

Site Description

Study Name	CBWQ-Salmo
Site	NESHP01
Sampling Date	Sep 20 2016
Know Your Watershed Basin	Central Columbia
Province / Territory	British Columbia
Terrestrial Ecological Classification	Montane Cordillera EcoZone Selkirk-Bitterroot Foothills EcoRegion
Coordinates (decimal degrees)	49.14128 N, 117.25862 W
Altitude	2198
Local Basin Name	Sheep Creek
	Columbia Basin
Stream Order	4

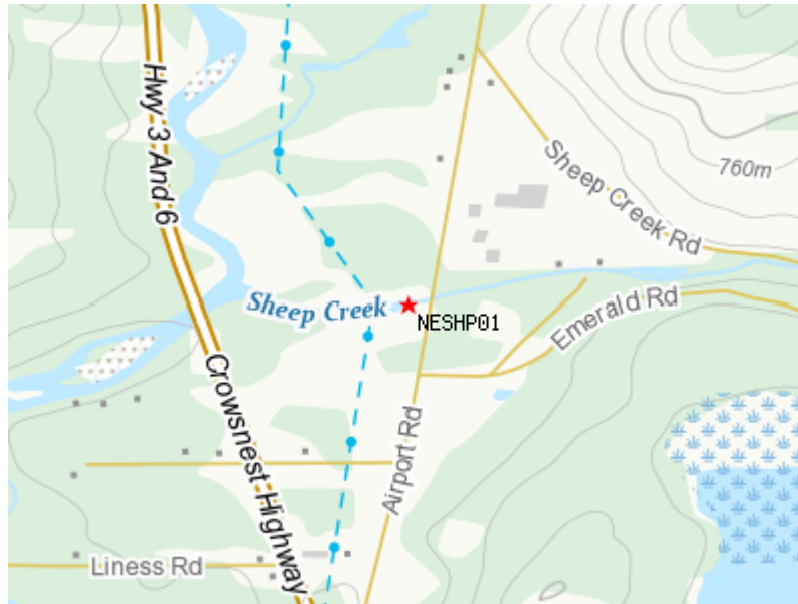


Figure 1. Location Map



Across Reach



Down Stream
 Field Sheet (No image found)
 Miscellaneous (No image found)



Substrate



Up Stream

Cabin Assessment Results

Reference Model Summary					
Model	Columbia-Okanagan Preliminary March 2010				
Analysis Date	February 27, 2017				
Taxonomic Level	Family				
Predictive Model Variables	Depth-Avg Latitude Longitude Reg-Ice Reg-SlopeLT30%				
Reference Groups	1	2	3	4	5
Number of Reference Sites	9	43	17	12	33
Group Error Rate	22.2%	24.5%	22.2%	25.0%	32.4%
Overall Model Error Rate	26.4%				
Probability of Group Membership	0.0%	100.0%	0.0%	0.0%	0.0%
CABIN Assessment of NESHP01 on Sep 20, 2016	Similar to Reference				

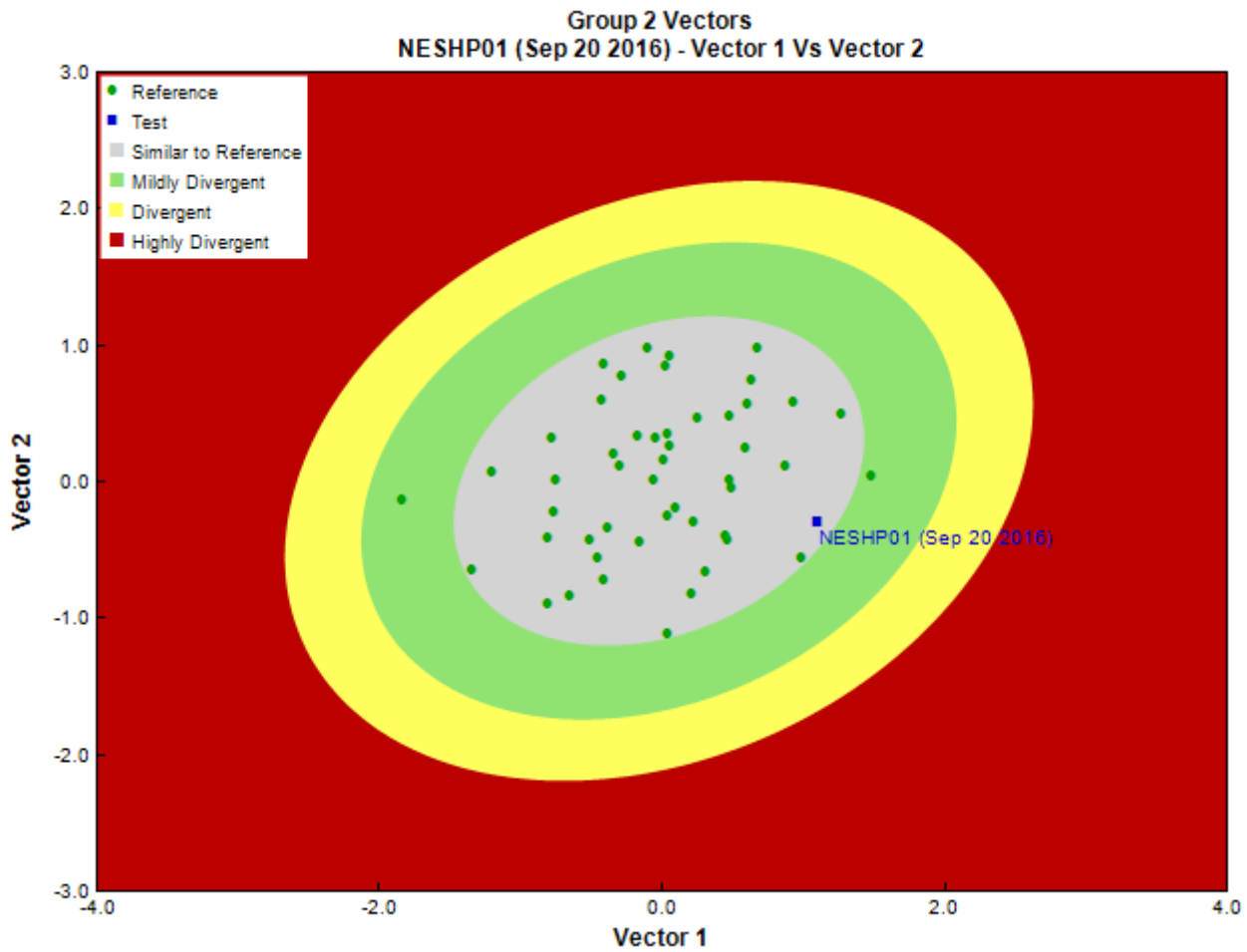


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

Sample Information

Sampling Device	Kick Net
Mesh Size	400
Sampling Time	3
Taxonomist	Pina Viola, Consultant
Date Taxonomy Completed	October 22, 2016
	Marchant Box
Sub-Sample Proportion	8/100

Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
Annelida	Oligochaeta			3	37.5
		Lumbriculida	Lumbriculidae	1	12.5
Arthropoda	Arachnida	Trombidiformes		1	12.5
			Hydryphantidae	3	37.5
			Hygrobatidae	2	25.0
			Lebertiidae	8	100.0
			Sperchontidae	5	62.5
			Torrenticolidae	18	225.0
	Insecta	Coleoptera	Dytiscidae	1	12.5
			Elmidae	20	250.0
		Diptera	Ceratopogonidae	1	12.5
			Chironomidae	82	1,025.0
			Psychodidae	16	200.0
			Tipulidae	10	125.0
		Ephemeroptera	Ameletidae	7	87.5

Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
			Baetidae	10	125.0
			EphemereIIDae	40	500.0
			Heptageniidae	80	1,000.0
			Leptophlebiidae	9	112.5
		Plecoptera	Capniidae	1	12.5
			Chloroperlidae	1	12.5
			Nemouridae	2	25.0
			Perlodidae	2	25.0
		Trichoptera	Brachycentridae	24	300.0
			Glossosomatidae	2	25.0
			Hydropsychidae	1	12.5
			Hydroptilidae	1	12.5
			Lepidostomatidae	22	275.0
			Limnephilidae	2	25.0
			Rhyacophilidae	3	37.5
			Total	378	4,725.0

Metrics

Name	NESHPO1	Predicted Group Reference Mean \pm SD
Bray-Curtis Distance	0.67	0.5 \pm 0.1
Biotic Indices		
Hilsenhoff Family index (North-West)	4.1	3.3 \pm 0.5
Intolerant taxa	--	1.0 \pm 0.0
Long-lived taxa	4.0	3.7 \pm 1.9
Tolerant individuals (%)	0.3	1.3 \pm 1.5
Functional Measures		
% Filterers	6.6	4.5 \pm 4.6
% Gatherers	56.6	46.7 \pm 12.1
% Predatores	33.6	22.1 \pm 11.2
% Scrapers	31.0	53.4 \pm 16.1
% Shredder	21.4	27.8 \pm 12.7
No. Clinger Taxa	26.0	25.5 \pm 6.3
Number Of Individuals		
% Chironomidae	21.9	8.7 \pm 10.4
% Coleoptera	5.6	5.7 \pm 8.6
% Diptera + Non-insects	39.0	15.7 \pm 11.6
% Ephemeroptera	39.0	45.6 \pm 14.3
% Ephemeroptera that are Baetidae	6.8	44.5 \pm 20.4
% EPT Individuals	55.3	78.6 \pm 14.0
% Odonata	0.0	0.0 \pm 0.0
% of 2 dominant taxa	43.3	49.3 \pm 10.6
% of 5 dominant taxa	66.3	76.4 \pm 9.1
% of dominant taxa	21.9	30.6 \pm 8.9
% Plecoptera	1.6	23.2 \pm 13.6
% Tribe Tanyatarisini	--	
% Trichoptera that are Hydropsychida	1.8	27.4 \pm 25.1
% Tricoptera	14.7	9.8 \pm 7.1
No. EPT individuals/Chironomids+EPT Individuals	0.7	0.9 \pm 0.1
Total Abundance	4725.0	3018.4 \pm 2496.0
Richness		
Chironomidae taxa (genus level only)	1.0	1.0 \pm 0.1
Coleoptera taxa	2.0	0.8 \pm 0.7
Diptera taxa	4.0	3.8 \pm 1.4
Ephemeroptera taxa	5.0	4.3 \pm 0.6
EPT Individuals (Sum)	2587.5	2266.9 \pm 1692.6
EPT taxa (no)	16.0	14.0 \pm 2.7
Odonata taxa	0.0	0.0 \pm 0.0
Pielou's Evenness	0.8	0.7 \pm 0.1
Plecoptera taxa	4.0	5.3 \pm 1.7
Shannon-Wiener Diversity	2.5	2.2 \pm 0.3
Simpson's Diversity	0.9	0.8 \pm 0.1

Metrics

Name	NESHP01	Predicted Group Reference Mean \pm SD
Simpson's Evenness	0.3	0.3 \pm 0.1
Total No. of Taxa	28.0	21.8 \pm 4.8
Trichoptera taxa	7.0	4.5 \pm 1.5

Frequency and Probability of Taxa Occurrence

Reference Model Taxa	Frequency of Occurrence in Reference Sites					Probability Of Occurrence at NESHP01
	Group 1	Group 2	Group 3	Group 4	Group 5	
Baetidae	100%	100%	100%	100%	97%	1.00
Chironomidae	100%	100%	100%	100%	95%	1.00
Chloroperlidae	78%	88%	94%	100%	100%	0.88
Elmidae	0%	86%	50%	50%	5%	0.86
EphemereIIDae	78%	100%	100%	100%	100%	1.00
Heptageniidae	100%	100%	100%	100%	100%	1.00
Hydropsychidae	11%	92%	78%	92%	86%	0.92
Leptophlebiidae	0%	90%	11%	33%	3%	0.90
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlidae	11%	84%	33%	100%	3%	0.84
Perlodidae	78%	78%	89%	92%	81%	0.78
Rhyacophilidae	100%	92%	100%	100%	95%	0.92
Torrenticolidae	11%	86%	11%	17%	11%	0.86

RIVPACS Ratios

RIVPACS : Expected taxa P>0.50	17.84
RIVPACS : Observed taxa P>0.50	21.00
RIVPACS : O:E (p > 0.5)	1.18
RIVPACS : Expected taxa P>0.70	11.94
RIVPACS : Observed taxa P>0.70	12.00
RIVPACS : O:E (p > 0.7)	1.01

Habitat Description

Variable	NESHP01	Predicted Group Reference Mean \pm SD
Channel		
Depth-Avg (cm)	25.8	18.0 \pm 7.8
Depth-BankfullMinusWetted (cm)	192.00	52.85 \pm 27.13
Depth-Max (cm)	40.0	23.9 \pm 10.9
Macrophyte (PercentRange)	1	0 \pm 1
Reach-%CanopyCoverage (PercentRange)	1.00	2.37 \pm 1.20
Reach-DomStreamsideVeg (Category (1-4))	2	3 \pm 1
Reach-Pools (Binary)	1	1 \pm 0
Reach-Riffles (Binary)	1	1 \pm 0
Reach-StraightRun (Binary)	1	1 \pm 0
Slope (m/m)	0.0250000	0.0325815 \pm 0.0231391
Veg-Coniferous (Binary)	1	1 \pm 0
Veg-Deciduous (Binary)	1	1 \pm 0
Veg-GrassesFerns (Binary)	1	1 \pm 0
Veg-Shrubs (Binary)	1	1 \pm 0
Velocity-Avg (m/s)	0.50	0.35 \pm 0.17
Velocity-Max (m/s)	0.69	0.49 \pm 0.22
Width-Bankfull (m)	19.0	10.4 \pm 7.4
Width-Wetted (m)	15.0	5.6 \pm 3.7
XSEC-VelInstrumentDirect (Category (1-3))	3	3 \pm 0
XSEC-VelMethod (Category (1-3))	3	2 \pm 1
Landcover		
Reg-Ice (%)	0.00000	0.00000 \pm 0.00000
Substrate Data		
%Bedrock (%)	0	0 \pm 1
%Boulder (%)	11	10 \pm 9
%Cobble (%)	31	56 \pm 12

Habitat Description

Variable	NESHPO1	Predicted Group Reference Mean \pm SD
%Gravel (%)	9	5 \pm 5
%Pebble (%)	41	27 \pm 13
%Sand (%)	0	1 \pm 3
%Silt+Clay (%)	8	1 \pm 1
D50 (cm)	5.00	13.08 \pm 14.78
Dg (cm)	3.9	10.8 \pm 15.3
Dominant-1st (Category(0-9))	6	7 \pm 1
Dominant-2nd (Category(0-9))	5	6 \pm 1
Embeddedness (Category(1-5))	5	4 \pm 1
PeriphytonCoverage (Category(1-5))	2	2 \pm 1
SurroundingMaterial (Category(0-9))	2	3 \pm 1
Topography		
Reg-SlopeLT30% (%)	2644.62500	56.46157 \pm 21.18067
Water Chemistry		
Ag (mg/L)	0.0000100	0.0000071 \pm 0.0000039
Al (mg/L)	0.0137000	0.0203857 \pm 0.0252665
As (mg/L)	0.0001200	0.0005171 \pm 0.0007540
B (mg/L)	0.0250000	0.0500000 \pm 0.0000000
Ba (mg/L)	0.0228000	0.0389286 \pm 0.0177357
Be (mg/L)	0.0000500	0.0000114 \pm 0.0000038
Bi (mg/L)	0.0005000	0.0000071 \pm 0.0000039
Ca (mg/L)	17.3000000	22.5624250 \pm 16.5307245
Cd (mg/L)	0.0000950	0.0000051 \pm 0.0000029
Chloride-Dissolved (mg/L)	0.5000000	2.1658537 \pm 5.6687900
Co (mg/L)	0.0002500	0.0000191 \pm 0.0000250
CO3 (mg/L)	0.2500000	0.0000000 \pm 0.0000000
Cr (mg/L)	0.0005000	0.0001429 \pm 0.0000787
Cu (mg/L)	0.0002500	0.0005714 \pm 0.0006419
Fe (mg/L)	0.0050000	0.1625000 \pm 0.2029396
General-Alkalinity (mg/L)	46.7000000	74.2090909 \pm 49.2896792
General-DO (mg/L)	11.0000000	10.7197872 \pm 0.8550553
General-Hardness (mg/L)	54.5000000	76.7627907 \pm 51.6191365
General-pH (pH)	8.2	7.9 \pm 0.4
General-SolidsTSS (mg/L)	2.0000000	1.2584331 \pm 1.5004996
General-TempAir (Degrees Celsius)	12.0	16.9 \pm 5.3
General-TempWater (Degrees Celsius)	8.0000000	9.5837917 \pm 2.8075507
General-Turbidity (NTU)	0.4500000	0.3928571 \pm 0.4025218
HCO3 (mg/L)	56.9000000	0.0000000 \pm 0.0000000
Hg (ng/L)	5.0000000	0.0000000 \pm 0.0000000
K (mg/L)	0.5430000	1.3021622 \pm 0.6781926
Li (mg/L)	0.0025000	0.0007150 \pm 0.0007595
Mg (mg/L)	2.7100000	4.8150000 \pm 3.9874418
Mn (mg/L)	0.0005000	0.0048270 \pm 0.0093216
Mo (mg/L)	0.0005000	0.0003543 \pm 0.0001658
Na (mg/L)	0.8630000	3.8905405 \pm 3.6065003
Ni (mg/L)	0.0005000	0.0002171 \pm 0.0003655
Nitrogen-NO2 (mg/L)	0.0025000	0.0061486 \pm 0.0067934
Nitrogen-NO2+NO3 (mg/L)	0.0490000	0.0178069 \pm 0.0412372
Nitrogen-NO3 (mg/L)	0.0490000	0.0258108 \pm 0.0256957
Nitrogen-TN (mg/L)	0.1150000	0.0969231 \pm 0.0788454
Pb (mg/L)	0.0001000	0.0000217 \pm 0.0000292
Phosphorus-OrthoP (mg/L)	0.0063000	0.0078875 \pm 0.0114003
Phosphorus-TP (mg/L)	0.0095000	0.0119104 \pm 0.0123605
S (mg/L)	1.5000000	3.0000000 \pm 0.0000000
Sb (mg/L)	0.0002500	0.0000327 \pm 0.0000172
Se (mg/L)	0.0001600	0.0003229 \pm 0.0001776
Si (mg/L)	4.3800000	5.8577273 \pm 3.4465676
Sn (mg/L)	0.0025000	0.0000100 \pm 0.0000071
Sr (mg/L)	0.0545000	0.0810571 \pm 0.0366920
Ti (mg/L)	0.0025000	0.0010000 \pm 0.0002828
Tl (mg/L)	0.0000250	0.0000013 \pm 0.0000010
U (mg/L)	0.0004100	0.0001454 \pm 0.0001004

Habitat Description

Variable	NESHP01	Predicted Group Reference Mean \pmSD
V (mg/L)	0.0025000	0.0002957 \pm 0.0001416
Zn (mg/L)	0.0054000	0.0005857 \pm 0.0003388
Zr (mg/L)	0.0002500	0.0000000 \pm 0.0000000

Site Description

Study Name	CBWQ-Salmo
Site	NESHP01
Sampling Date	Sep 12 2017
Know Your Watershed Basin	Central Columbia
Province / Territory	British Columbia
Terrestrial Ecological Classification	Montane Cordillera EcoZone Selkirk-Bitterroot Foothills EcoRegion
Coordinates (decimal degrees)	49.14128 N, 117.25862 W
Altitude	2198
Local Basin Name	Sheep Creek
	Columbia Basin
Stream Order	4

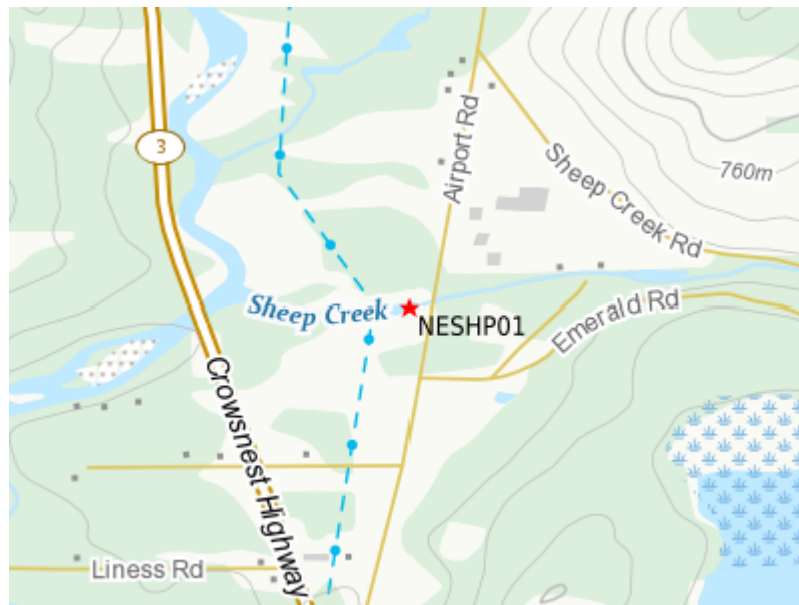


Figure 1. Location Map



- Across Reach
- Aerial (No image found)
- Down Stream (No image found)
- Field Sheet (No image found)
- Miscellaneous (No image found)
- Substrate (No image found)
- Up Stream (No image found)

Cabin Assessment Results

Reference Model Summary	
Model	Columbia-Okanagan Preliminary March 2010
Analysis Date	January 30, 2018
Taxonomic Level	Family

Cabin Assessment Results

Predictive Model Variables	Depth-Avg Latitude Longitude Reg-Ice Reg-SlopeLT30%				
Reference Groups	1	2	3	4	5
Number of Reference Sites	9	43	17	12	33
Group Error Rate	22.2%	24.5%	22.2%	25.0%	32.4%
Overall Model Error Rate	26.4%				
Probability of Group Membership	0.1%	7.6%	8.0%	81.9%	2.4%
CABIN Assessment of NESHP01 on Sep 12, 2017	Mildly Divergent				

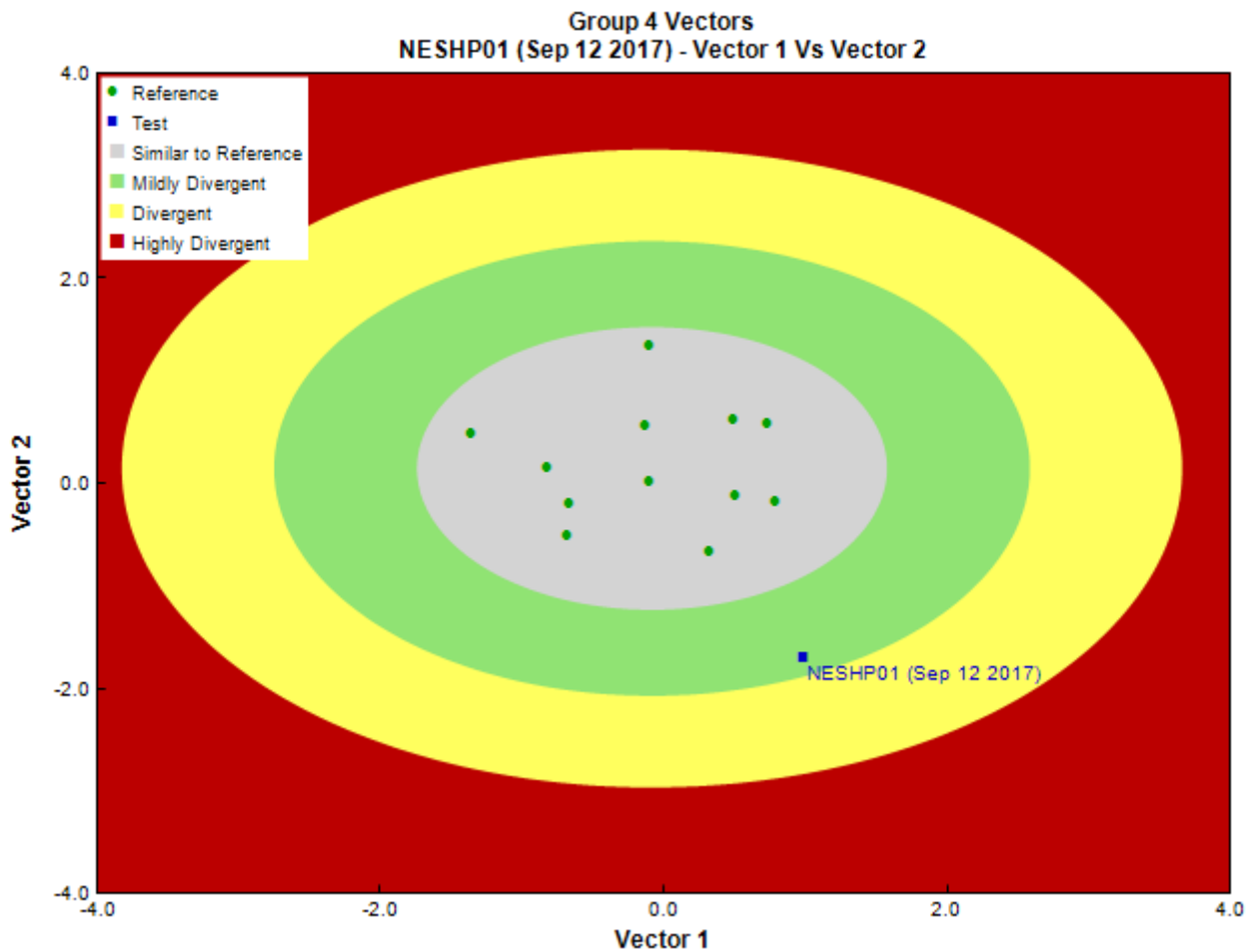


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

Sample Information

Sampling Device	Kick Net
Mesh Size	400
Sampling Time	3
Taxonomist	Pina Viola, Consultant
Date Taxonomy Completed	December 19, 2017
	Marchant Box
Sub-Sample Proportion	8/100

Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
Annelida	Oligochaeta	Tubificida	Naididae	4	50.0
Arthropoda	Arachnida	Trombidiformes		4	50.0
			Hydryphantidae	2	25.0
			Hygrobatidae	1	12.5
			Lebertiidae	4	50.0
			Sperchontidae	1	12.5
			Torrenticolidae	43	537.5
	Insecta	Coleoptera	Elmidae	16	200.0
		Diptera	Ceratopogonidae	3	37.5
			Chironomidae	177	2,212.5
			Psychodidae	15	187.5
			Tipulidae	4	50.0
		Ephemeroptera	Ameletidae	9	112.5
			Baetidae	12	150.0
			Ephemerellidae	12	150.0
			Heptageniidae	41	512.5
			Leptophlebiidae	5	62.5
		Plecoptera	Capniidae	1	12.5
			Chloroperlidae	1	12.5
			Nemouridae	2	25.0
		Trichoptera		1	12.5
			Brachycentridae	5	62.5
			Hydropsychidae	3	37.5
			Hydroptilidae	2	25.0
			Lepidostomatidae	7	87.5
			Limnephilidae	1	12.5
			Rhyacophilidae	1	12.5
			Total	377	4,712.5

Metrics

Name	NESHP01	Predicted Group Reference Mean \pm SD
Bray-Curtis Distance	0.86	0.4 \pm 0.1
Biotic Indices		
Hilsenhoff Family index (North-West)	5.2	3.2 \pm 0.3
Intolerant taxa	--	
Long-lived taxa	3.0	2.1 \pm 1.0
Tolerant individuals (%)	--	0.8 \pm 0.3
Functional Measures		
% Filterers	2.1	2.2 \pm 1.8
% Gatherers	67.6	38.4 \pm 12.4
% Predators	62.6	19.0 \pm 8.5
% Scrapers	20.2	63.2 \pm 19.7
% Shredder	9.5	27.6 \pm 15.2
No. Clinger Taxa	26.0	23.2 \pm 6.3
Number Of Individuals		
% Chironomidae	47.6	7.4 \pm 6.4
% Coleoptera	4.3	1.5 \pm 3.9
% Diptera + Non-insects	68.3	10.8 \pm 7.6
% Ephemeroptera	21.2	51.7 \pm 18.8
% Ephemeroptera that are Baetidae	15.2	40.6 \pm 30.0
% EPT Individuals	27.4	87.7 \pm 7.4
% Odonata	0.0	0.0 \pm 0.0
% of 2 dominant taxa	59.1	57.9 \pm 14.2
% of 5 dominant taxa	78.5	81.6 \pm 7.9
% of dominant taxa	47.6	39.8 \pm 14.9
% Plecoptera	1.1	31.4 \pm 15.4
% Tribe Tanyatarisini	--	
% Trichoptera that are Hydropsychida	15.8	27.0 \pm 26.2
% Tricoptera	5.1	4.5 \pm 2.8
No. EPT individuals/Chironomids+EPT Individuals	0.4	0.9 \pm 0.1
Total Abundance	4712.5	587.4 \pm 299.1

Metrics

Name	NESHP01	Predicted Group Reference Mean \pm SD
Richness		
Chironomidae taxa (genus level only)	1.0	1.0 \pm 0.0
Coleoptera taxa	1.0	0.4 \pm 0.5
Diptera taxa	4.0	3.3 \pm 1.0
Ephemeroptera taxa	5.0	3.8 \pm 0.8
EPT Individuals (Sum)	1275.0	526.0 \pm 285.8
EPT taxa (no)	14.0	13.3 \pm 2.7
Odonata taxa	0.0	0.0 \pm 0.0
Pielou's Evenness	0.6	0.7 \pm 0.1
Plecoptera taxa	3.0	6.3 \pm 1.1
Shannon-Wiener Diversity	2.0	1.9 \pm 0.4
Simpson's Diversity	0.7	0.8 \pm 0.1
Simpson's Evenness	0.2	0.3 \pm 0.1
Total No. of Taxa	25.0	19.3 \pm 3.7
Trichoptera taxa	6.0	3.2 \pm 1.4

Frequency and Probability of Taxa Occurrence

Reference Model Taxa	Frequency of Occurrence in Reference Sites					Probability Of Occurrence at NESHP01
	Group 1	Group 2	Group 3	Group 4	Group 5	
Baetidae	100%	100%	100%	100%	97%	1.00
Capniidae	78%	55%	50%	92%	68%	0.85
Chironomidae	100%	100%	100%	100%	95%	1.00
Chloroperlidae	78%	88%	94%	100%	100%	0.99
Ephemerellidae	78%	100%	100%	100%	100%	1.00
Heptageniidae	100%	100%	100%	100%	100%	1.00
Hydropsychidae	11%	92%	78%	92%	86%	0.90
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlidae	11%	84%	33%	100%	3%	0.91
Perlodidae	78%	78%	89%	92%	81%	0.90
Rhyacophilidae	100%	92%	100%	100%	95%	0.99
Taeniopterygidae	89%	49%	100%	92%	97%	0.89

RIVPACS Ratios

RIVPACS : Expected taxa P>0.50	14.41
RIVPACS : Observed taxa P>0.50	12.00
RIVPACS : O:E (p > 0.5)	0.83
RIVPACS : Expected taxa P>0.70	11.43
RIVPACS : Observed taxa P>0.70	9.00
RIVPACS : O:E (p > 0.7)	0.79

Habitat Description

Variable	NESHP01	Predicted Group Reference Mean \pm SD
Channel		
Depth-Avg (cm)	25.3	23.6 \pm 11.1
Depth-BankfullMinusWetted (cm)	105.00	51.38 \pm 29.42
Depth-Max (cm)	31.0	34.6 \pm 12.3
Macrophyte (PercentRange)	0	0 \pm 0
Reach-%CanopyCoverage (PercentRange)	1.00	1.33 \pm 0.78
Reach-DomStreamsideVeg (Category(1-4))	3	4 \pm 1
Reach-Pools (Binary)	1	1 \pm 0
Reach-Riffles (Binary)	1	1 \pm 0
Reach-StraightRun (Binary)	1	1 \pm 1
Slope (m/m)	0.0150000	0.0546683 \pm 0.0376269
Veg-Coniferous (Binary)	1	1 \pm 0
Veg-Deciduous (Binary)	1	1 \pm 0
Veg-GrassesFerns (Binary)	1	1 \pm 0
Veg-Shrubs (Binary)	1	1 \pm 0
Velocity-Avg (m/s)	0.27	0.48 \pm 0.22

Habitat Description

Variable	NESHP01	Predicted Group Reference Mean \pm SD
Velocity-Max (m/s)	0.42	0.76 \pm 0.36
Width-Bankfull (m)	20.0	13.4 \pm 9.9
Width-Wetted (m)	17.0	8.5 \pm 5.8
XSEC-VelInstrumentDirect (Category(1-3))	3	0 \pm 0
XSEC-VelMethod (Category(1-3))	3	1 \pm 0
Landcover		
Reg-Ice (%)	0.00000	0.02487 \pm 0.06034
Substrate Data		
%Bedrock (%)	0	0 \pm 0
%Boulder (%)	7	9 \pm 9
%Cobble (%)	63	51 \pm 15
%Gravel (%)	1	3 \pm 3
%Pebble (%)	29	37 \pm 20
%Sand (%)	0	0 \pm 0
%Silt+Clay (%)	0	0 \pm 0
D50 (cm)	9.30	15.12 \pm 14.26
Dg (cm)	9.0	8.2 \pm 2.8
Dominant-1st (Category(0-9))	6	7 \pm 1
Dominant-2nd (Category(0-9))	7	7 \pm 1
Embeddedness (Category(1-5))	5	5 \pm 1
PeriphytonCoverage (Category(1-5))	3	1 \pm 0
SurroundingMaterial (Category(0-9))	2	4 \pm 1
Topography		
Reg-SlopeLT30% (%)	19.60983	18.88386 \pm 9.29866
Water Chemistry		
CO3 (mg/L)	0.5000000	0.0000000 \pm 0.0000000
General-Alkalinity (mg/L)	69.9000000	71.7000000 \pm 53.9231440
General-DO (mg/L)	10.0700000	11.4175000 \pm 0.7986708
General-pH (pH)	8.2	7.9 \pm 0.4
General-SolidsTSS (mg/L)	2.0000000	0.8849836 \pm 1.2378575
General-SpCond (μ S/cm)	148.1000000	168.9833333 \pm 123.7858182
General-TempAir (Degrees Celsius)	15.0	26.0
General-TempWater (Degrees Celsius)	12.1000000	7.3183333 \pm 2.7240839
General-Turbidity (NTU)	0.3000000	0.2020000
HCO3 (mg/L)	85.2000000	0.0000000 \pm 0.0000000
Phosphorus-OrthoP (mg/L)	0.0062000	0.0002727 \pm 0.0004671
Phosphorus-TP (mg/L)	0.0082000	0.0045833 \pm 0.0049992