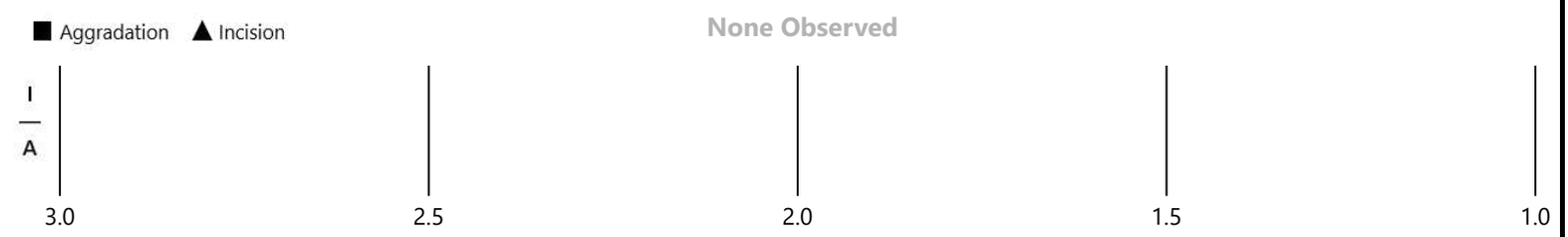
Channel Conditions



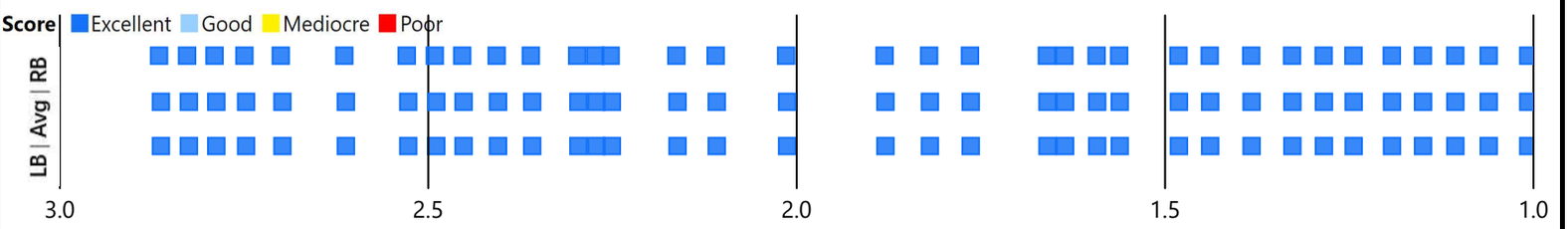
Stream Bank Hardening



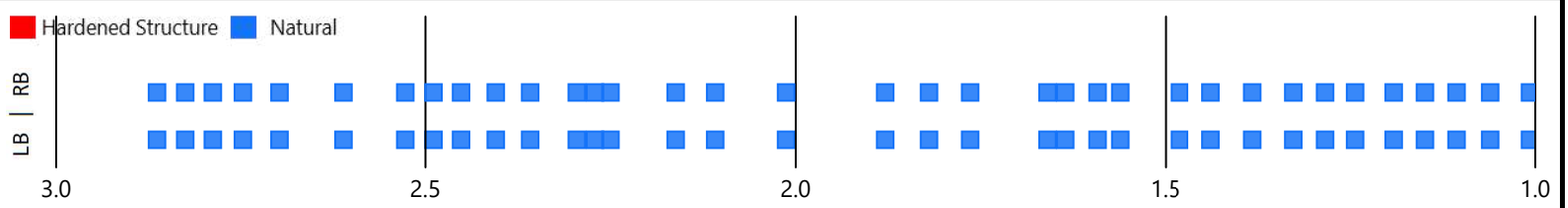
Aggradation/Incision



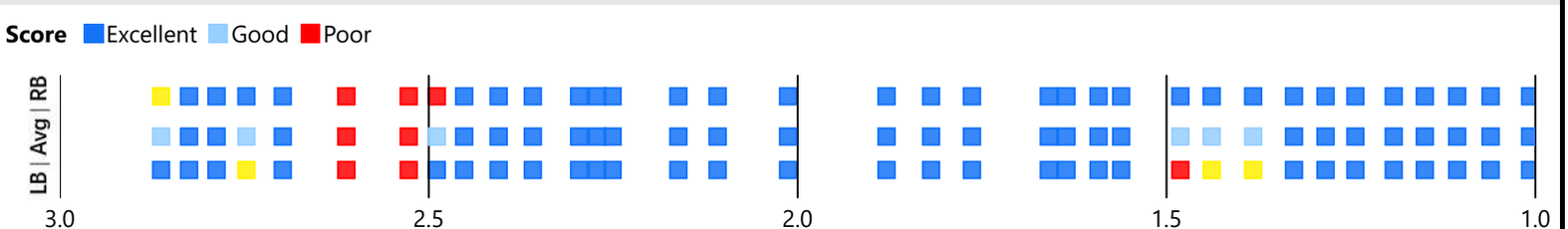
Bank Stability



Bank Condition



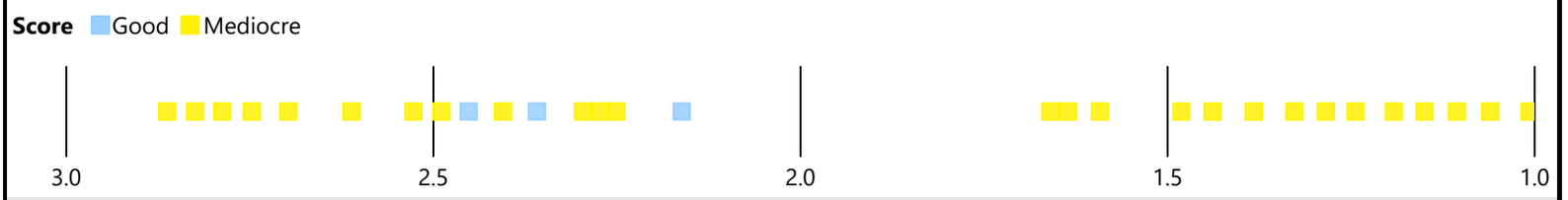
Riparian Zone



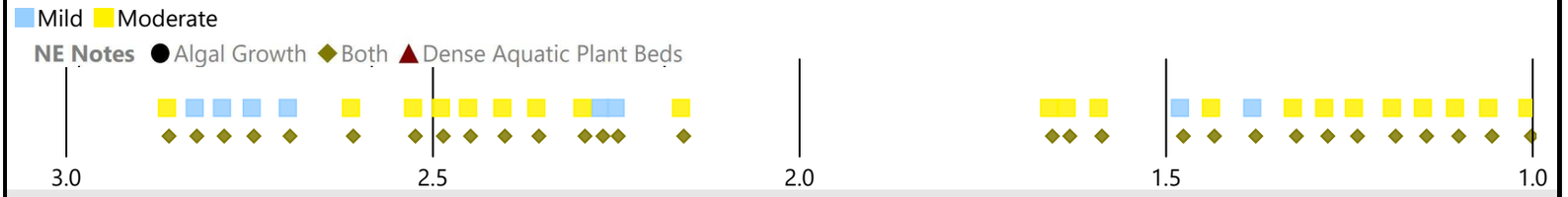
FLOW DIRECTION **Creek Mile (2.86 at Tailwater, 1.01 at Headwater)** FLOW DIRECTION

REACH C

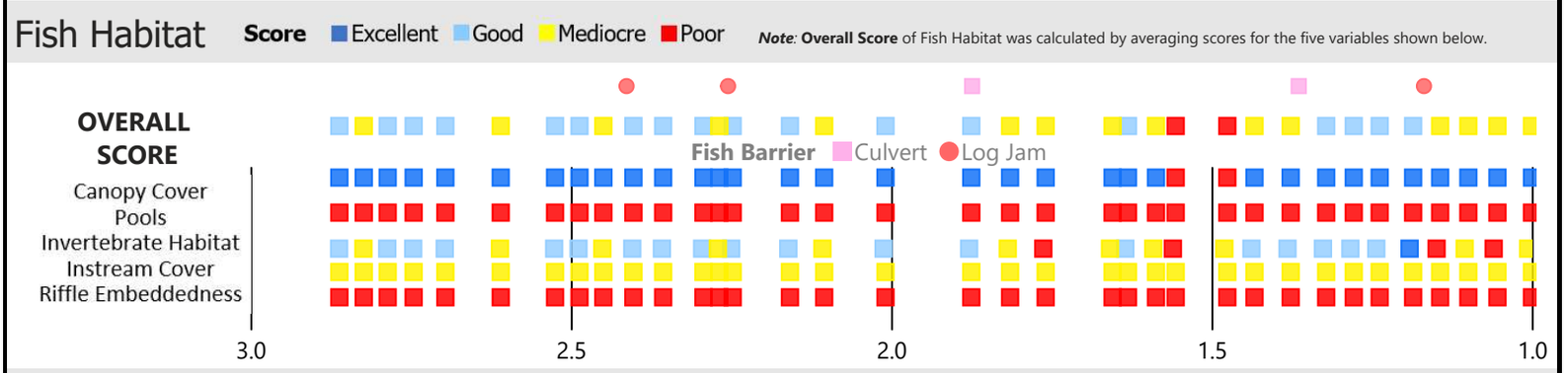
Water Appearance



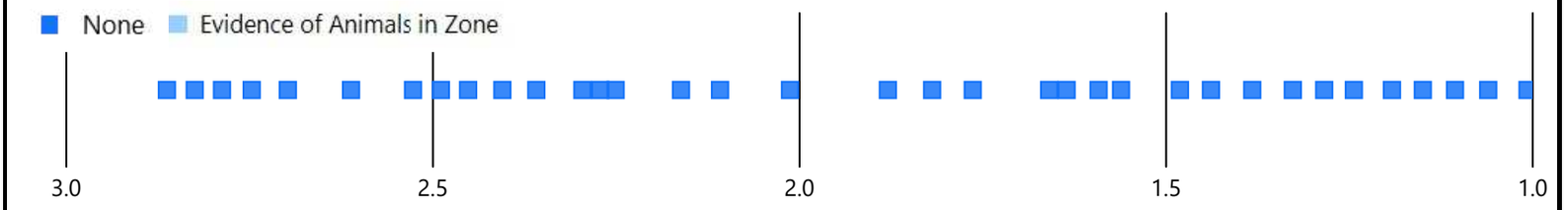
Nutrient Enrichment



Fish Habitat

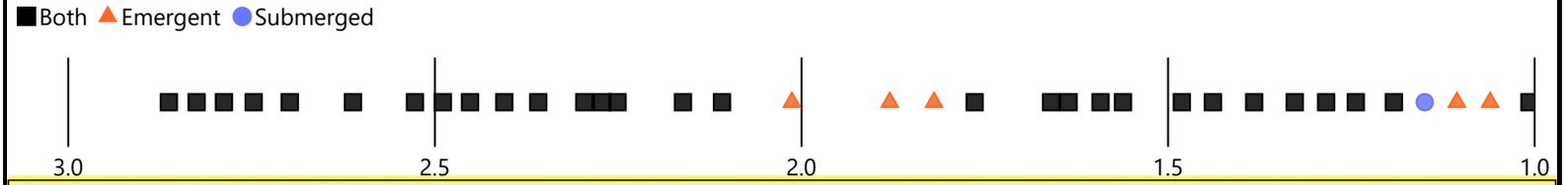


Manure Presence

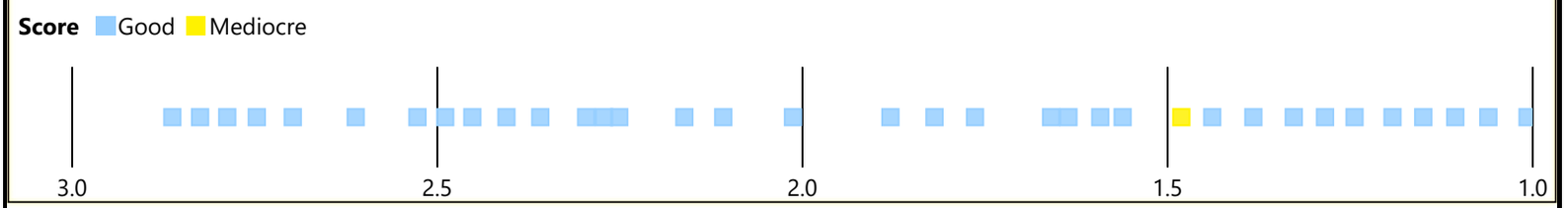


Invasive Species

Aquatic Vegetation



OVERALL SVAP RATING — MUD CREEK

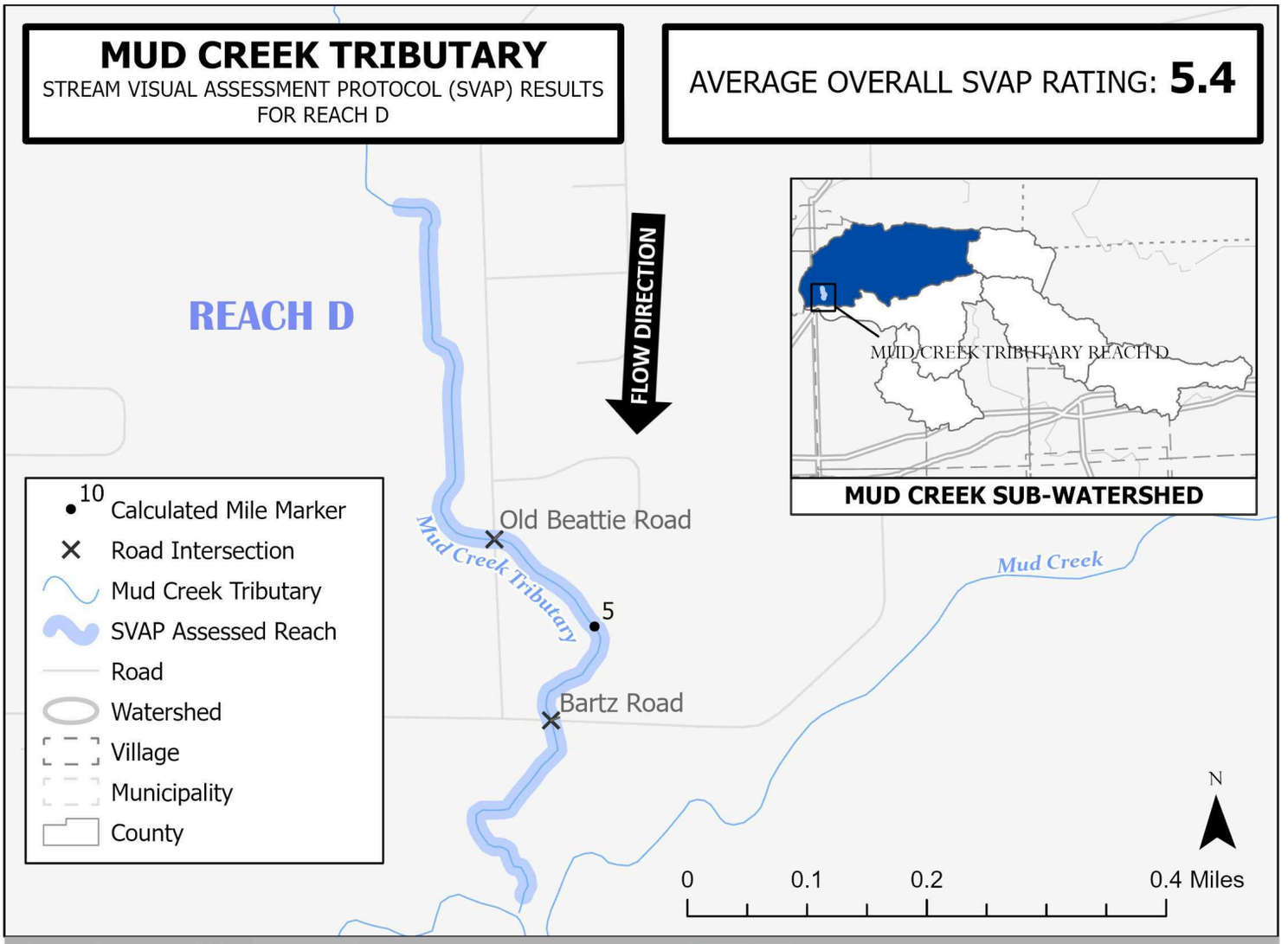


FLOW DIRECTION **Creek Mile (2.86 at Tailwater, 1.01 at Headwater)** FLOW DIRECTION

MUD CREEK TRIBUTARY

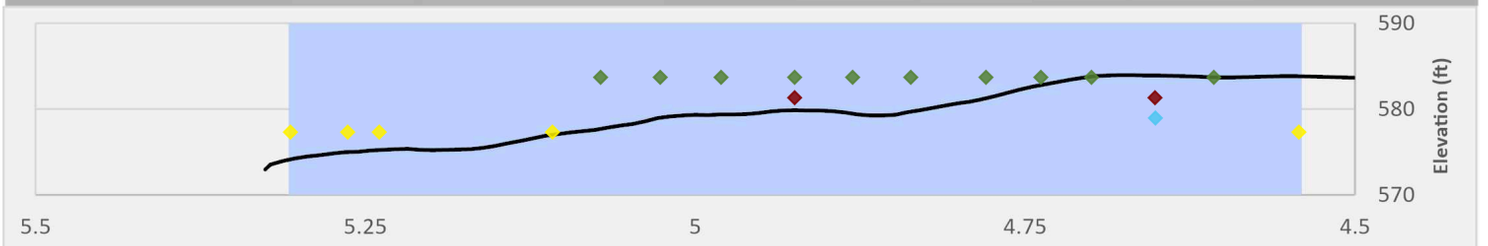
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH D

AVERAGE OVERALL SVAP RATING: **5.4**



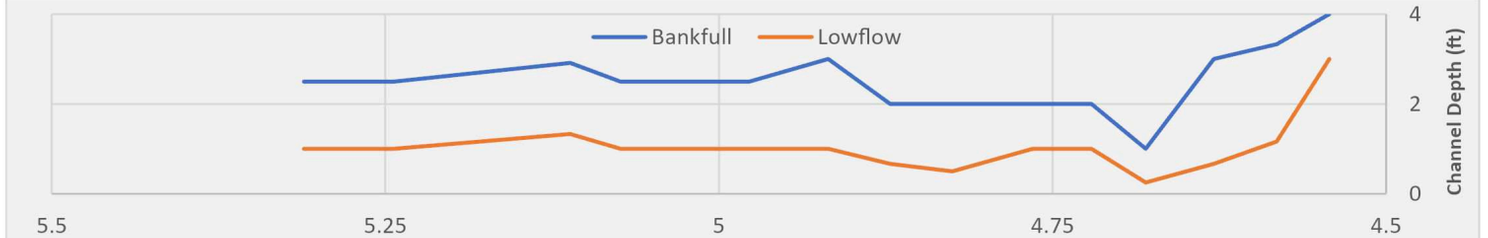
Elevation Profile

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

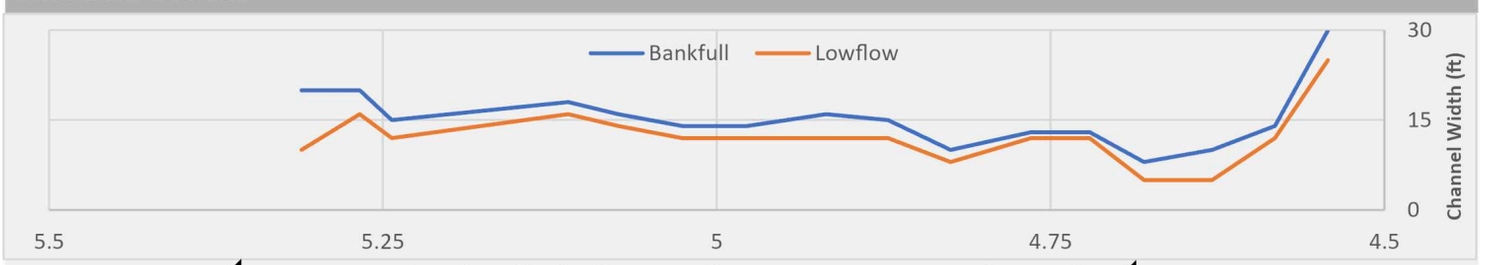


REACH D

Channel Depth



Channel Width



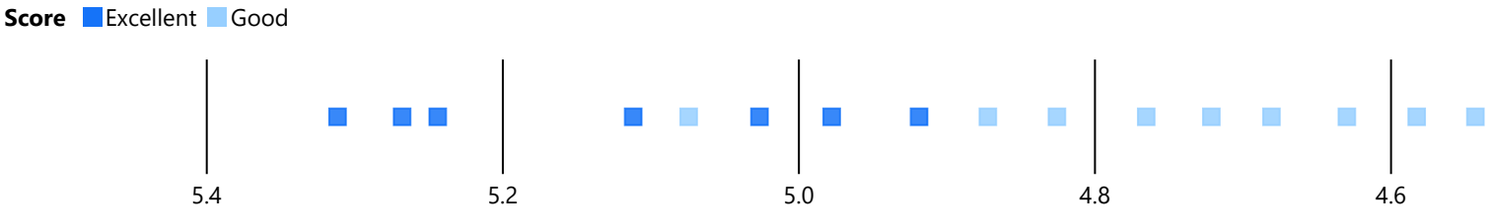
FLOW DIRECTION **Creek Mile (5.31 at Tailwater, 4.54 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

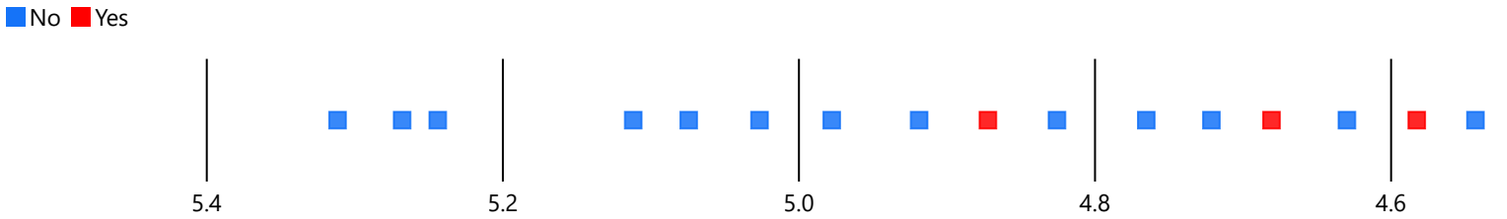
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH D

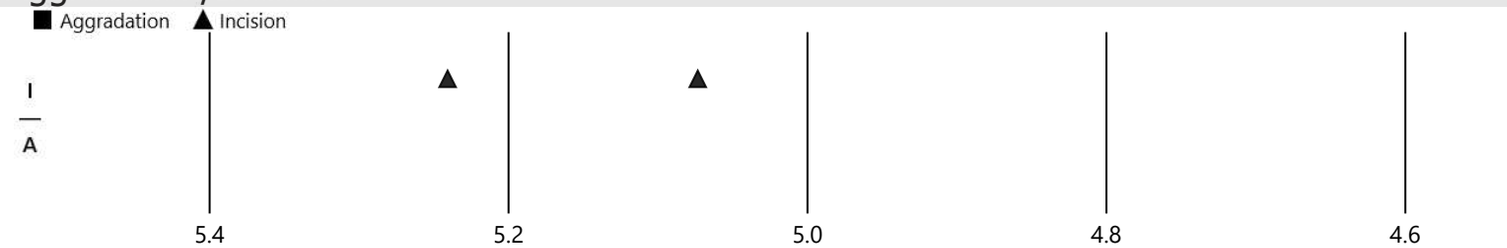
Channel Conditions



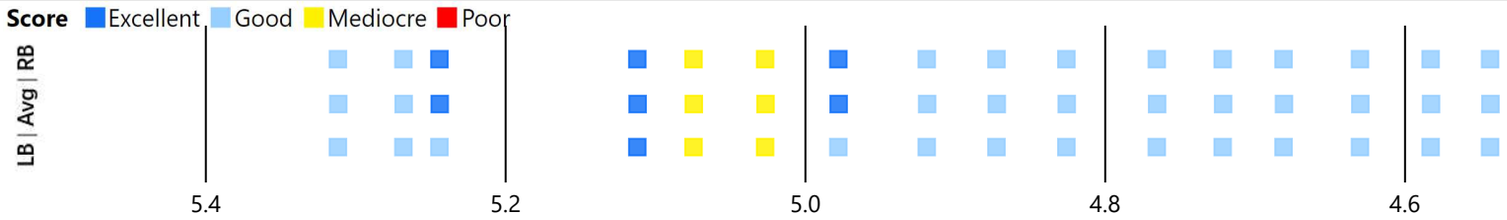
Stream Bank Hardening



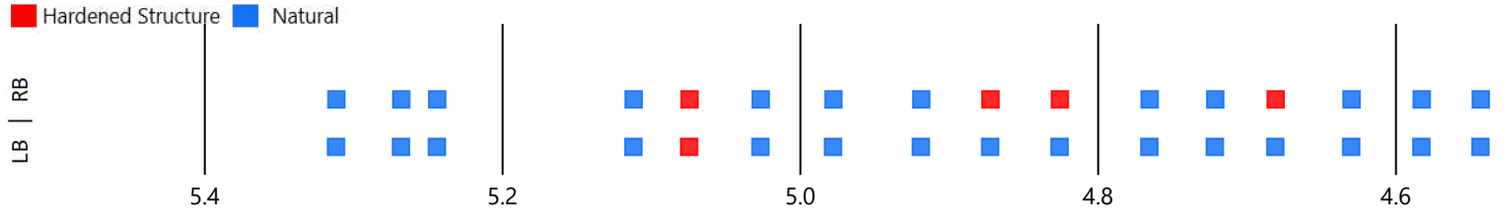
Aggradation/Incision



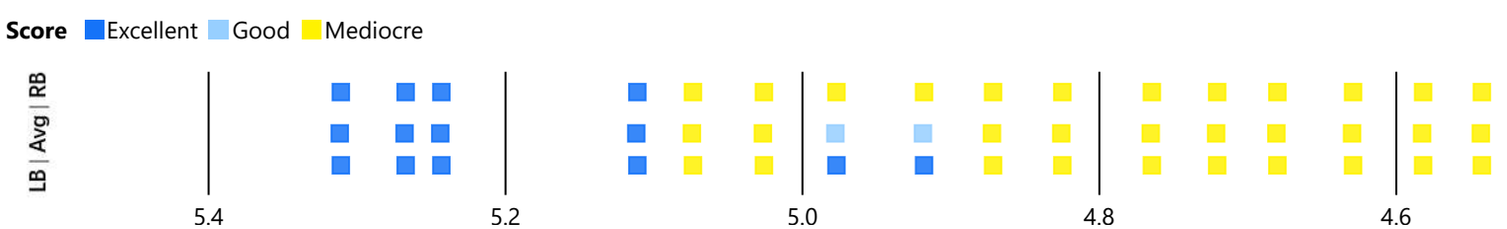
Bank Stability



Bank Condition



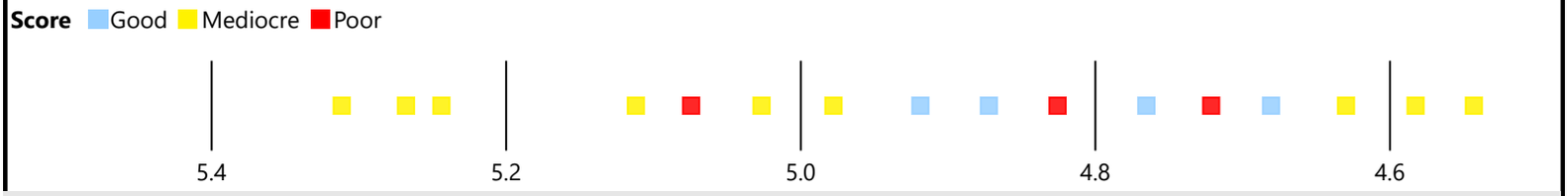
Riparian Zone



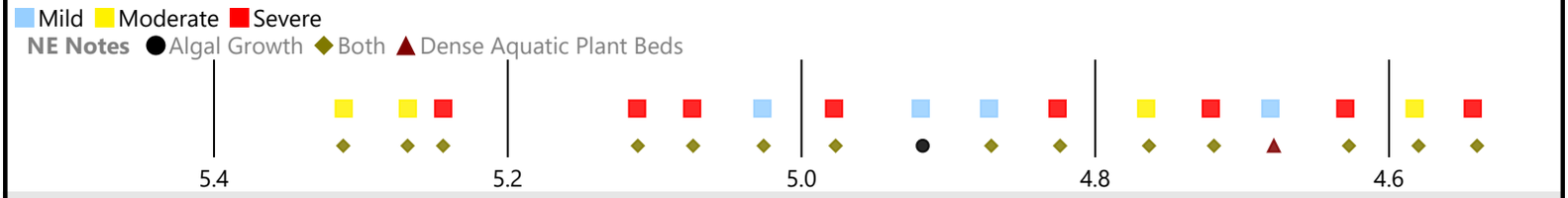
FLOW DIRECTION **Creek Mile (5.31 at Tailwater, 4.54 at Headwater)** FLOW DIRECTION

REACH D

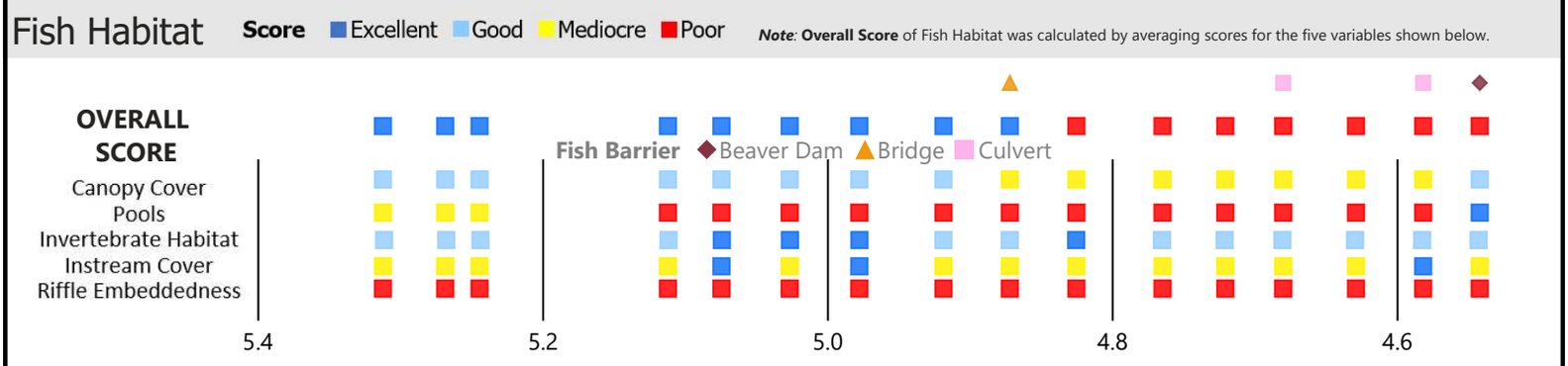
Water Appearance



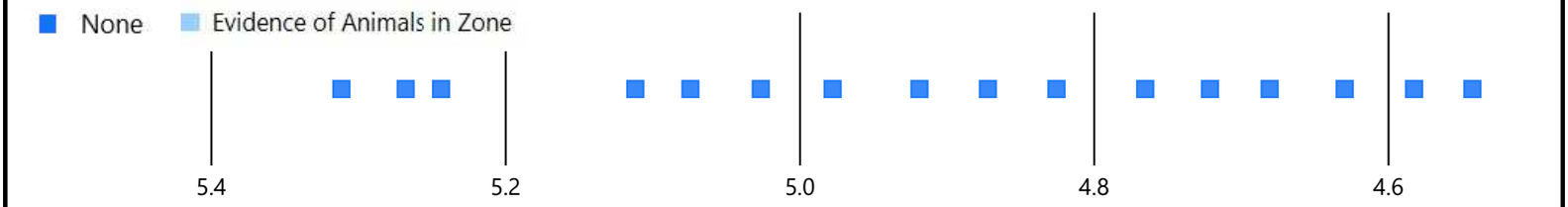
Nutrient Enrichment



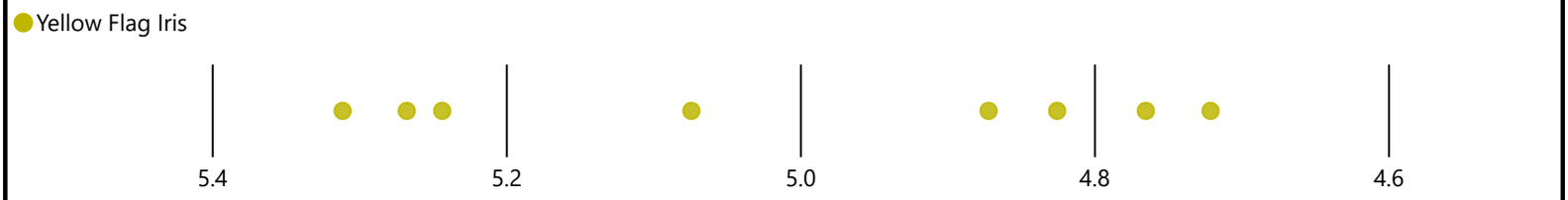
Fish Habitat



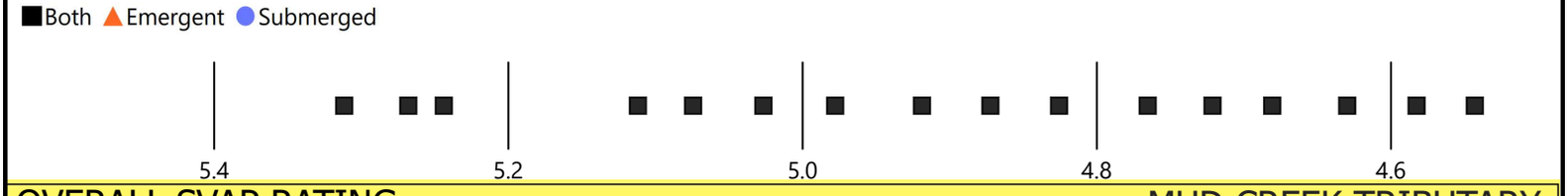
Manure Presence



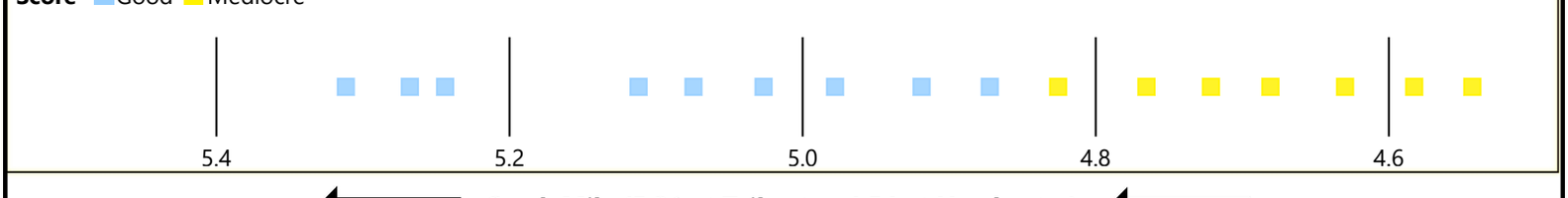
Invasive Species



Aquatic Vegetation



OVERALL SVAP RATING — MUD CREEK TRIBUTARY

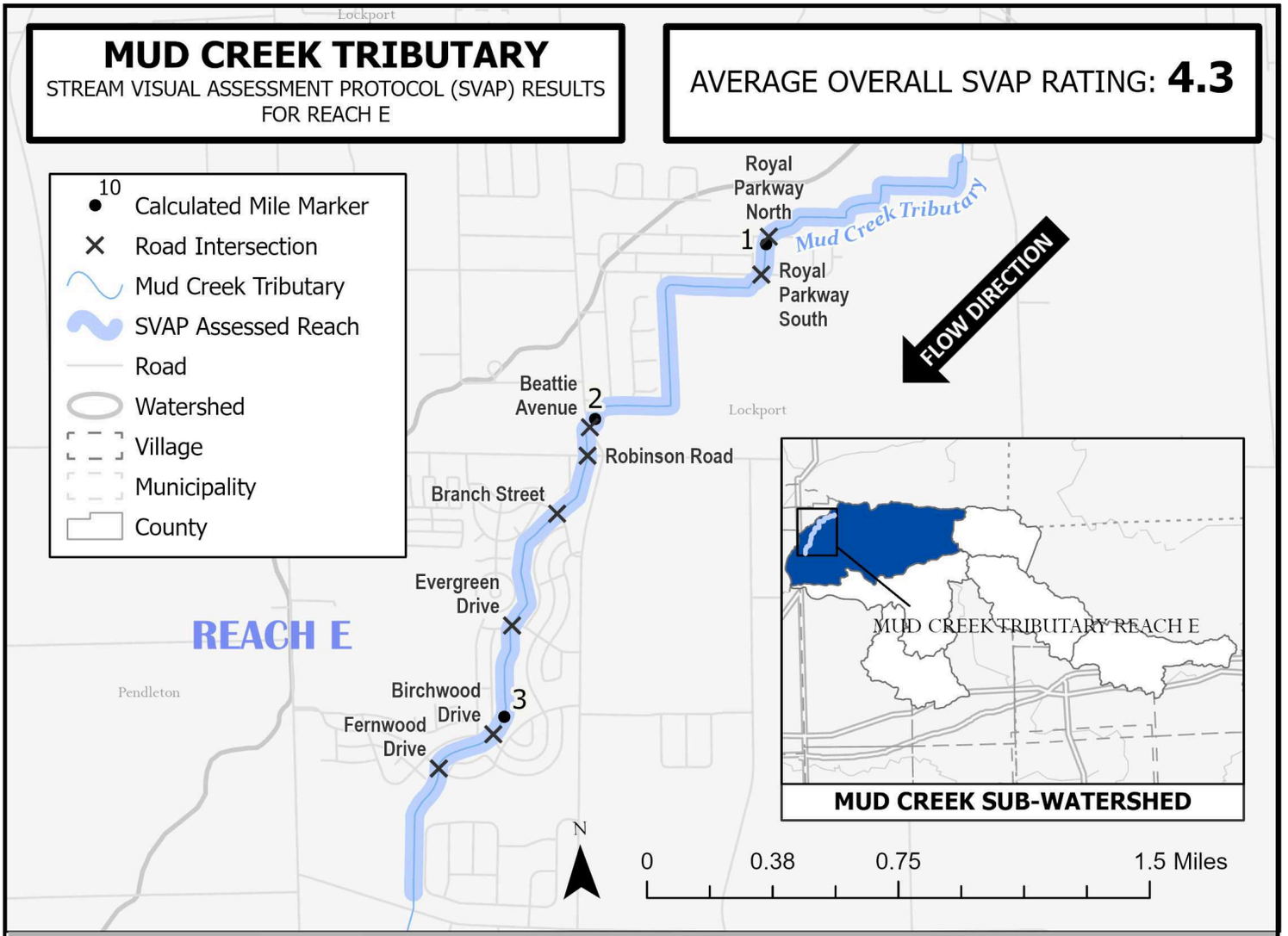


FLOW DIRECTION **Creek Mile (5.31 at Tailwater, 4.54 at Headwater)** FLOW DIRECTION

MUD CREEK TRIBUTARY

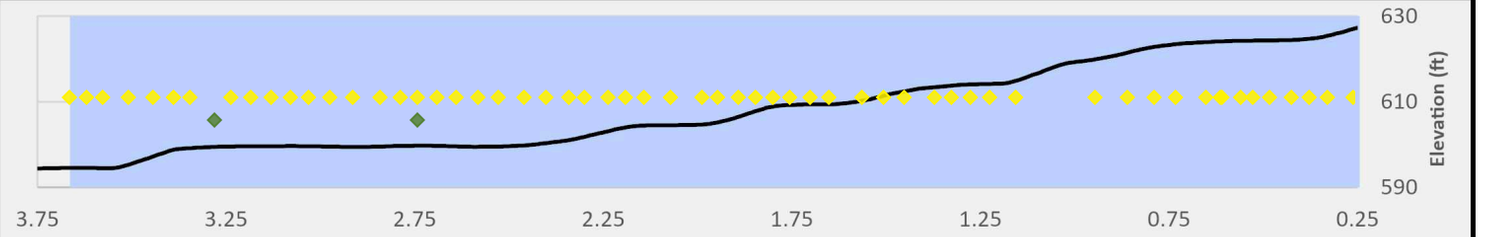
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH E

AVERAGE OVERALL SVAP RATING: **4.3**



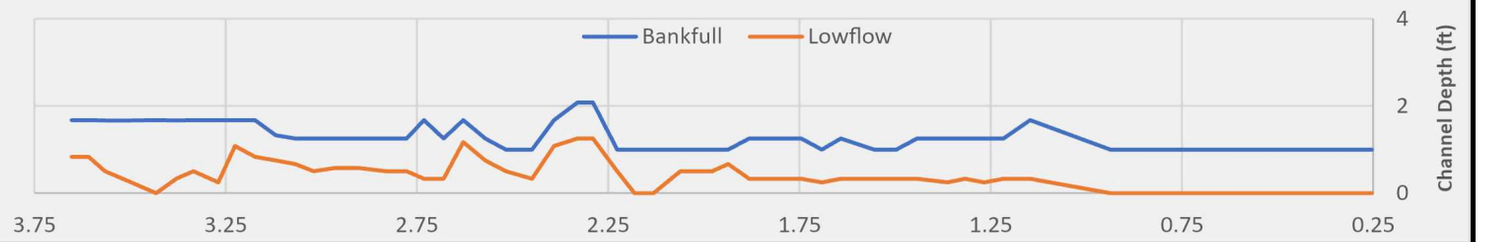
Elevation Profile

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

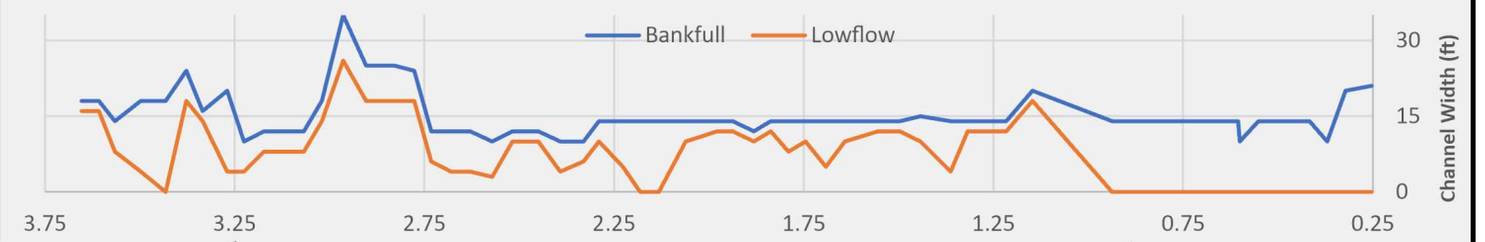


REACH E

Channel Depth



Channel Width



FLOW DIRECTION

Creek Mile (3.65 at Tailwater, 0.25 at Headwater)

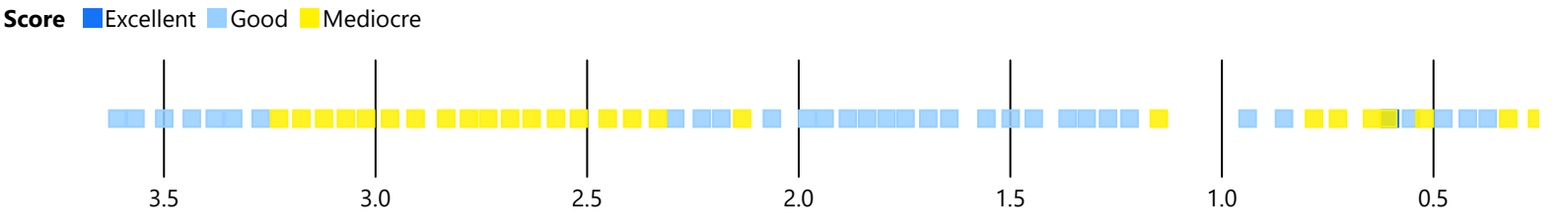
FLOW DIRECTION

Classification Scheme for SVAP Parameters

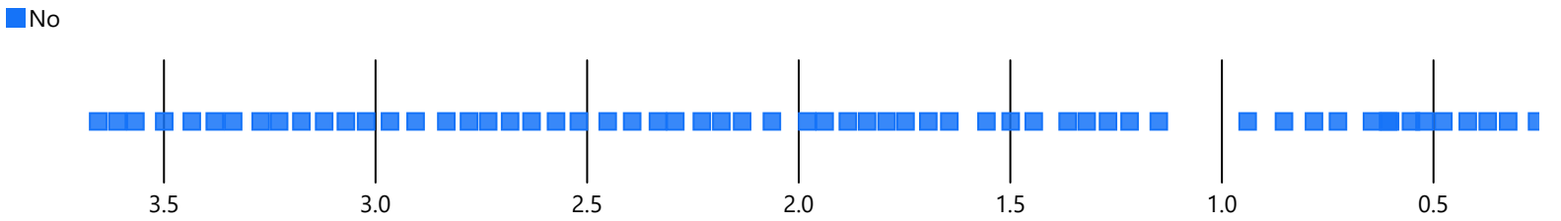
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH E

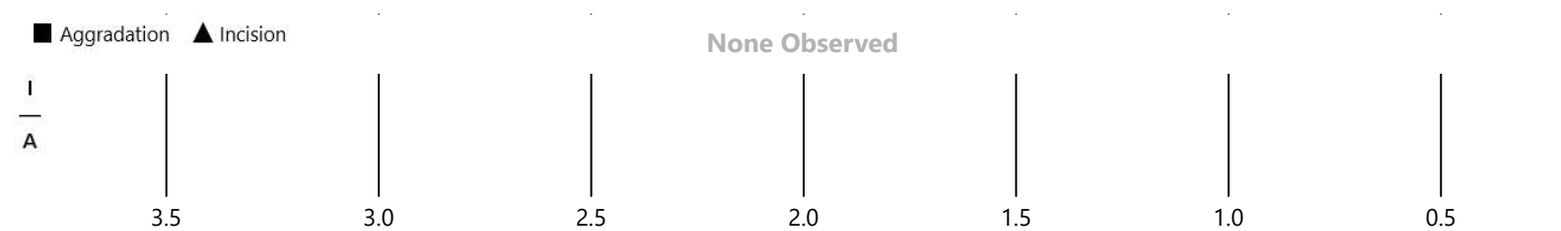
Channel Conditions



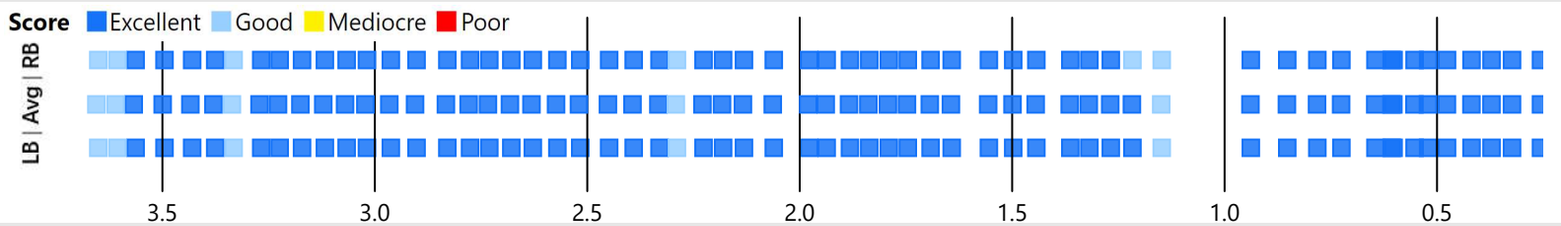
Stream Bank Hardening



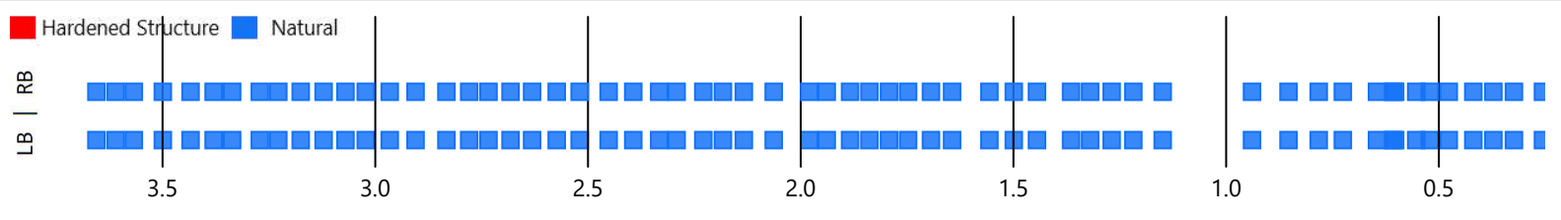
Aggradation/Incision



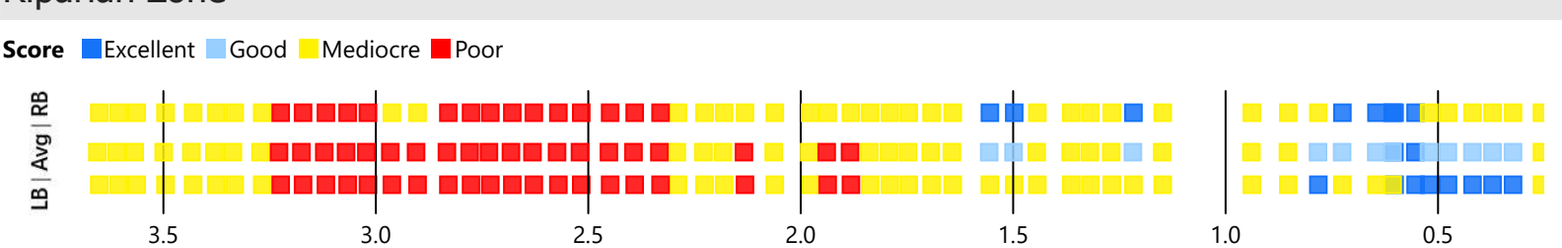
Bank Stability



Bank Condition



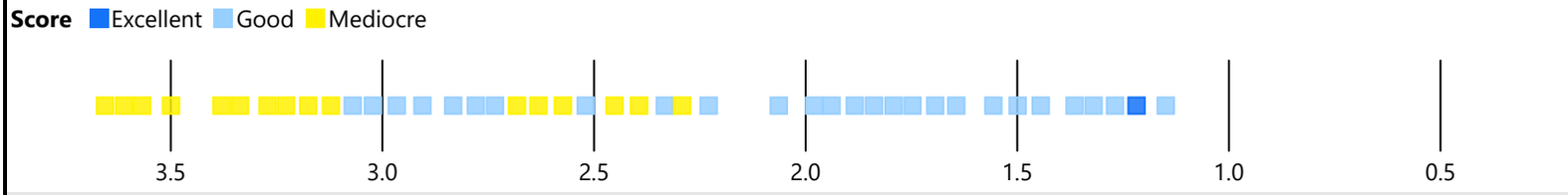
Riparian Zone



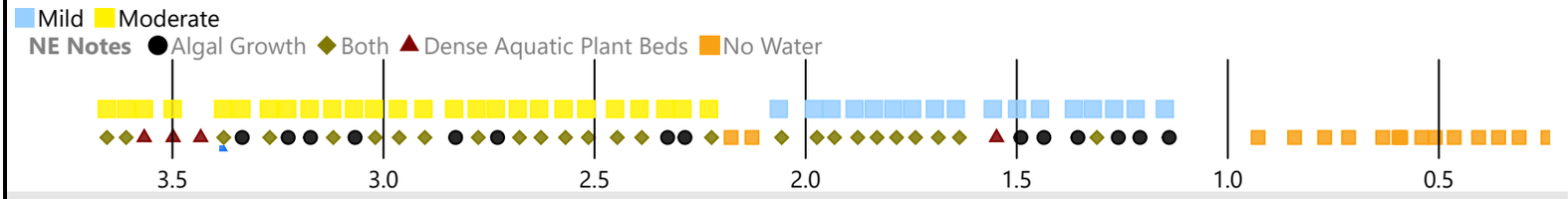
FLOW DIRECTION **Creek Mile (3.65 at Tailwater, 0.25 at Headwater)** FLOW DIRECTION

REACH E

Water Appearance



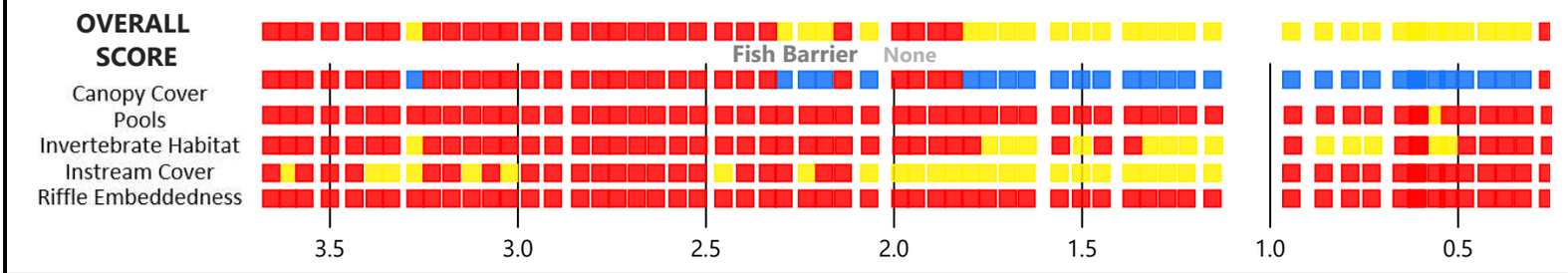
Nutrient Enrichment



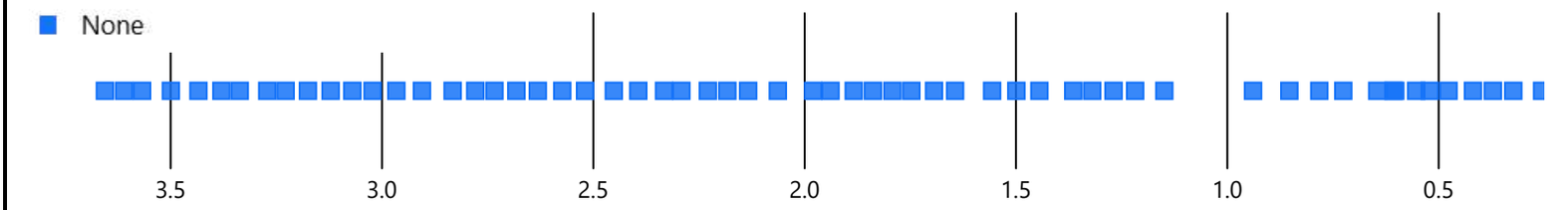
Fish Habitat

Score Excellent Good Mediocre Poor

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



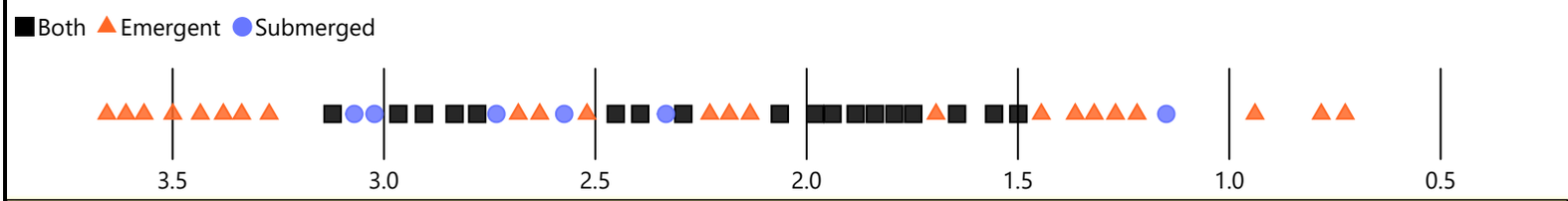
Manure Presence



Invasive Species

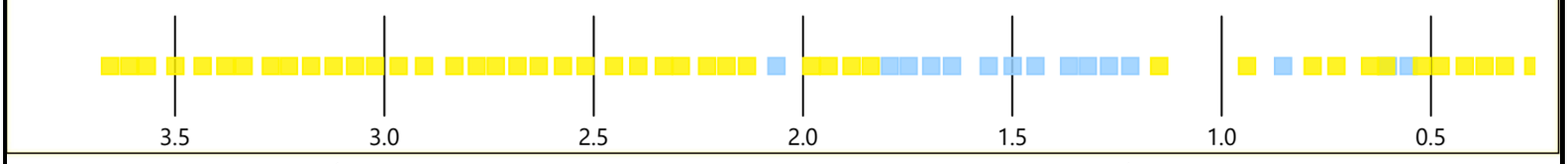
None Observed

Aquatic Vegetation



OVERALL SVAP RATING — MUD CREEK TRIBUTARY

Score Good Mediocre

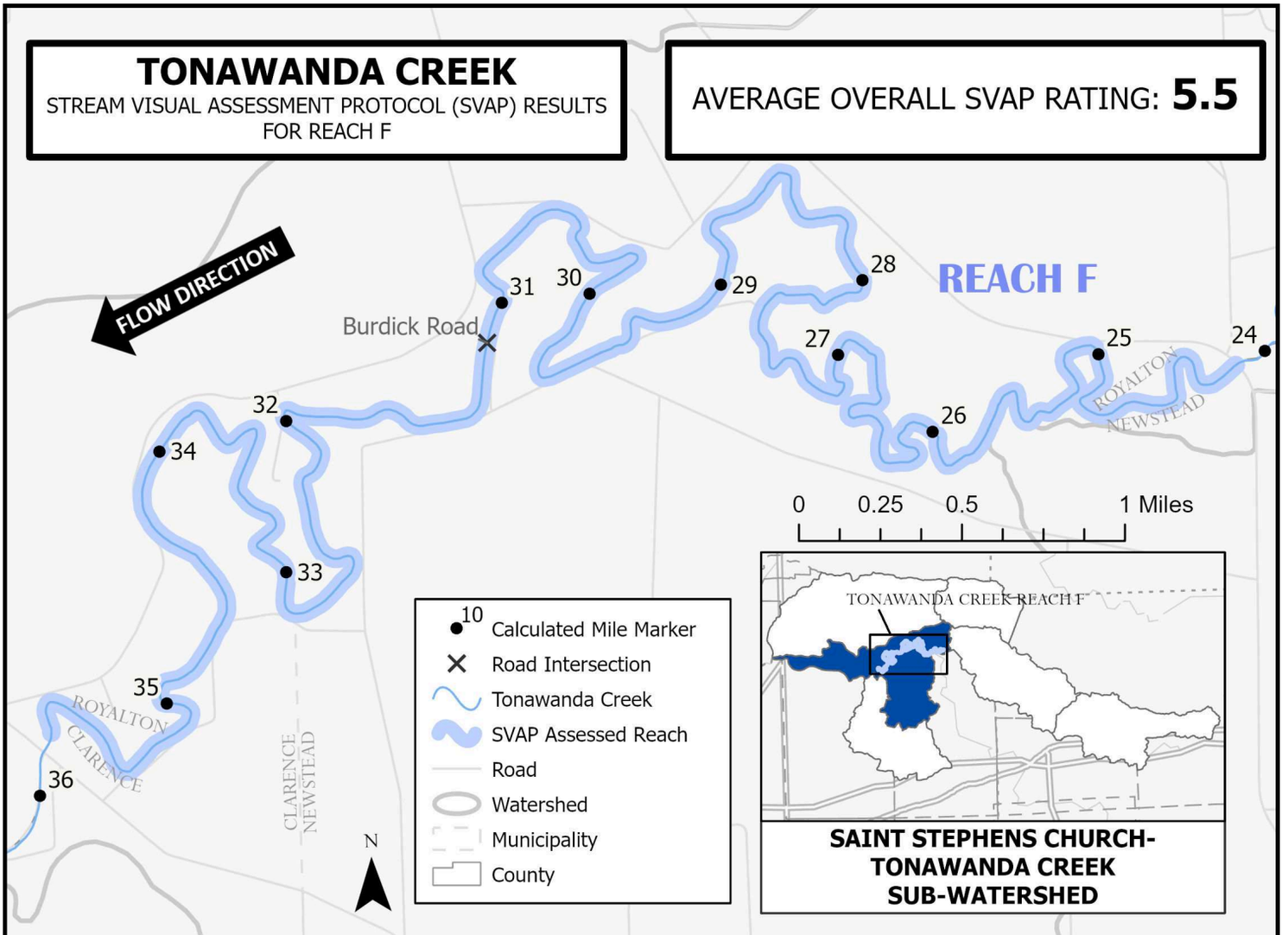


FLOW DIRECTION **Creek Mile (3.65 at Tailwater, 0.25 at Headwater)** FLOW DIRECTION

TONAWANDA CREEK

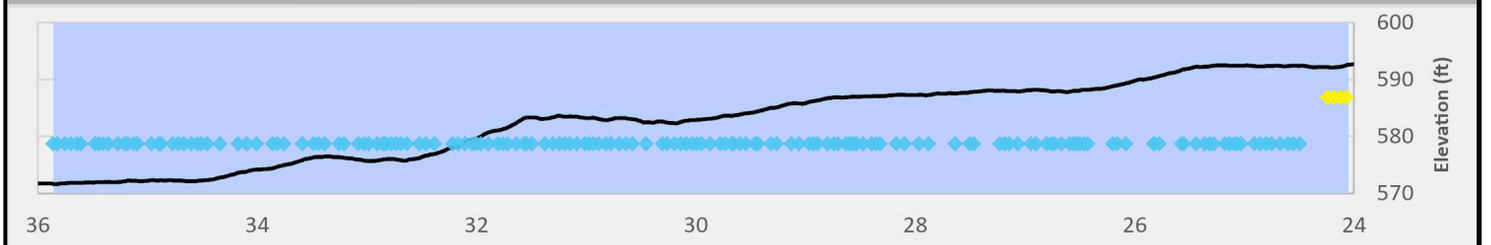
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH F

AVERAGE OVERALL SVAP RATING: **5.5**



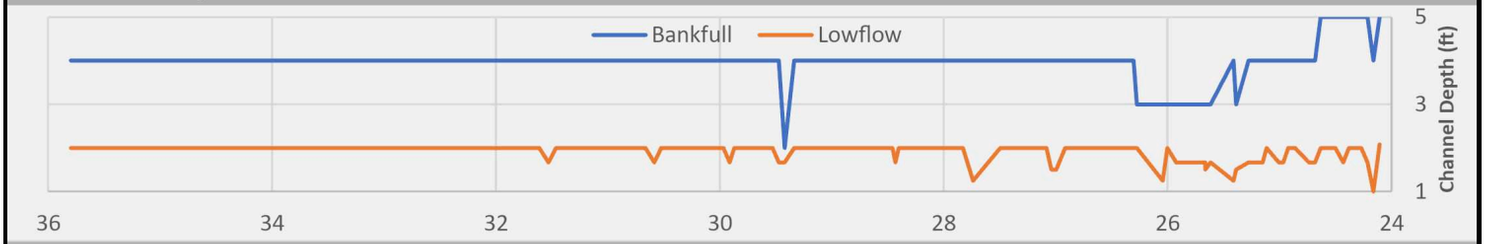
Elevation Profile

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

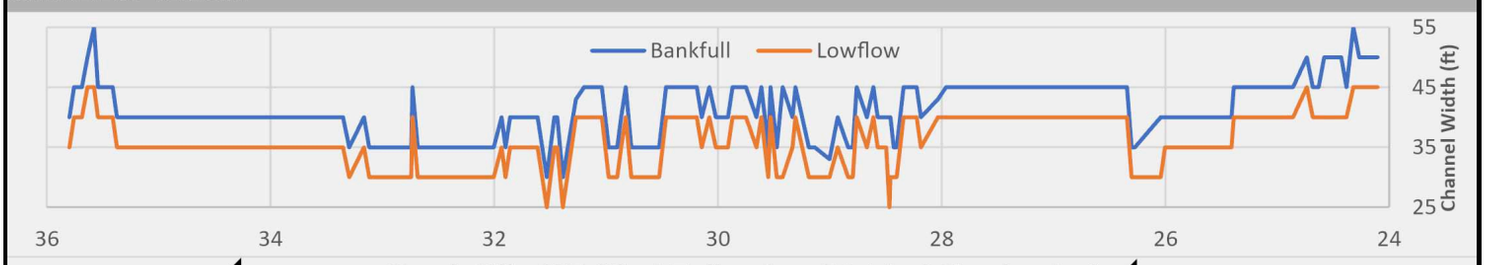


REACH F

Channel Depth



Channel Width



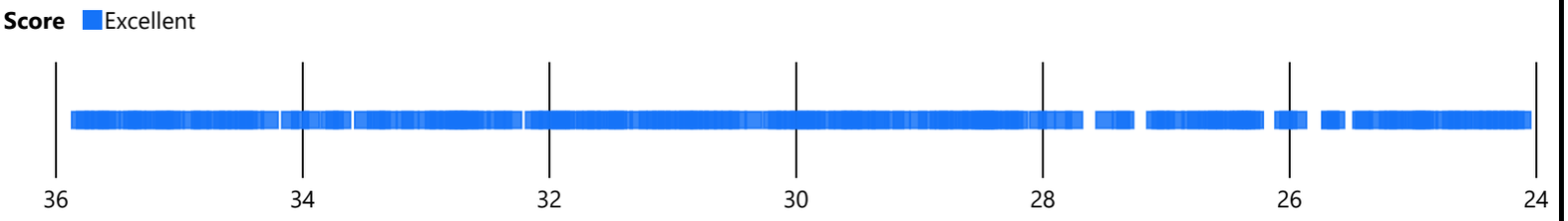
FLOW DIRECTION **Creek Mile (35.80 at Tailwater, 24.11 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

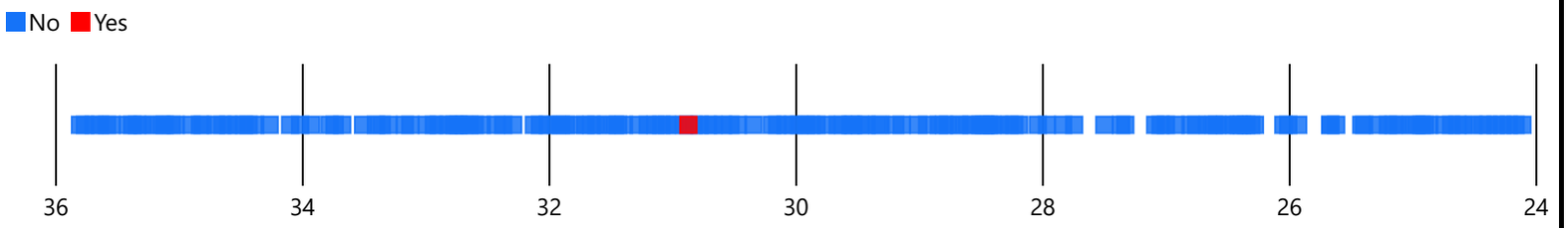
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH F

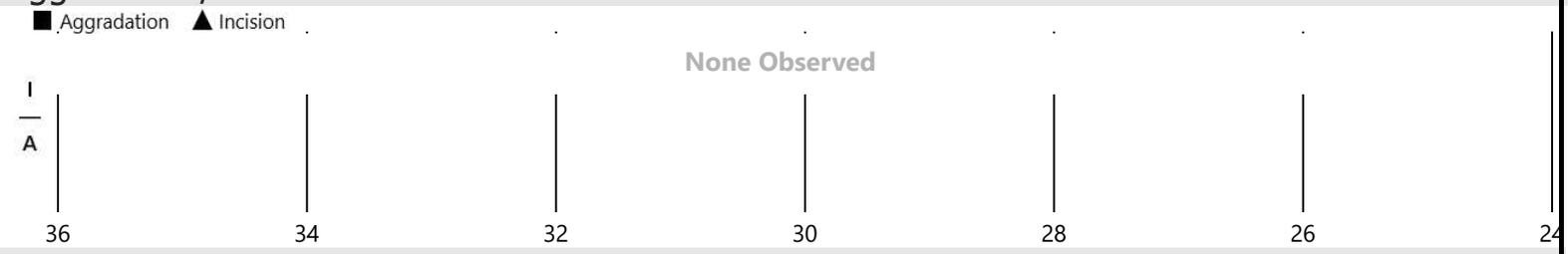
Channel Conditions



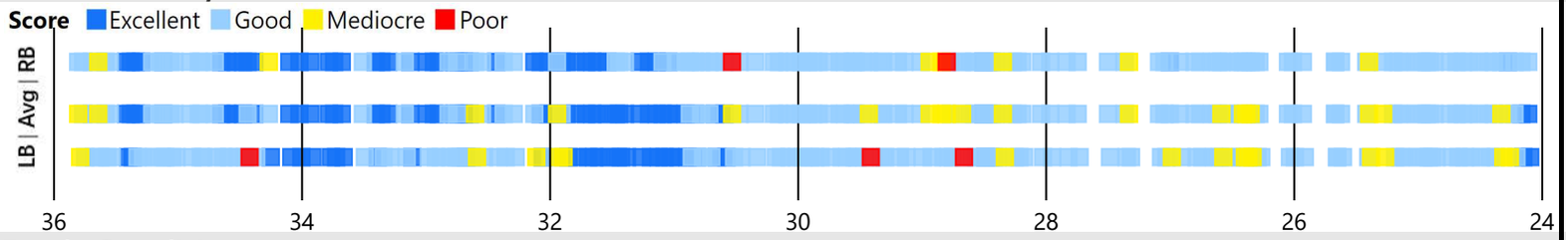
Stream Bank Hardening



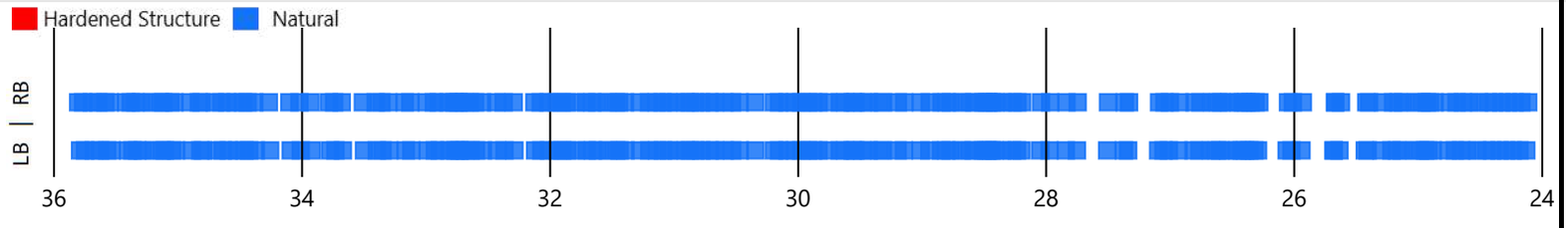
Aggradation/Incision



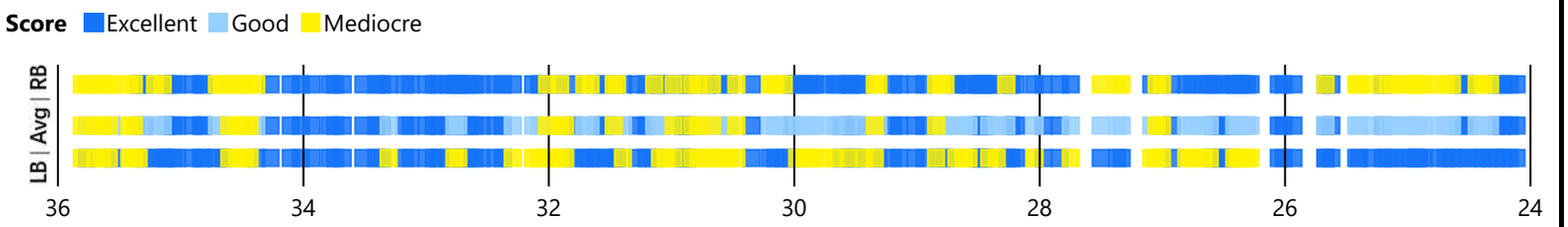
Bank Stability



Bank Condition



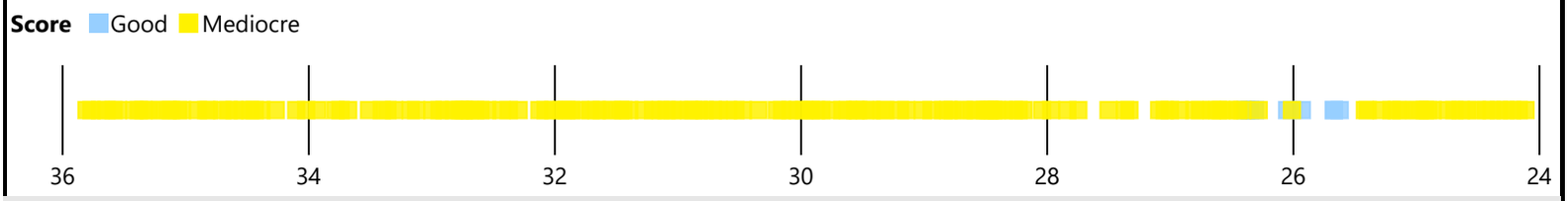
Riparian Zone



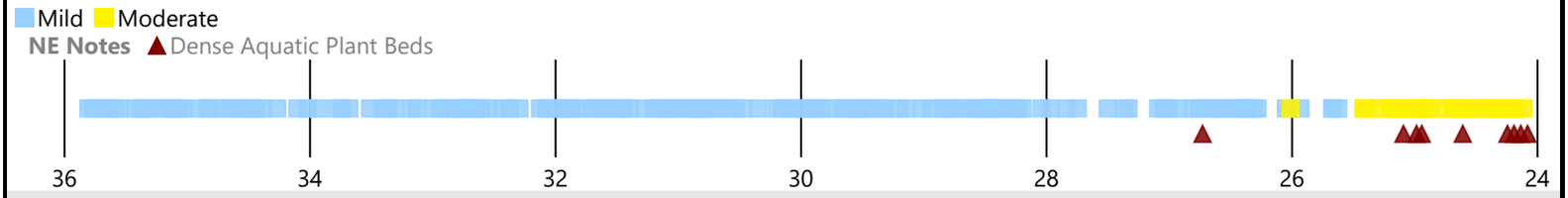
FLOW DIRECTION **Creek Mile (35.80 at Tailwater, 24.11 at Headwater)** FLOW DIRECTION

REACH F

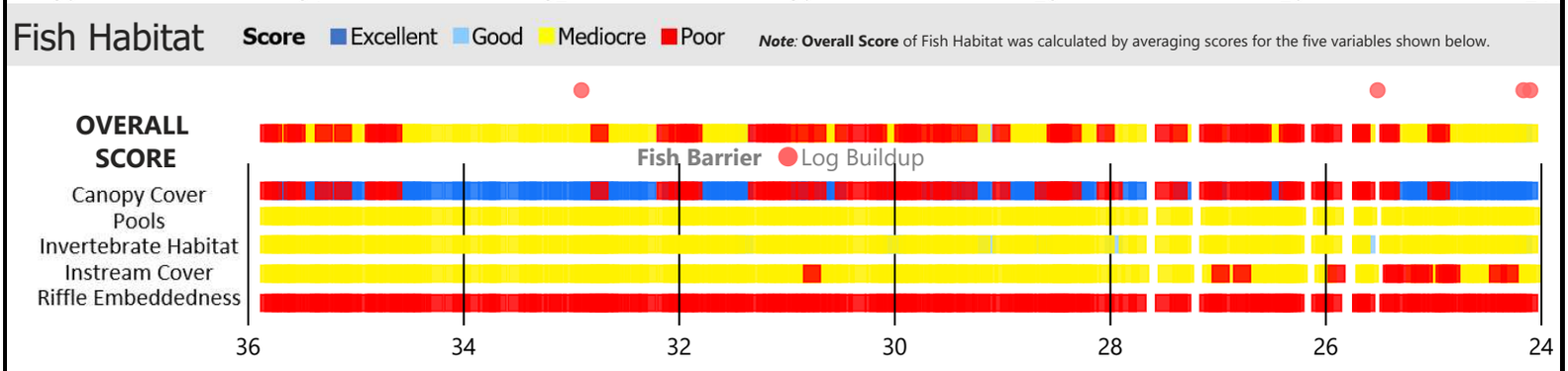
Water Appearance



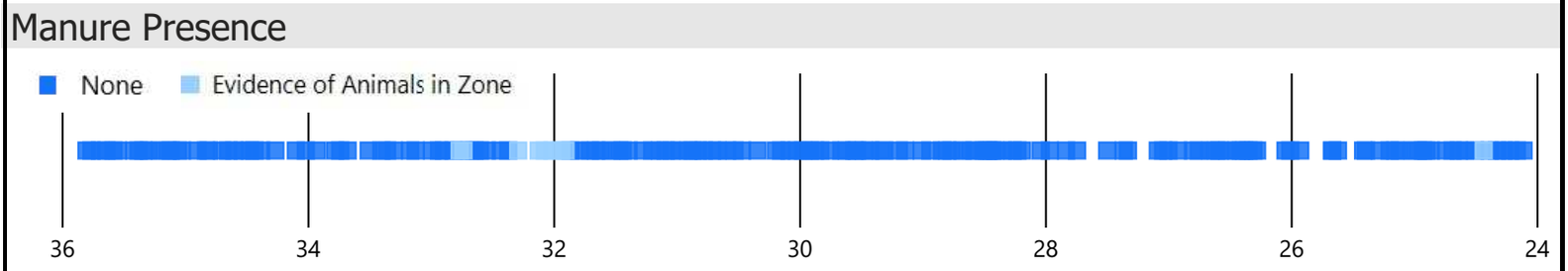
Nutrient Enrichment



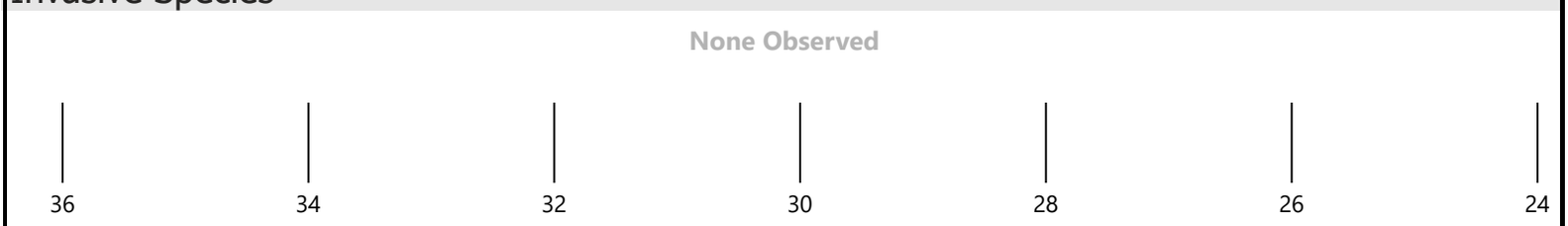
Fish Habitat



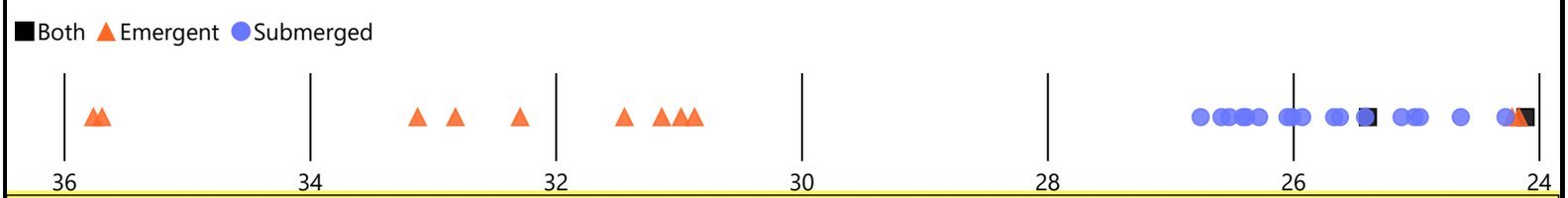
Manure Presence



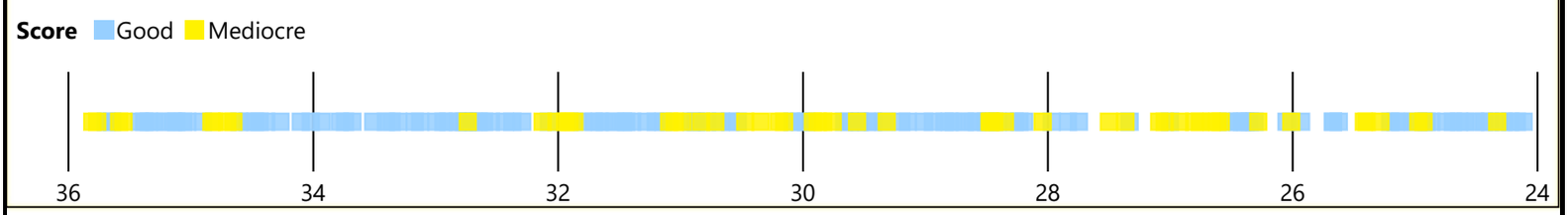
Invasive Species



Aquatic Vegetation



OVERALL SVAP RATING — TONAWANDA CREEK

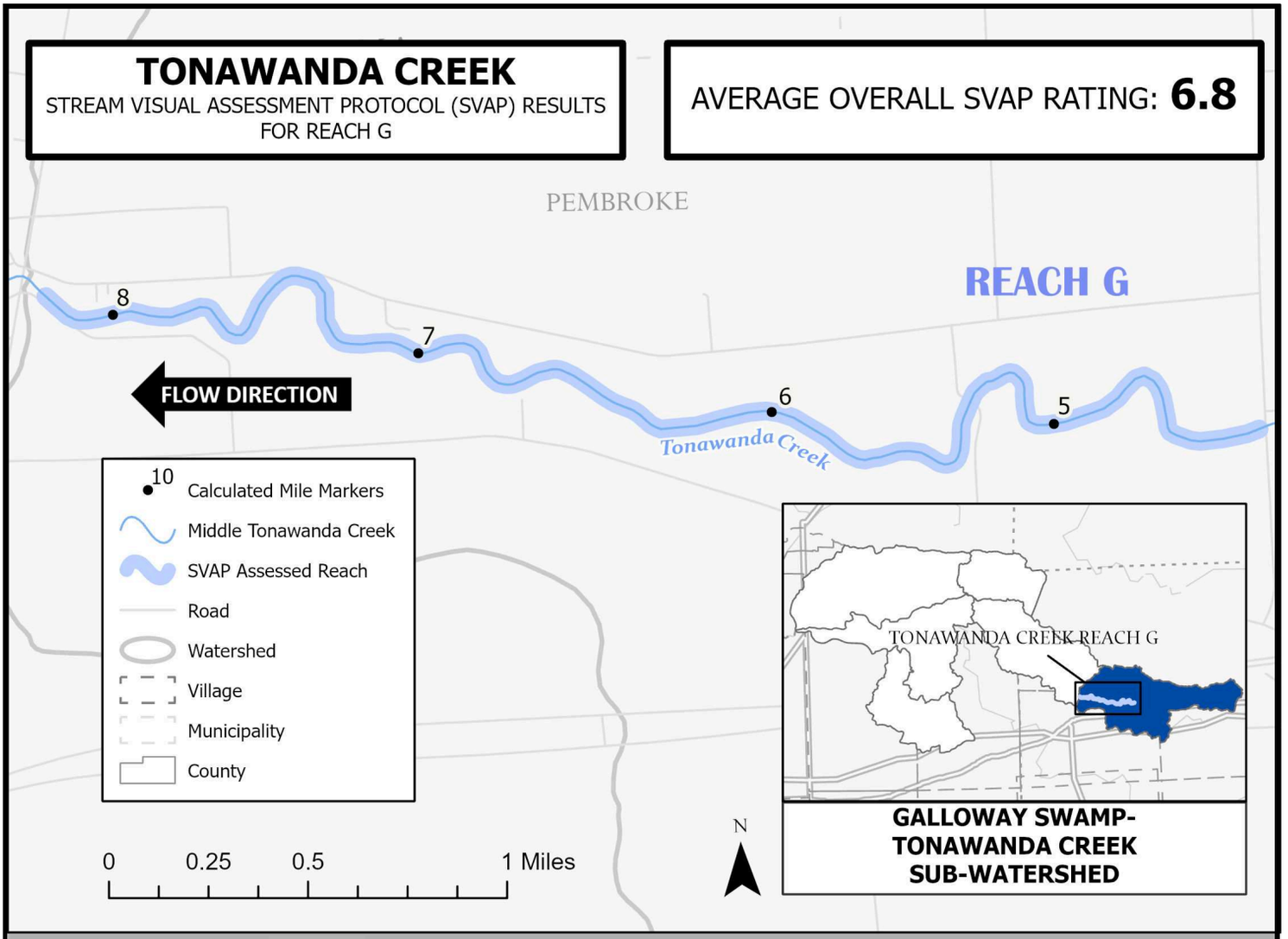


FLOW DIRECTION **Creek Mile (35.80 at Tailwater, 24.11 at Headwater)** FLOW DIRECTION

TONAWANDA CREEK

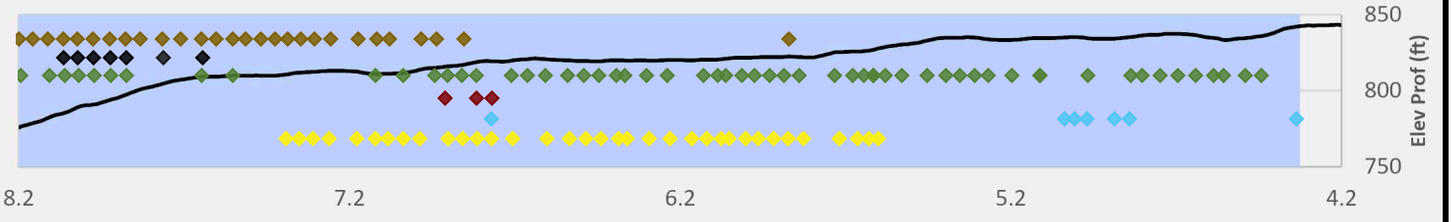
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH G

AVERAGE OVERALL SVAP RATING: **6.8**



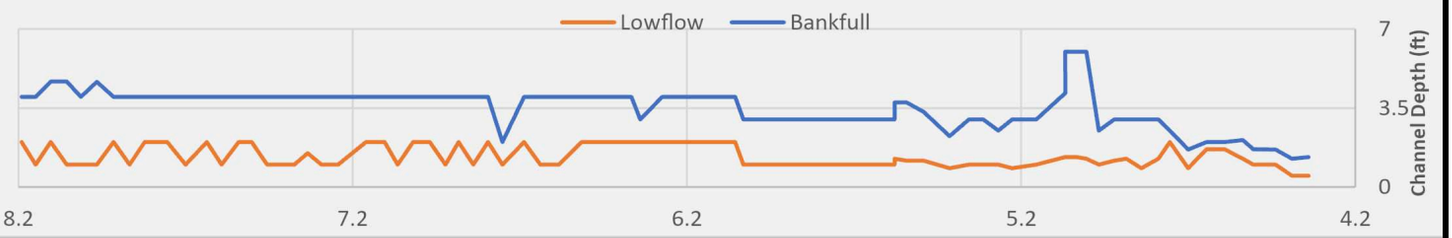
Elevation Profile

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

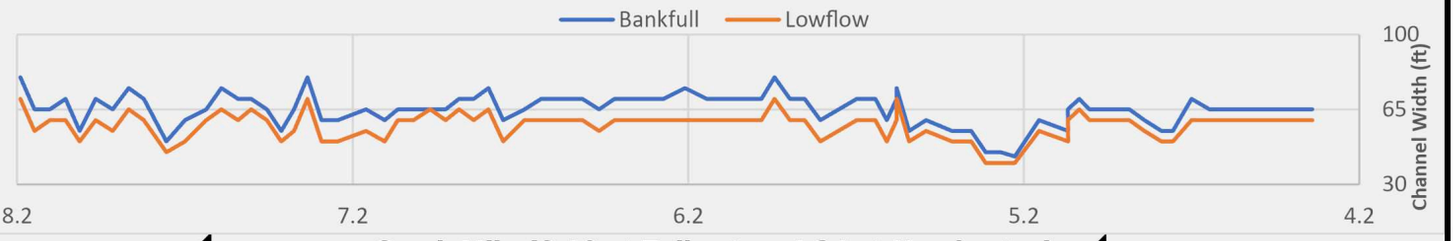


REACH G

Channel Depth



Channel Width



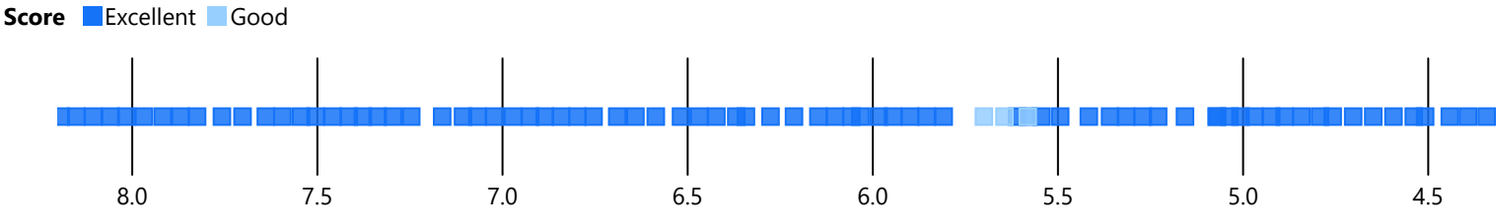
FLOW DIRECTION **Creek Mile (8.19 at Tailwater, 4.34 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

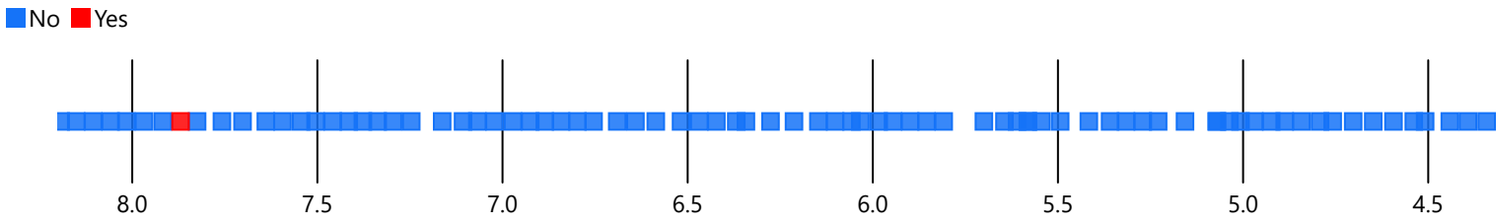
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH G

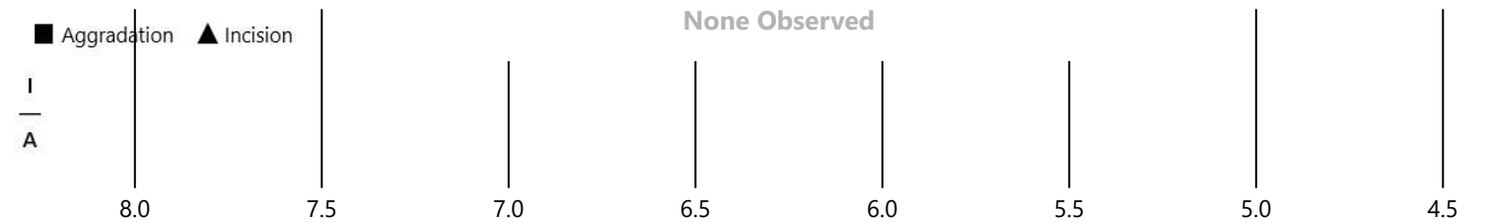
Channel Conditions



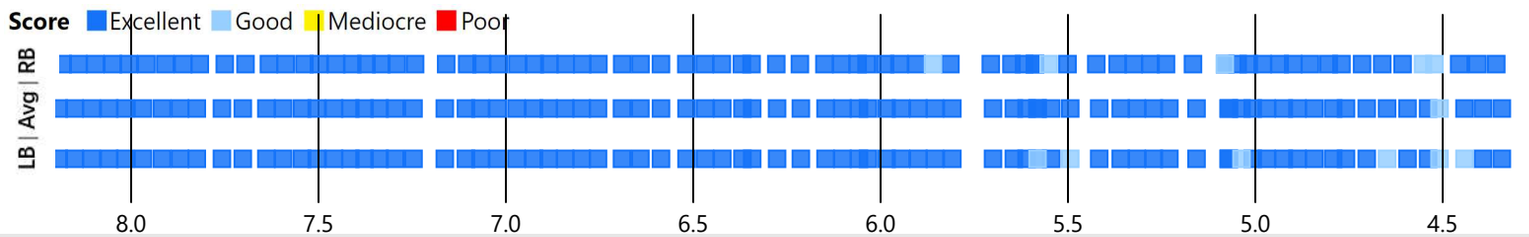
Stream Bank Hardening



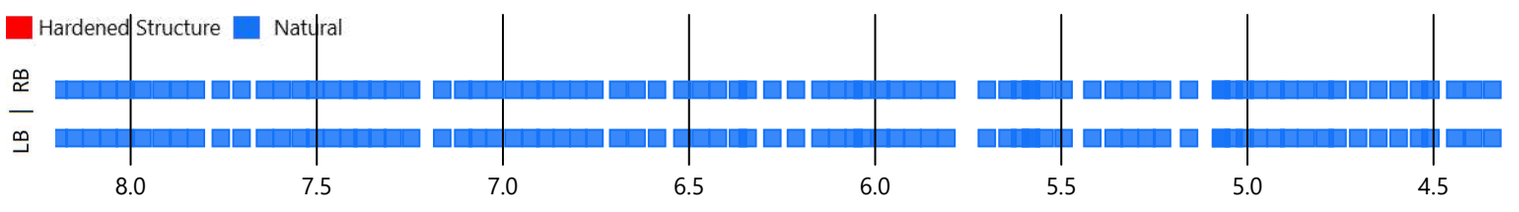
Aggradation/Incision



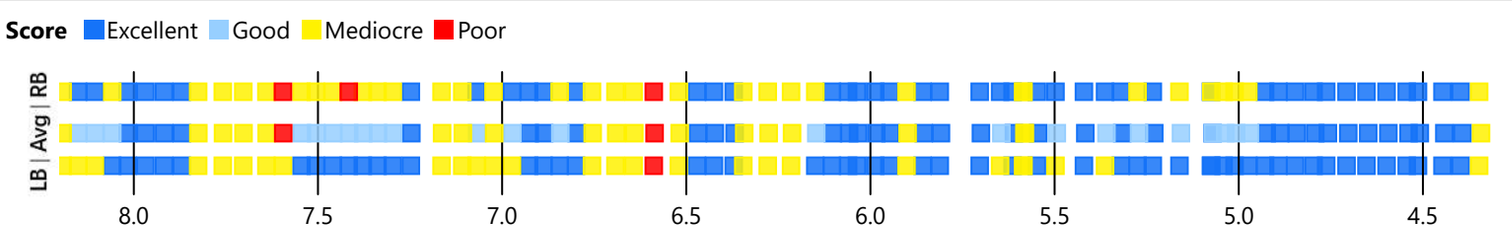
Bank Stability



Bank Condition



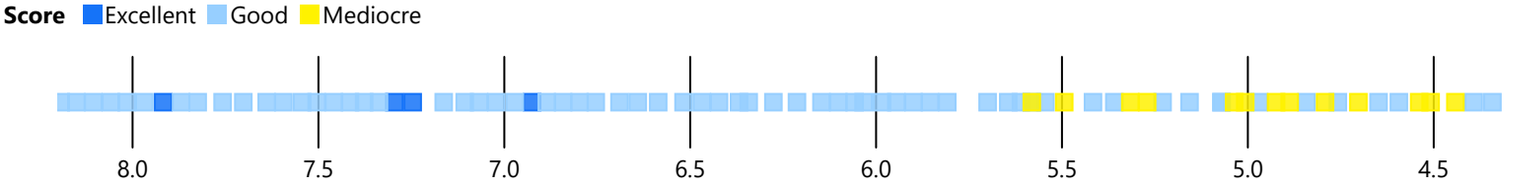
Riparian Zone



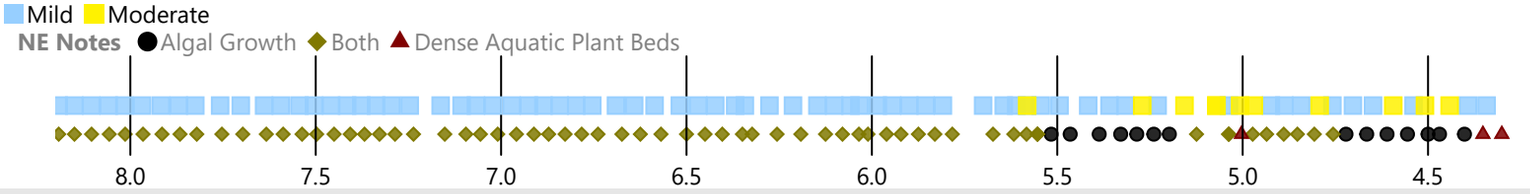
FLOW DIRECTION **Creek Mile (8.19 at Tailwater, 4.34 at Headwater)** FLOW DIRECTION

REACH G

Water Appearance



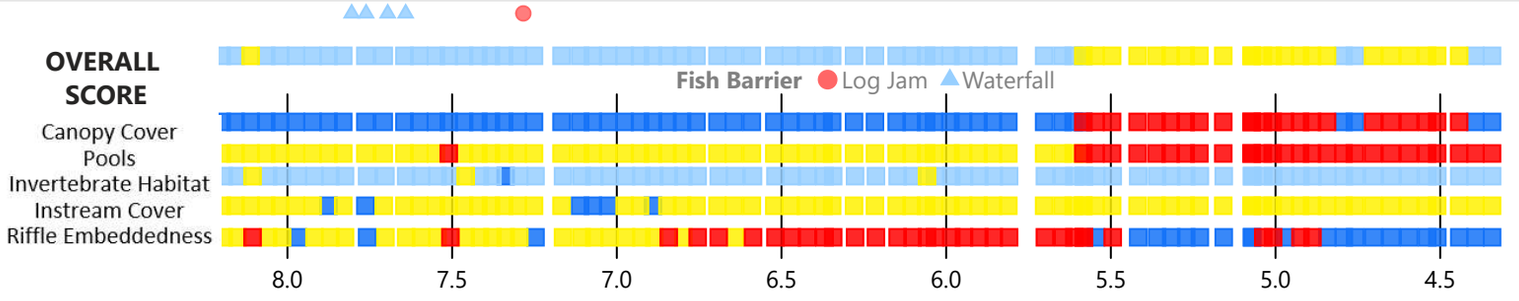
Nutrient Enrichment



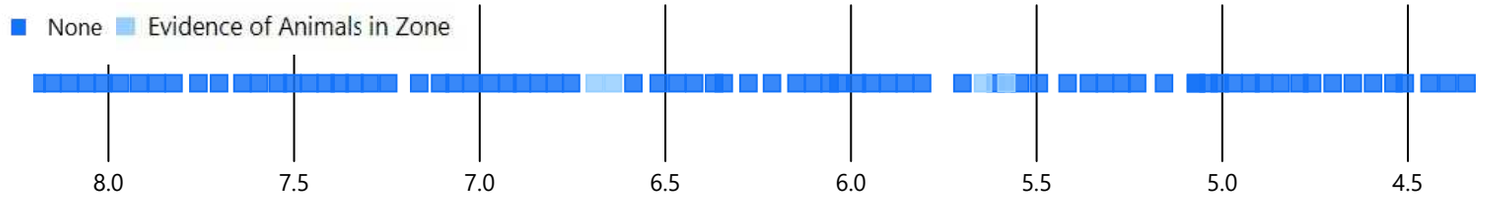
Fish Habitat

Score Excellent Good Mediocre Poor

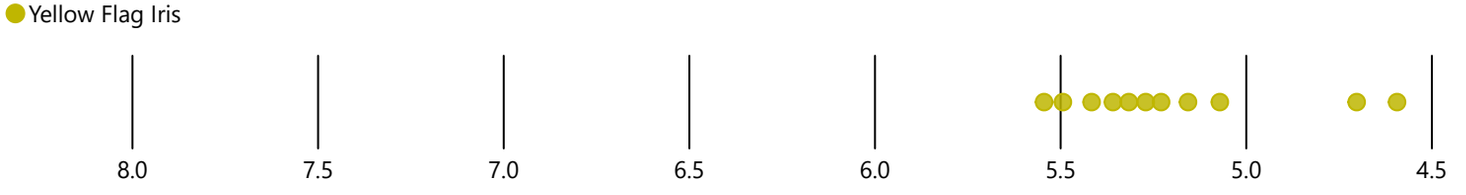
Note: **Overall Score** of Fish Habitat was calculated by averaging scores for the five variables shown below.



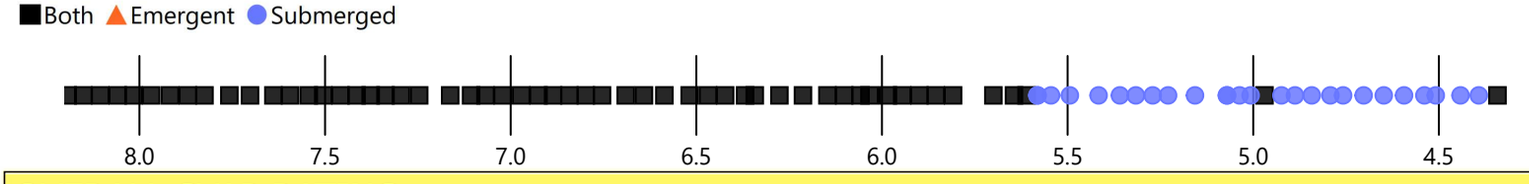
Manure Presence



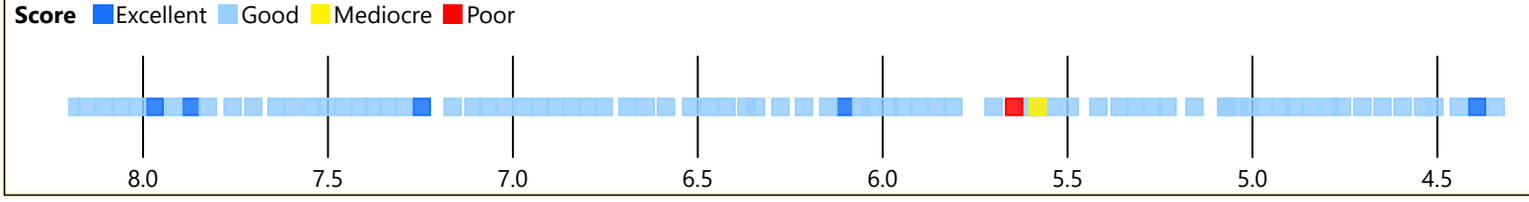
Invasive Species



Aquatic Vegetation



OVERALL SVAP RATING — TONAWANDA CREEK

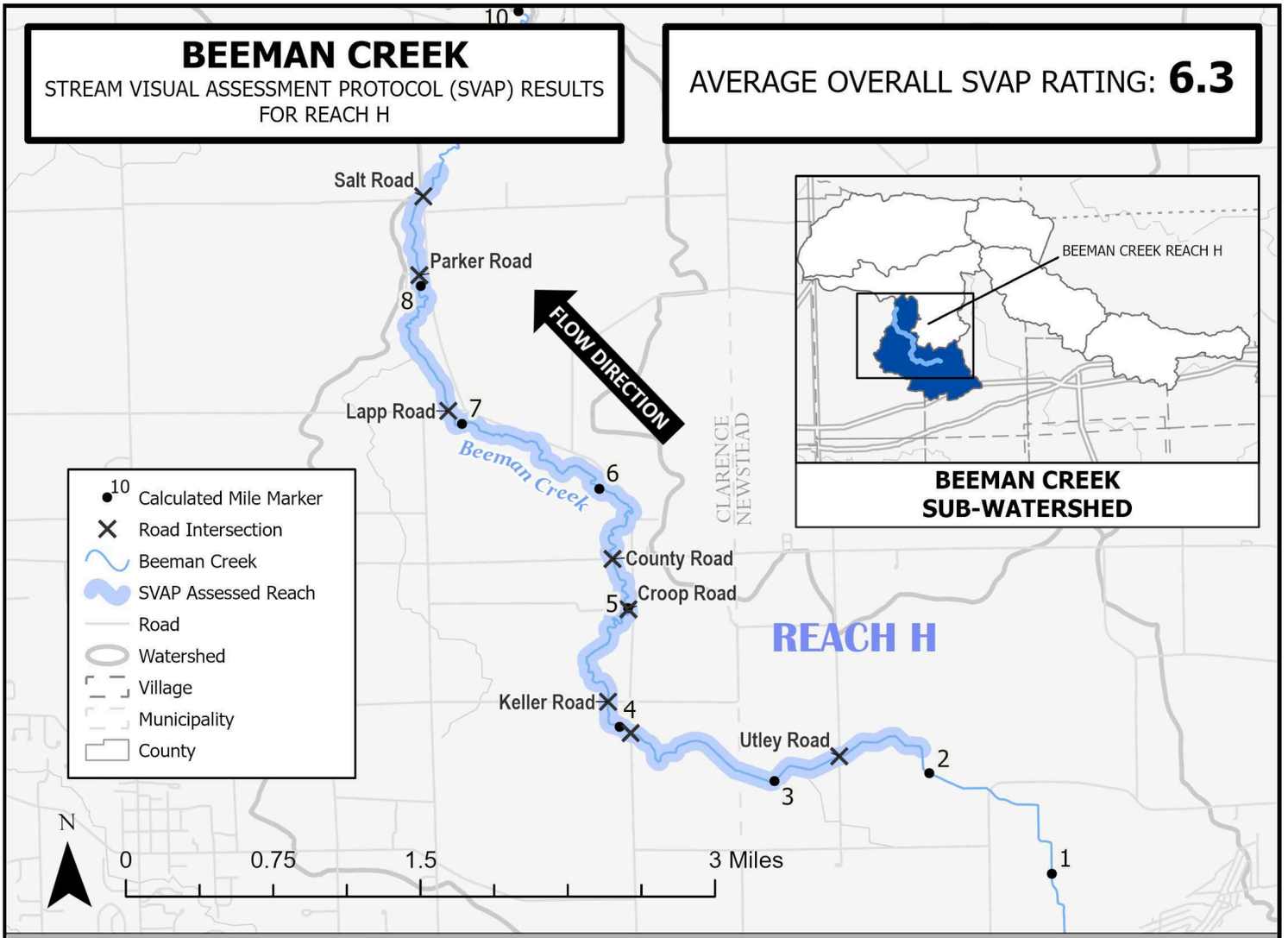


FLOW DIRECTION **Creek Mile (8.19 at Tailwater, 4.34 at Headwater)** FLOW DIRECTION

BEEMAN CREEK

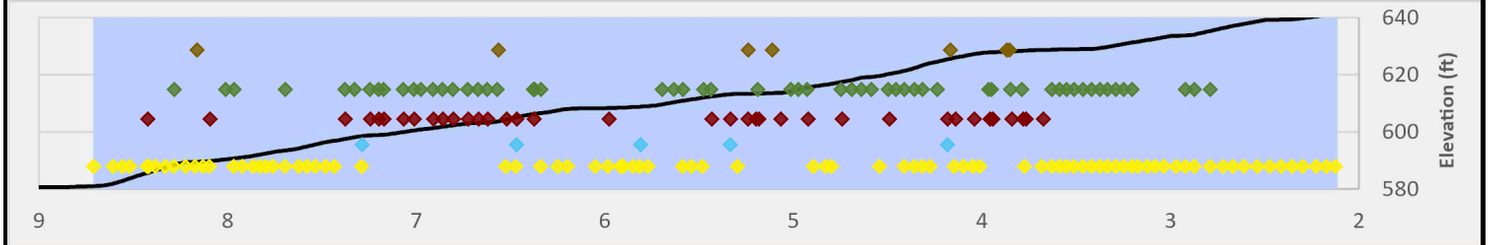
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH H

AVERAGE OVERALL SVAP RATING: **6.3**



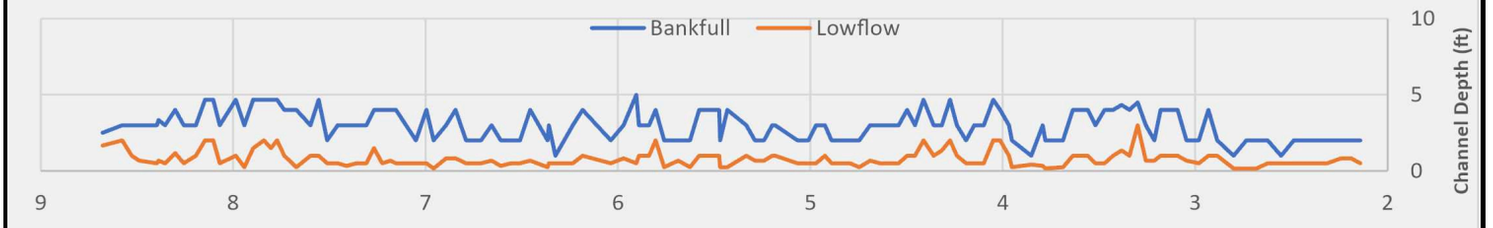
Elevation Profile

Substrate: Bedrock/Concrete, Cobble, Gravel, Sand, Silt/Clay

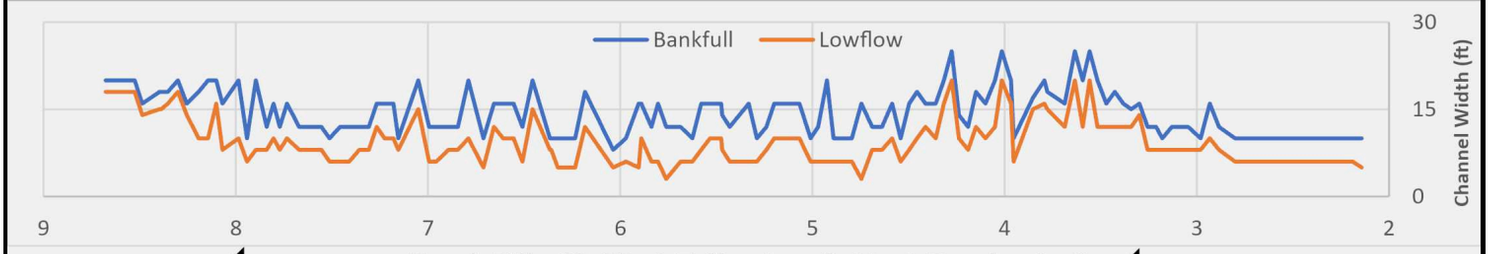


REACH H

Channel Depth



Channel Width



FLOW DIRECTION

Creek Mile (8.68 at Tailwater, 2.14 at Headwater)

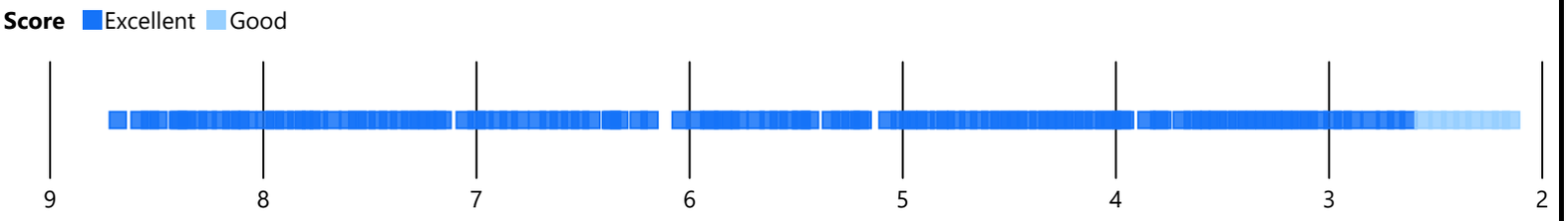
FLOW DIRECTION

Classification Scheme for SVAP Parameters

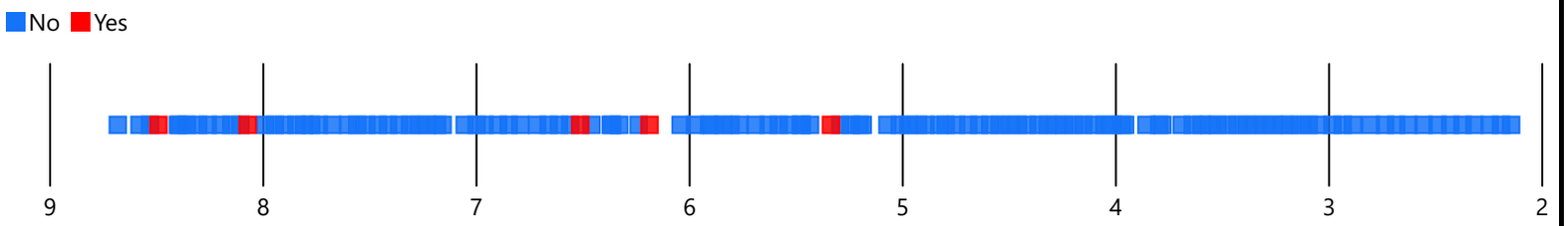
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH H

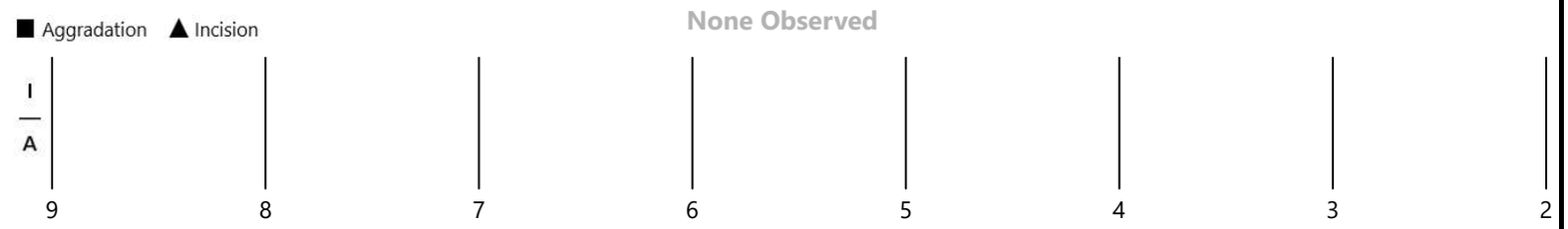
Channel Conditions



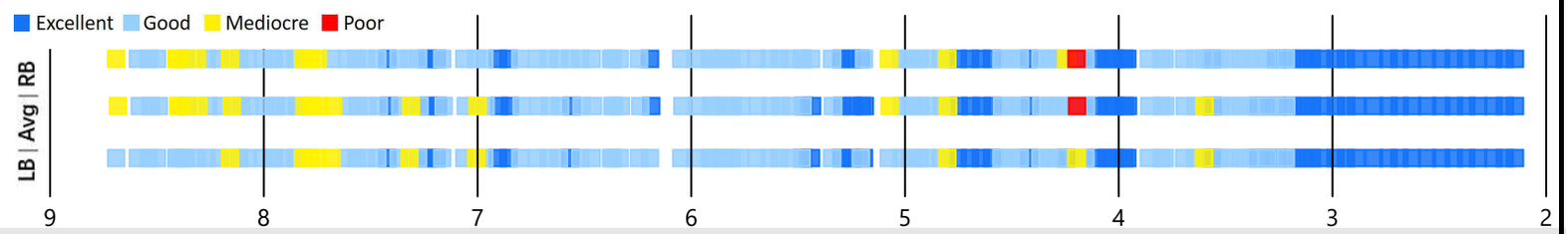
Stream Bank Hardening



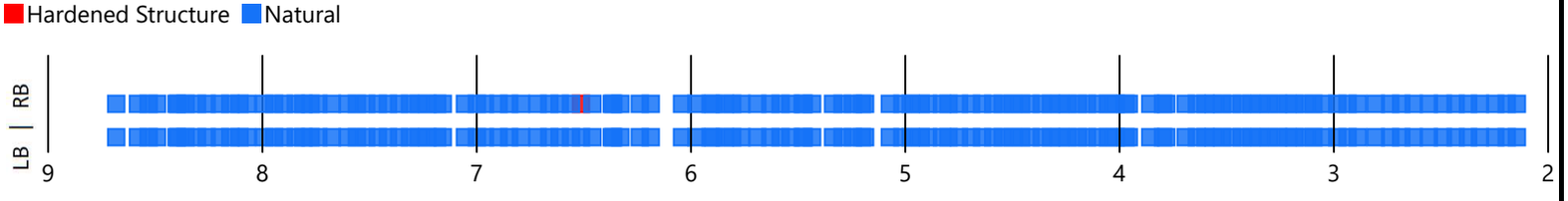
Aggradation/Incision



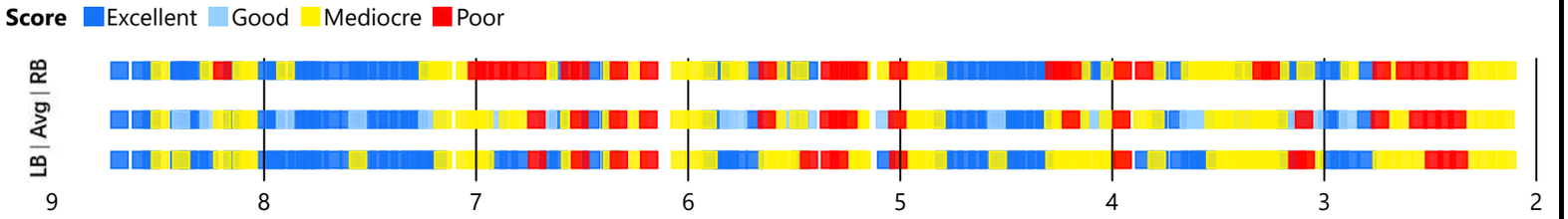
Bank Stability



Bank Condition



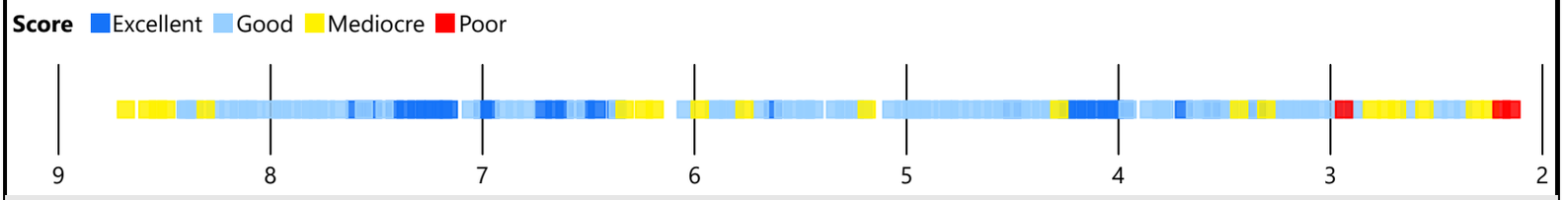
Riparian Zone



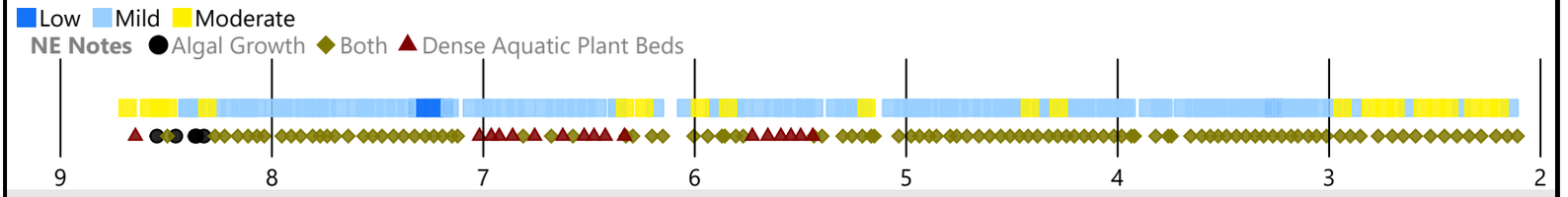
FLOW DIRECTION **Creek Mile (4.74 at Tailwater, 3.24 at Headwater)** FLOW DIRECTION

REACH H

Water Appearance



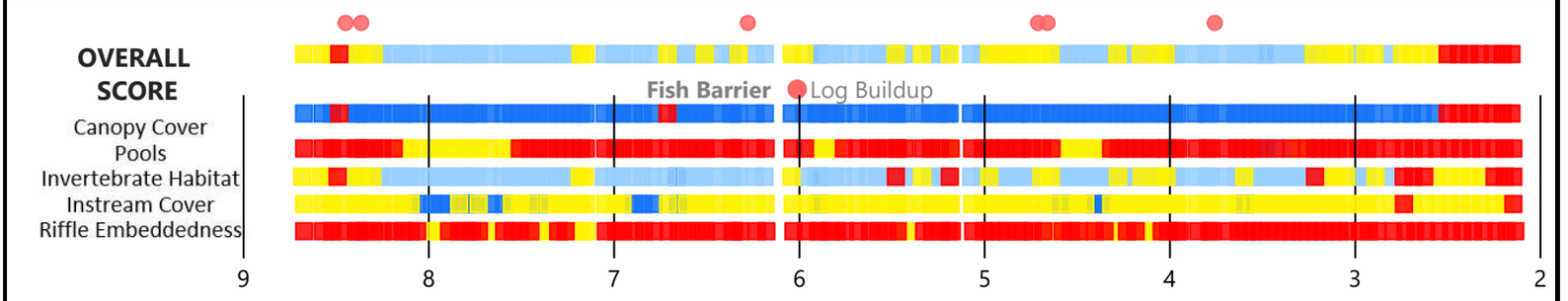
Nutrient Enrichment



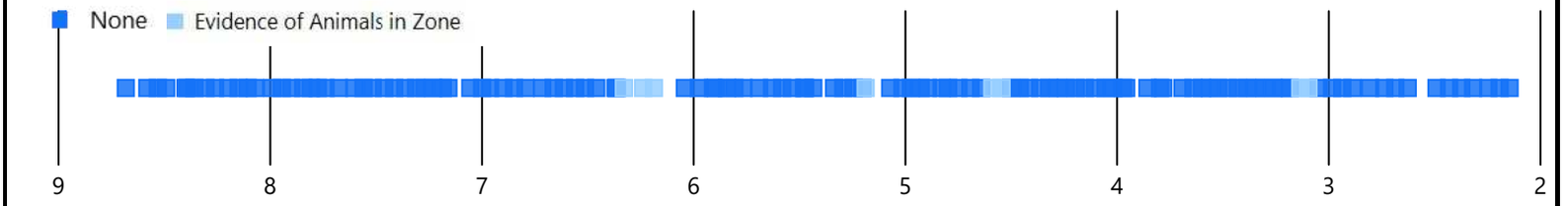
Fish Habitat

Score Excellent Good Mediocre Poor

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



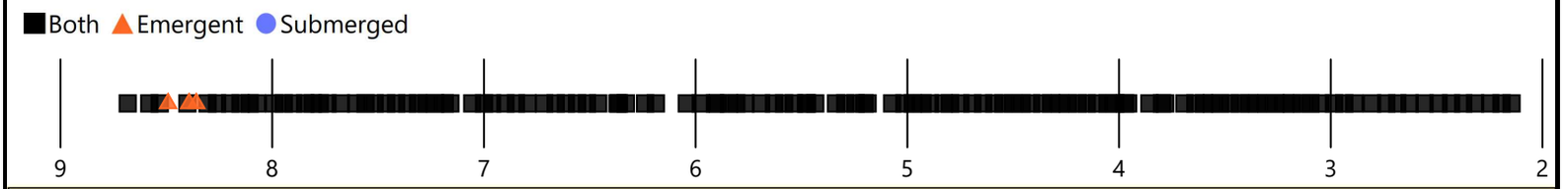
Manure Presence



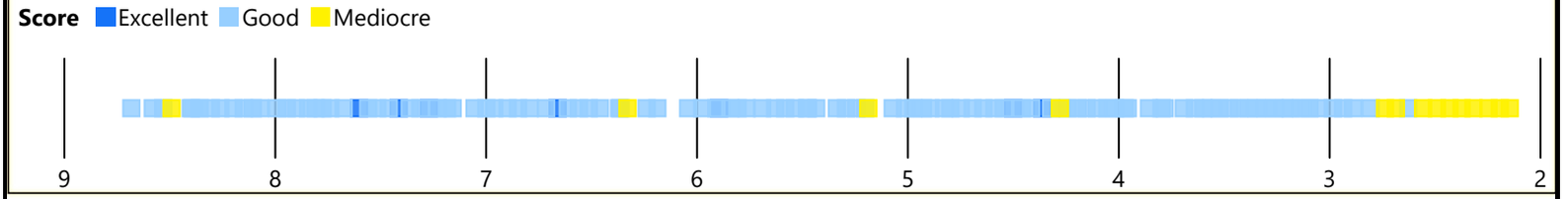
Invasive Species

None Observed

Aquatic Vegetation



OVERALL SVAP RATING — BEEMAN CREEK

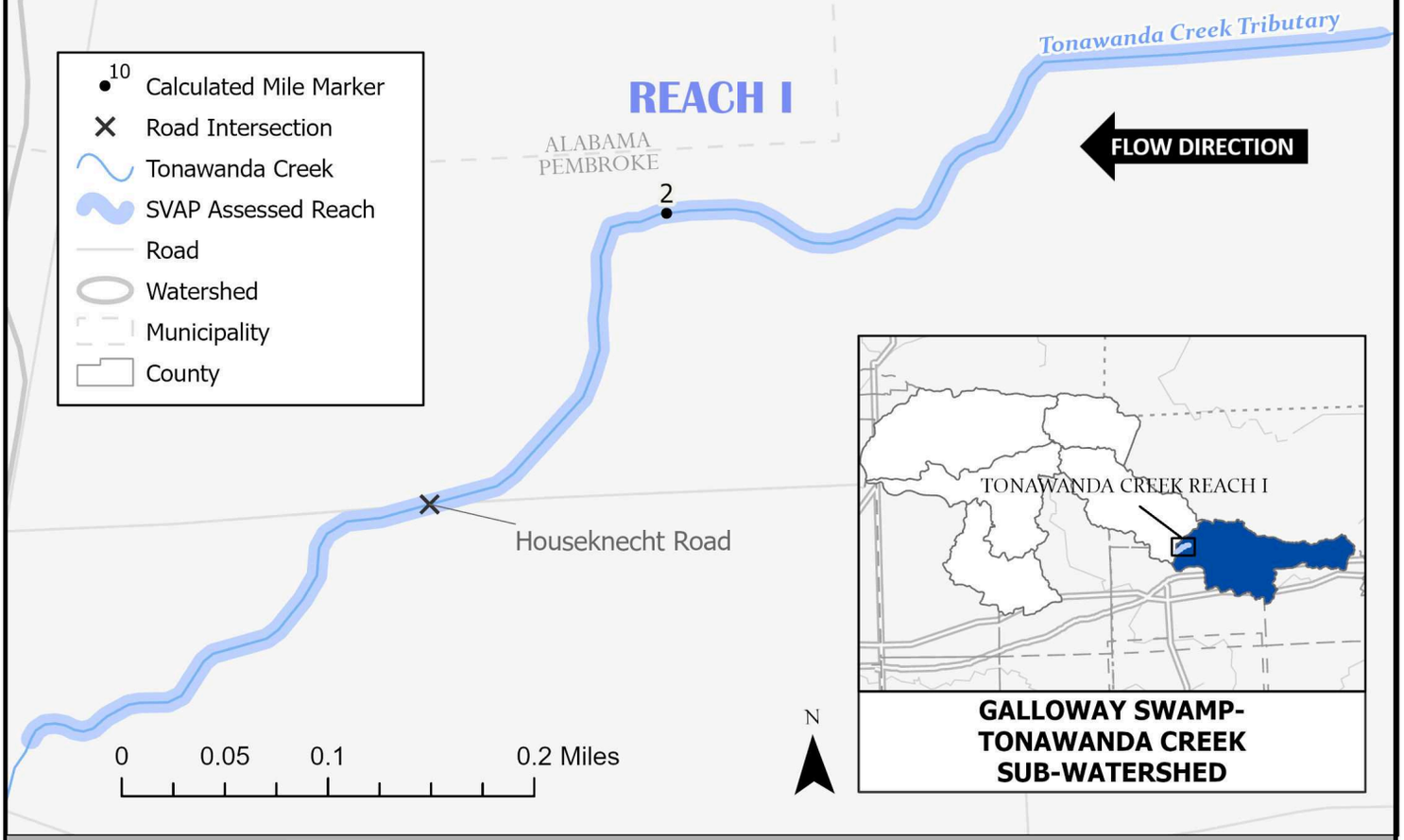


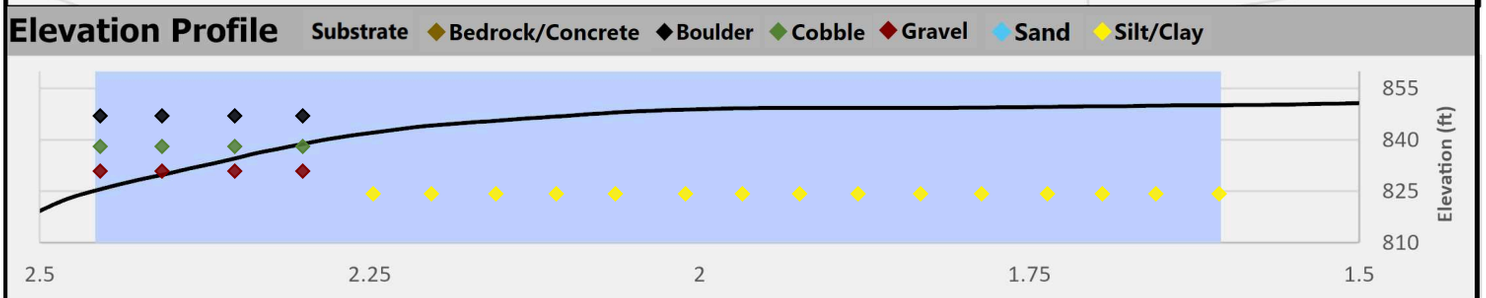
FLOW DIRECTION **Creek Mile (8.68 at Tailwater, 2.14 at Headwater)** FLOW DIRECTION

TONAWANDA CREEK

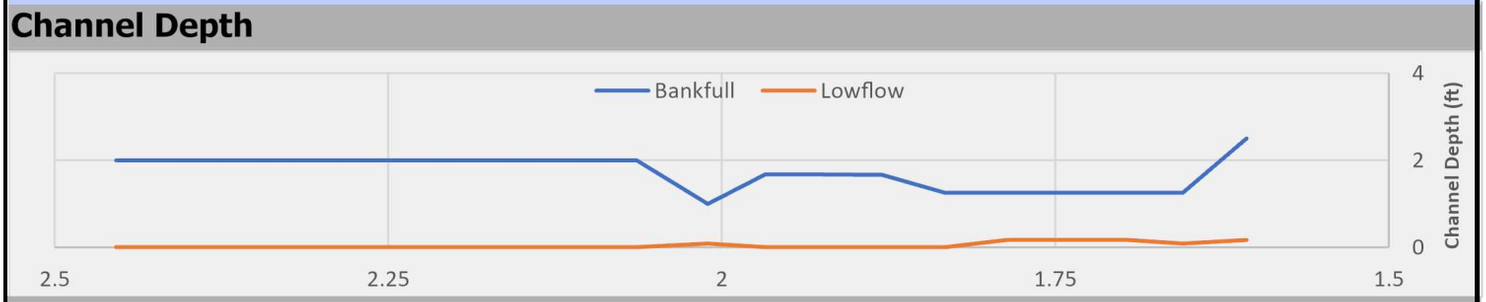
STREAM VISUAL ASSESSMENT PROTOCOL (SVAP) RESULTS FOR REACH I

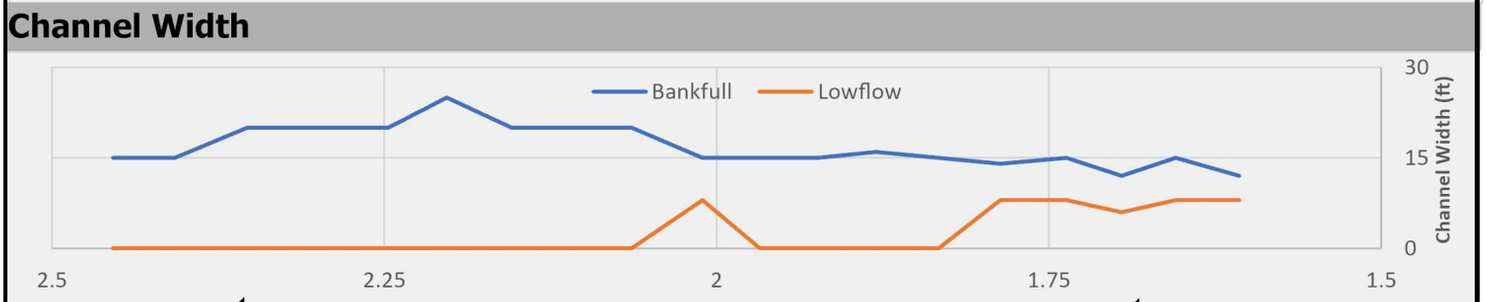
AVERAGE OVERALL SVAP RATING: **6.5**





REACH I





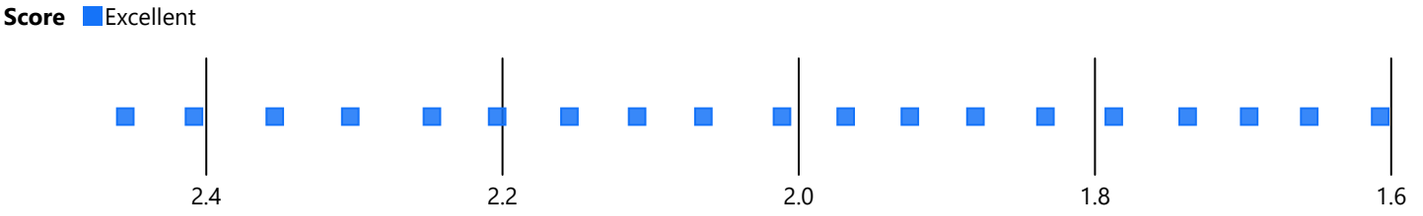
FLOW DIRECTION **Creek Mile (2.45 at Tailwater, 1.61 at Headwater)** FLOW DIRECTION

Classification Scheme for SVAP Parameters

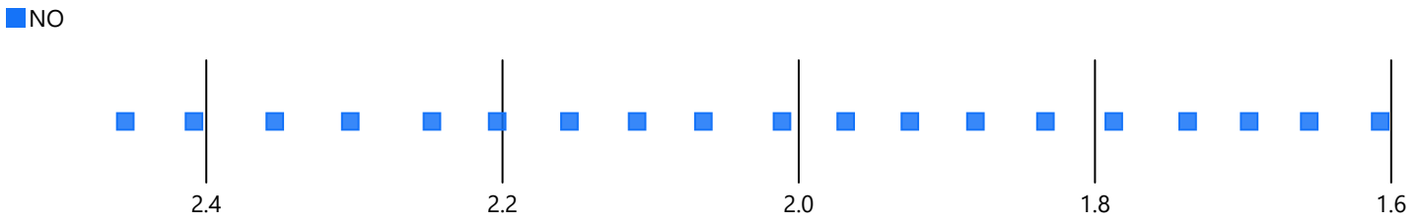
Color Classification				
SVAP Score (0-10)	0 - 2.5	2.6 - 5	5.1 - 7.5	7.6 - 10

REACH I

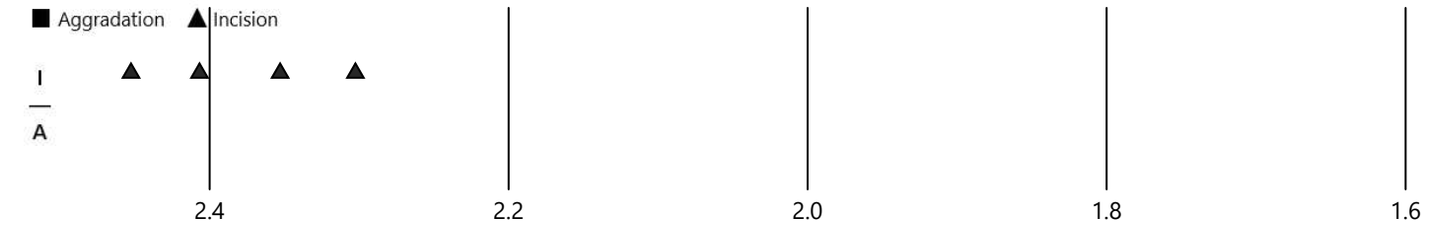
Channel Conditions



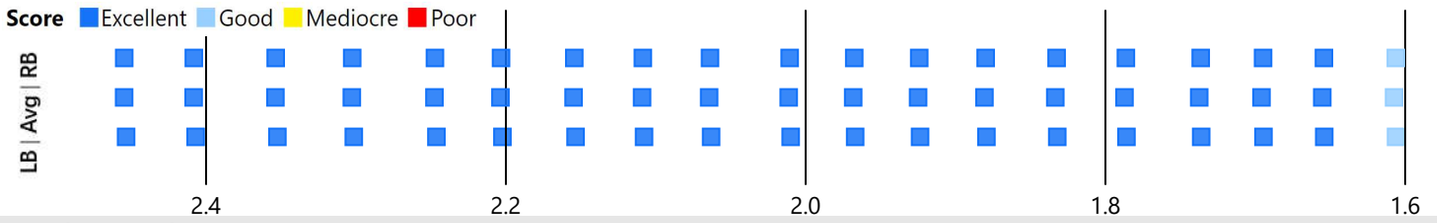
Stream Bank Hardening



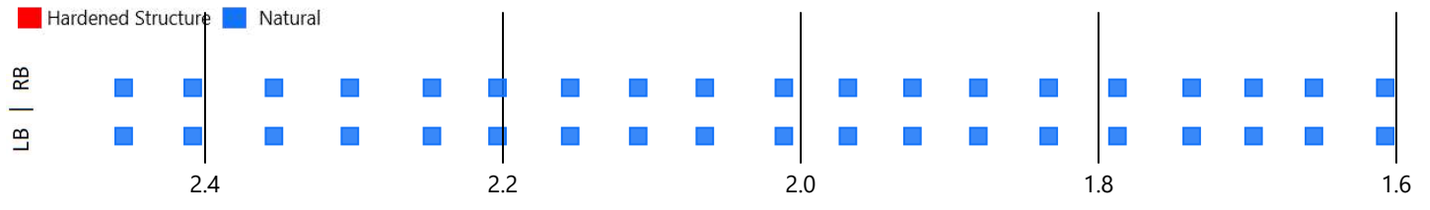
Aggradation/Incision



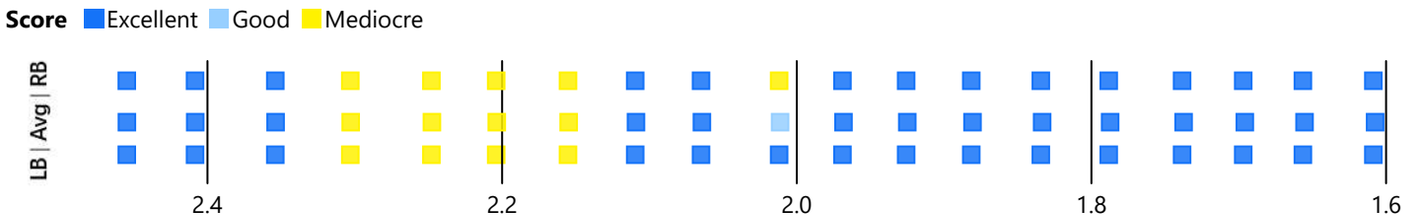
Bank Stability



Bank Condition



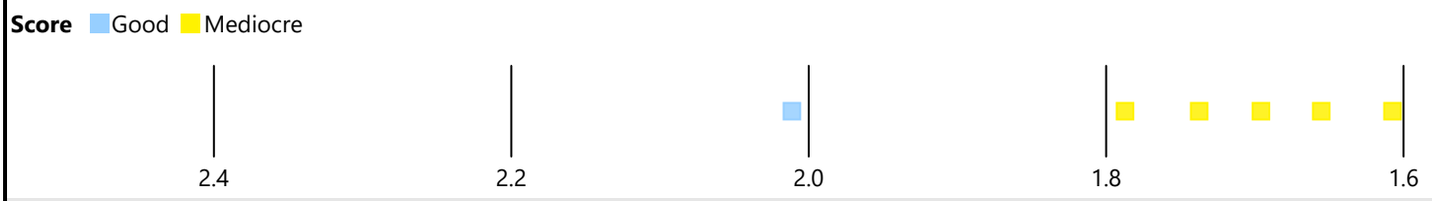
Riparian Zone



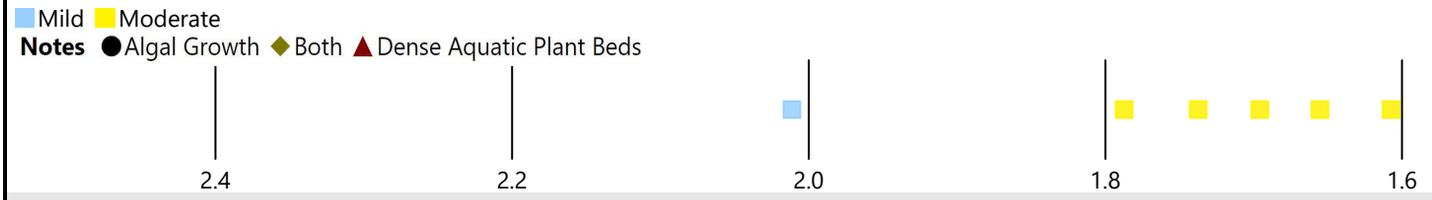
FLOW DIRECTION **Creek Mile (2.45 at Tailwater, 1.61 at Headwater)** FLOW DIRECTION

REACH I

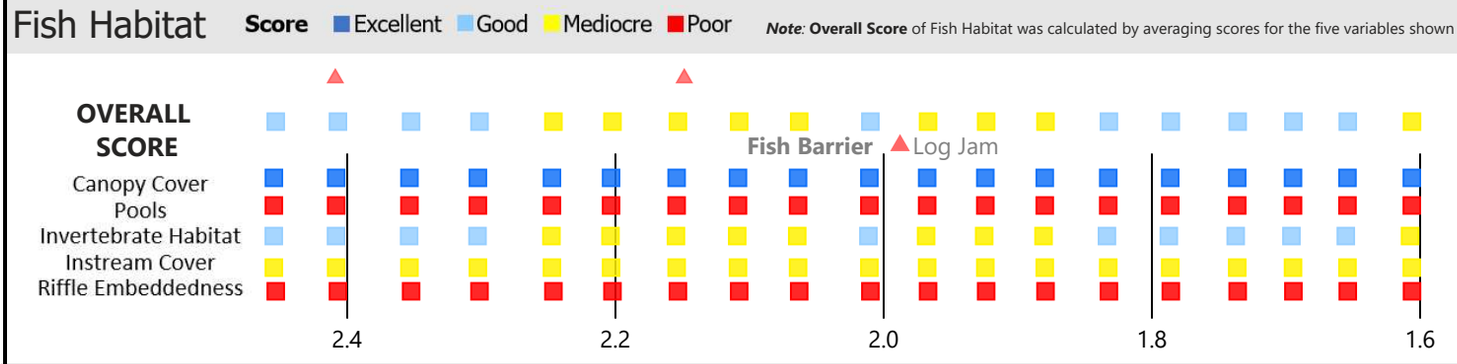
Water Appearance



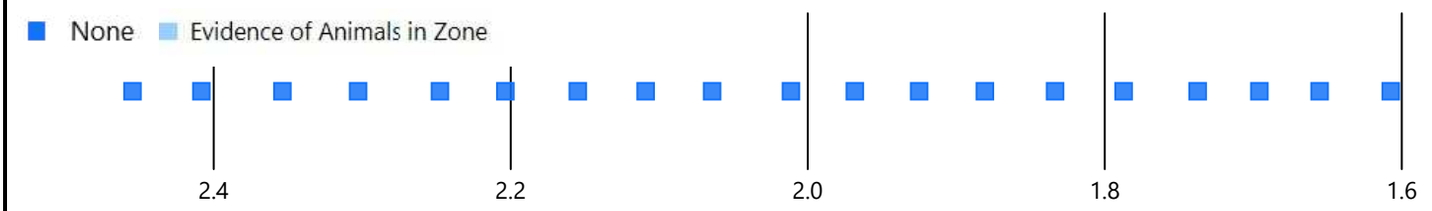
Nutrient Enrichment



Fish Habitat

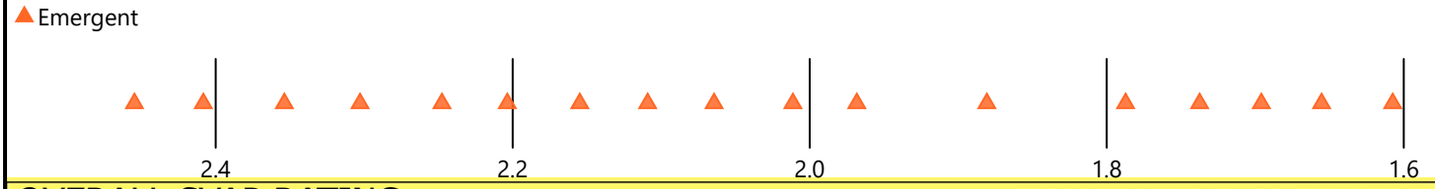


Manure Presence

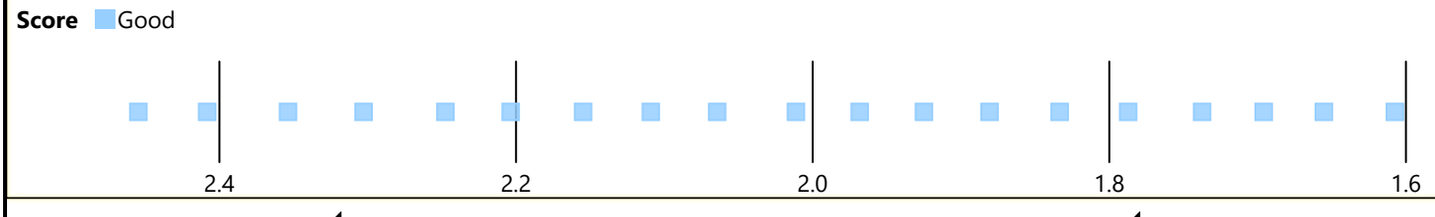


Invasive Species

Aquatic Vegetation



OVERALL SVAP RATING — TONAWANDA CREEK TRIBUTARY



FLOW DIRECTION **Creek Mile (2.45 at Tailwater, 1.61 at Headwater)** FLOW DIRECTION