

**Site Description**

<b>Study Name</b>	CBWQ-Slocan
<b>Site</b>	NJBON01
<b>Sampling Date</b>	Oct 01 2012
<b>Know Your Watershed Basin</b>	Slocan
<b>Province / Territory</b>	British Columbia
<b>Terrestrial Ecological Classification</b>	Montane Cordillera EcoZone Columbia Mountains and Highlands EcoRegion
<b>Coordinates (decimal degrees)</b>	50.10000 N, 117.48333 W
<b>Altitude</b>	
<b>Local Basin Name</b>	Slocan River
	Slocan
<b>Stream Order</b>	4

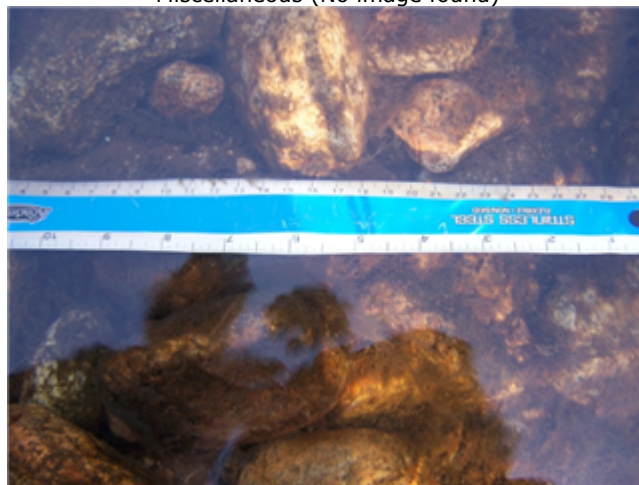


Figure 1. Location Map

Across Reach  
Aerial (No image found)



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



Substrate



Up Stream

### Cabin Assessment Results

Reference Model Summary	
<b>Model</b>	Columbia-Okanagan Preliminary March 2010
<b>Analysis Date</b>	September 05, 2017
<b>Taxonomic Level</b>	Family

**Cabin Assessment Results**

<b>Predictive Model Variables</b>	Depth-Avg Latitude Longitude Reg-Ice Reg-SlopeLT30%				
<b>Reference Groups</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Number of Reference Sites</b>	9	43	17	12	33
<b>Group Error Rate</b>	22.2%	24.5%	22.2%	25.0%	32.4%
<b>Overall Model Error Rate</b>	26.4%				
<b>Probability of Group Membership</b>	100.0%	0.0%	0.0%	0.0%	0.0%
<b>CABIN Assessment of NJBON01 on Oct 01, 2012</b>	Similar to Reference				

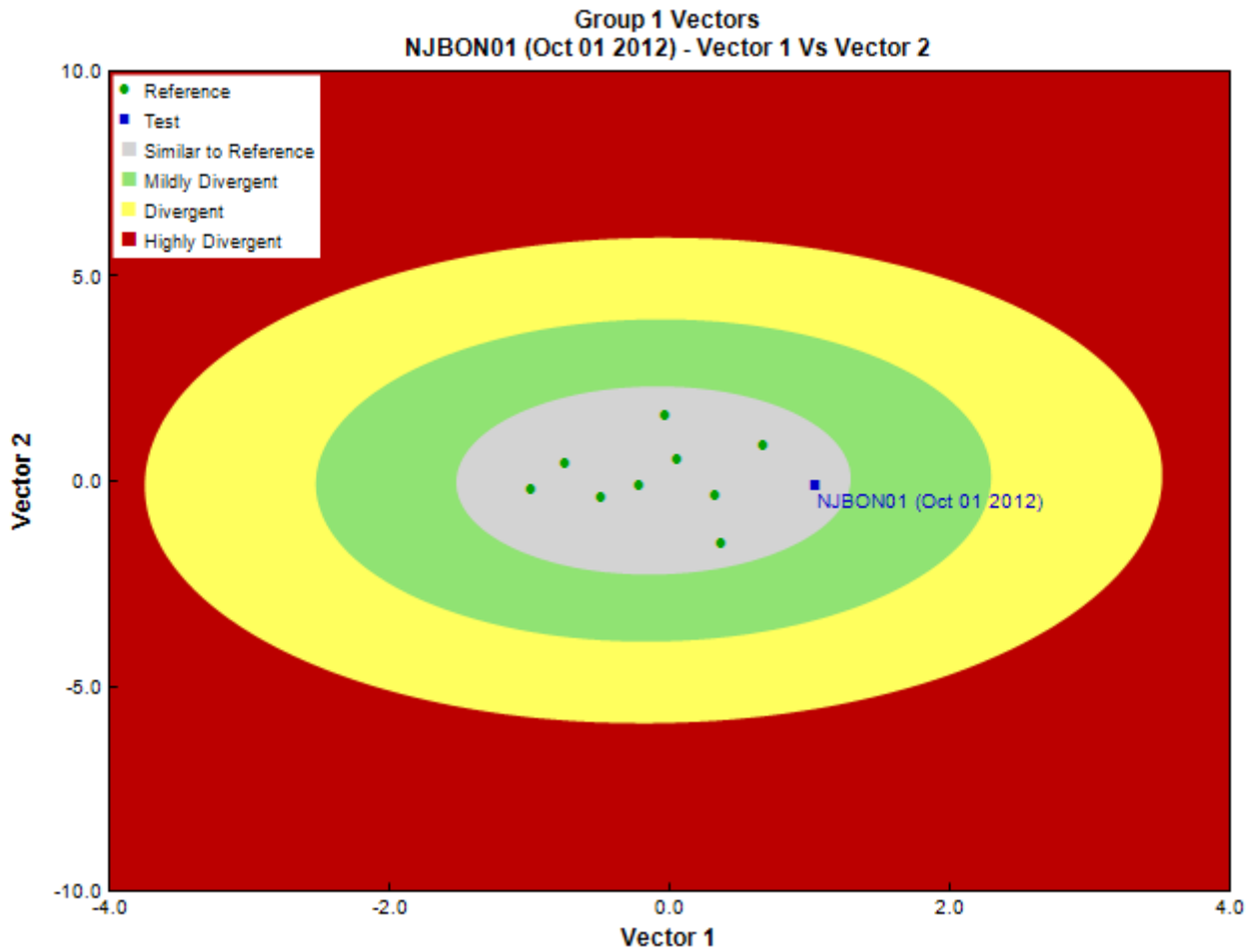


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

**Sample Information**

<b>Sampling Device</b>	Kick Net
<b>Mesh Size</b>	400
<b>Sampling Time</b>	3
<b>Taxonomist</b>	Eco Analysts, EcoAnalysts
<b>Date Taxonomy Completed</b>	February 09, 2013
	Marchant Box
<b>Sub-Sample Proportion</b>	100/100

## Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count			
Arthropoda	Arachnida	Trombidiformes	Hygrobatidae	1	1.0			
			Lebertiidae	1	1.0			
			Sperchontidae	1	1.0			
			Stygothrombidiidae	1	1.0			
			Torrenticolidae	1	1.0			
	Insecta	Coleoptera	Diptera	Elmidae	35	35.0		
				Ceratopogonidae	12	12.0		
		Ephemeroptera	Chironomidae	Chironomidae	104	104.0		
				Empididae	4	4.0		
				Pelecorhynchidae	1	1.0		
				Psychodidae	30	30.0		
				Tipulidae	3	3.0		
				Baetidae	32	32.0		
				Ephemerellidae	29	29.0		
				Heptageniidae	30	30.0		
				Plecoptera	Capniidae	Capniidae	3	3.0
						Chloroperlidae	40	40.0
Nemouridae	4	4.0						
Trichoptera	Perlidae	Perlidae	9	9.0				
		Perlodidae	8	8.0				
		Taeniopterygidae	2	2.0				
		Brachycentridae	2	2.0				
		Glossosomatidae	16	16.0				
		Hydropsychidae	6	6.0				
		Philopotamidae	9	9.0				
Rhyacophilidae	27	27.0						
		Total	411	411.0				

## Metrics

Name	NJBON01	Predicted Group Reference Mean $\pm$ SD
<b>Bray-Curtis Distance</b>	0.59	0.4 $\pm$ 0.2
<b>Biotic Indices</b>		
<b>Hilsenhoff Family index (North-West)</b>	3.9	3.3 $\pm$ 0.5
<b>Intolerant taxa</b>	--	1.0
<b>Long-lived taxa</b>	2.0	2.3 $\pm$ 1.5
<b>Tolerant individuals (%)</b>	--	
<b>Functional Measures</b>		
<b>% Filterers</b>	4.1	1.1 $\pm$ 1.5
<b>% Gatherers</b>	63.5	35.2 $\pm$ 11.4
<b>% Predatores</b>	52.6	16.9 $\pm$ 7.6
<b>% Scrapers</b>	40.6	60.6 $\pm$ 17.9
<b>% Shredder</b>	11.9	19.4 $\pm$ 13.9
<b>No. Clinger Taxa</b>	15.0	18.6 $\pm$ 4.2
<b>Number Of Individuals</b>		
<b>% Chironomidae</b>	25.3	8.1 $\pm$ 6.9
<b>% Coleoptera</b>	8.5	0.5 $\pm$ 1.7
<b>% Diptera + Non-insects</b>	38.7	11.2 $\pm$ 7.6
<b>% Ephemeroptera</b>	22.1	61.6 $\pm$ 17.6
<b>% Ephemeroptera that are Baetidae</b>	35.2	50.3 $\pm$ 24.0
<b>% EPT Individuals</b>	52.8	88.3 $\pm$ 7.4
<b>% Odonata</b>	0.0	0.0 $\pm$ 0.0
<b>% of 2 dominant taxa</b>	35.0	59.1 $\pm$ 14.3
<b>% of 5 dominant taxa</b>	58.6	84.1 $\pm$ 7.1
<b>% of dominant taxa</b>	25.3	41.5 $\pm$ 15.1
<b>% Plecoptera</b>	16.1	23.9 $\pm$ 14.1
<b>% Tribe Tanyatarisini</b>	--	
<b>% Trichoptera that are Hydropsychida</b>	10.0	12.9 $\pm$ 23.9
<b>% Tricoptera</b>	14.6	2.8 $\pm$ 2.9
<b>No. EPT individuals/Chironomids+EPT Individuals</b>	0.7	0.9 $\pm$ 0.1
<b>Total Abundance</b>	411.0	1453.9 $\pm$ 1355.4
<b>Richness</b>		

**Metrics**

Name	NJBON01	Predicted Group Reference Mean $\pm$ SD
<b>Chironomidae taxa (genus level only)</b>	1.0	1.0 $\pm$ 0.0
<b>Coleoptera taxa</b>	1.0	0.2 $\pm$ 0.4
<b>Diptera taxa</b>	6.0	2.9 $\pm$ 1.0
<b>Ephemeroptera taxa</b>	3.0	3.6 $\pm$ 0.6
<b>EPT Individuals (Sum)</b>	217.0	1288.9 $\pm$ 1149.7
<b>EPT taxa (no)</b>	14.0	11.1 $\pm$ 2.1
<b>Odonata taxa</b>	0.0	0.0 $\pm$ 0.0
<b>Pielou's Evenness</b>	0.8	0.7 $\pm$ 0.1
<b>Plecoptera taxa</b>	6.0	5.1 $\pm$ 1.2
<b>Shannon-Wiener Diversity</b>	2.6	1.8 $\pm$ 0.4
<b>Simpson's Diversity</b>	0.9	0.7 $\pm$ 0.1
<b>Simpson's Evenness</b>	0.3	0.3 $\pm$ 0.1
<b>Total No. of Taxa</b>	26.0	16.3 $\pm$ 3.2
<b>Trichoptera taxa</b>	5.0	2.3 $\pm$ 1.3

**Frequency and Probability of Taxa Occurrence**

Reference Model Taxa	Frequency of Occurrence in Reference Sites					Probability Of Occurrence at NJBON01
	Group 1	Group 2	Group 3	Group 4	Group 5	
Baetidae	100%	100%	100%	100%	97%	1.00
Capniidae	78%	55%	50%	92%	68%	0.78
Chironomidae	100%	100%	100%	100%	95%	1.00
Chloroperlidae	78%	88%	94%	100%	100%	0.78
Ephemerellidae	78%	100%	100%	100%	100%	0.78
Heptageniidae	100%	100%	100%	100%	100%	1.00
Lebertiidae	78%	65%	39%	58%	5%	0.78
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlodidae	78%	78%	89%	92%	81%	0.78
Rhyacophilidae	100%	92%	100%	100%	95%	1.00
Sperchontidae	78%	63%	50%	42%	65%	0.78
Taeniopterygidae	89%	49%	100%	92%	97%	0.89

**RIVPACS Ratios**

<b>RIVPACS : Expected taxa P&gt;0.50</b>	12.33
<b>RIVPACS : Observed taxa P&gt;0.50</b>	14.00
<b>RIVPACS : O:E (p &gt; 0.5)</b>	1.14
<b>RIVPACS : Expected taxa P&gt;0.70</b>	10.56
<b>RIVPACS : Observed taxa P&gt;0.70</b>	12.00
<b>RIVPACS : O:E (p &gt; 0.7)</b>	1.14

**Habitat Description**

Variable	NJBON01	Predicted Group Reference Mean $\pm$ SD
<b>Channel</b>		
<b>Depth-Avg (cm)</b>	192.0	39.4 $\pm$ 23.6
<b>Depth-Max (cm)</b>	255.0	55.6 $\pm$ 30.6
<b>Macrophyte (PercentRange)</b>	0	0 $\pm$ 0
<b>Reach-%CanopyCoverage (PercentRange)</b>	2.00	0.67 $\pm$ 1.00
<b>Reach-Pools (Binary)</b>	1	0 $\pm$ 1
<b>Reach-Rapids (Binary)</b>	0	0 $\pm$ 0
<b>Reach-Riffles (Binary)</b>	1	1 $\pm$ 1
<b>Reach-StraightRun (Binary)</b>	1	1 $\pm$ 1
<b>Slope (m/m)</b>	0.0960000	0.0440367 $\pm$ 0.0734738
<b>Veg-Coniferous (Binary)</b>	1	1 $\pm$ 0
<b>Veg-Deciduous (Binary)</b>	1	1 $\pm$ 0
<b>Veg-GrassesFerns (Binary)</b>	0	1 $\pm$ 0
<b>Veg-Shrubs (Binary)</b>	1	1 $\pm$ 0
<b>Velocity-Avg (m/s)</b>	2.28	0.64 $\pm$ 0.29
<b>Velocity-Max (m/s)</b>	4.08	0.81 $\pm$ 0.28
<b>Width-Bankfull (m)</b>	20.1	27.7 $\pm$ 17.6

## Habitat Description

Variable	NJBON01	Predicted Group Reference Mean $\pm$ SD
Width-Wetted (m)	9.8	17.6 $\pm$ 11.6
<b>Landcover</b>		
Reg-Ice (%)	0.00000	11.04418 $\pm$ 12.39512
<b>Substrate Data</b>		
%Bedrock (%)	0	1 $\pm$ 2
%Boulder (%)	7	1 $\pm$ 2
%Cobble (%)	77	55 $\pm$ 30
%Gravel (%)	0	2 $\pm$ 2
%Pebble (%)	16	40 $\pm$ 28
%Sand (%)	0	0 $\pm$ 0
%Silt+Clay (%)	0	0 $\pm$ 1
D50 (cm)	10.75	8.05 $\pm$ 3.69
Dg (cm)	11.0	7.5 $\pm$ 3.2
Dominant-1st (Category(0-9))	6	6 $\pm$ 2
Dominant-2nd (Category(0-9))	7	6 $\pm$ 1
Embeddedness (Category(1-5))	3	4 $\pm$ 1
PeriphytonCoverage (Category(1-5))	3	3 $\pm$ 1
<b>Topography</b>		
Reg-SlopeLT30% (%)	28.34000	27.80144 $\pm$ 15.50843
<b>Water Chemistry</b>		
General-Conductivity ( $\mu$ S/cm)	130.4000000	75.3777778 $\pm$ 42.7748109
General-DO (mg/L)	11.0000000	11.4277778 $\pm$ 1.0113454
General-pH (pH)	6.9	7.6 $\pm$ 0.6
General-TempAir (Degrees Celsius)	12.5	4.2
General-TempWater (Degrees Celsius)	7.5000000	5.7844444 $\pm$ 2.4754197
General-Turbidity (NTU)	0.2500000	67.5295000 $\pm$ 95.4176962