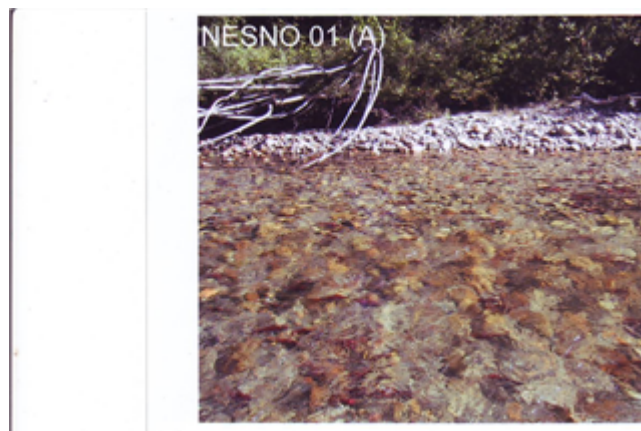


**Site Description**

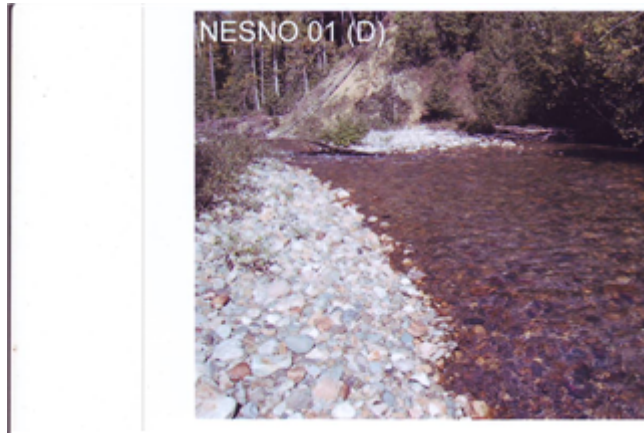
<b>Study Name</b>	CBWQ-Arrow
<b>Site</b>	NESNO01
<b>Sampling Date</b>	Sep 14 2009
<b>Know Your Watershed Basin</b>	Central Columbia
<b>Province / Territory</b>	British Columbia
<b>Terrestrial Ecological Classification</b>	Montane Cordillera EcoZone Columbia Mountains and Highlands EcoRegion
<b>Coordinates (decimal degrees)</b>	49.96696 N, 117.88336 W
<b>Altitude</b>	1670
<b>Local Basin Name</b>	Snow Cr.
	Columbia River
<b>Stream Order</b>	5



Figure 1. Location Map



Across Reach  
Aerial (No image found)



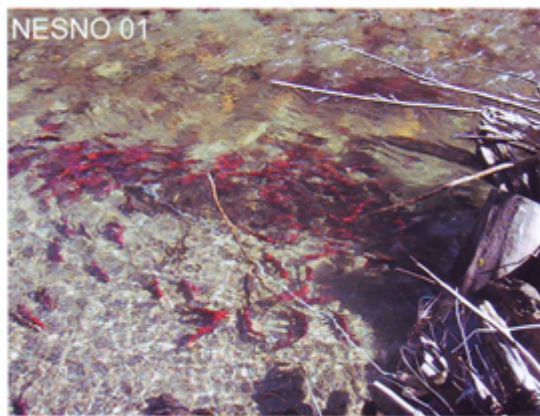
Down Stream



Field Sheet  
Miscellaneous (No image found)



Substrate



Up Stream

**Cabin Assessment Results**

<b>Reference Model Summary</b>					
<b>Model</b>	Columbia-Okanagan Preliminary March 2010				
<b>Analysis Date</b>	August 11, 2017				
<b>Taxonomic Level</b>	Family				
<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>	0.9%	3.0%	4.9%	74.2%	16.9%
<b>CABIN Assessment of NESNO01 on Sep 14, 2009</b>	Similar to Reference				

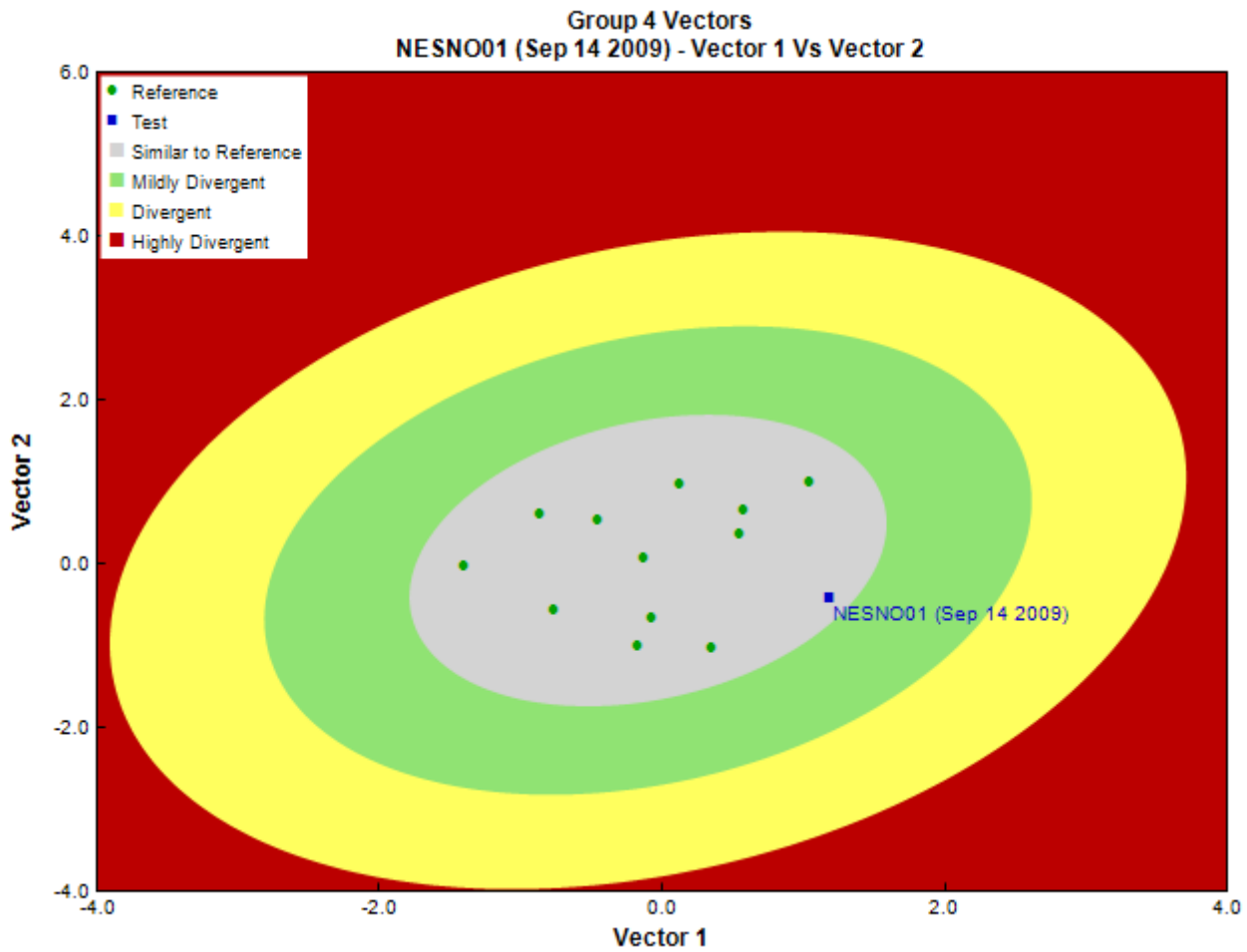


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

**Sample Information**

<b>Sampling Device</b>	Kick Net
<b>Mesh Size</b>	400
<b>Sampling Time</b>	3
<b>Taxonomist</b>	Eco Analsyts, EcoAnalysts
<b>Date Taxonomy Completed</b>	February 26, 2010
	Marchant Box
<b>Sub-Sample Proportion</b>	19/100

**Community Structure**

Phylum	Class	Order	Family	Raw Count	Total Count	
Arthropoda	Arachnida	Sarcoptiformes		1	5.3	
		Trombidiformes	Lebertiidae	1	5.3	
				Sperchontidae	1	5.3
	Insecta	Coleoptera		Elmidae	1	5.3
			Diptera	Chironomidae	5	26.3
				Empididae	1	5.3
				Psychodidae	6	31.6
				Tipulidae	9	47.4
			Ephemeroptera	Ameletidae	3	15.8
				Baetidae	123	647.4
				Ephemerellidae	12	63.2
				Heptageniidae	125	657.9
				Leptophlebiidae	2	10.5
		Plecoptera	Chloroperlidae	7	36.8	
		Perlodidae	1	5.3		

## Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
			Taeniopterygidae	8	42.1
		Trichoptera	Apataniidae	3	15.8
			Glossosomatidae	7	36.8
			Hydropsychidae	1	5.3
			Lepidostomatidae	2	10.5
			Limnephilidae	2	10.5
			Rhyacophilidae	7	36.8
			Uenoidae	2	10.5
			Total	330	1,737.0

## Metrics

Name	NESNO01	Predicted Group Reference Mean $\pm$ SD
<b>Bray-Curtis Distance</b>	0.66	0.4 $\pm$ 0.1
<b>Biotic Indices</b>		
<b>Hilsenhoff Family index (North-West)</b>	3.7	3.2 $\pm$ 0.3
<b>Intolerant taxa</b>	--	
<b>Long-lived taxa</b>	1.0	2.1 $\pm$ 1.0
<b>Tolerant individuals (%)</b>	--	0.8 $\pm$ 0.3
<b>Functional Measures</b>		
<b>% Filterers</b>	0.3	2.2 $\pm$ 1.8
<b>% Gatherers</b>	16.7	38.4 $\pm$ 12.4
<b>% Predatores</b>	7.3	19.0 $\pm$ 8.5
<b>% Scrapers</b>	84.2	63.2 $\pm$ 19.7
<b>% Shredder</b>	7.6	27.6 $\pm$ 15.2
<b>No. Clinger Taxa</b>	14.0	23.2 $\pm$ 6.3
<b>Number Of Individuals</b>		
<b>% Chironomidae</b>	1.5	7.4 $\pm$ 6.4
<b>% Coleoptera</b>	0.3	1.5 $\pm$ 3.9
<b>% Diptera + Non-insects</b>	7.0	10.8 $\pm$ 7.6
<b>% Ephemeroptera</b>	80.6	51.7 $\pm$ 18.8
<b>% Ephemeroptera that are Baetidae</b>	46.4	40.6 $\pm$ 30.0
<b>% EPT Individuals</b>	92.7	87.7 $\pm$ 7.4
<b>% Odonata</b>	--	0.0 $\pm$ 0.0
<b>% of 2 dominant taxa</b>	75.4	57.9 $\pm$ 14.2
<b>% of 5 dominant taxa</b>	84.2	81.6 $\pm$ 7.9
<b>% of dominant taxa</b>	38.0	39.8 $\pm$ 14.9
<b>% Plecoptera</b>	4.9	31.4 $\pm$ 15.4
<b>% Tribe Tanyatarisini</b>	--	
<b>% Trichoptera that are Hydropsychida</b>	4.2	27.0 $\pm$ 26.2
<b>% Tricoptera</b>	7.3	4.5 $\pm$ 2.8
<b>No. EPT individuals/Chironomids+EPT Individuals</b>	1.0	0.9 $\pm$ 0.1
<b>Total Abundance</b>	1736.7	587.4 $\pm$ 299.1
<b>Richness</b>		
<b>Chironomidae taxa (genus level only)</b>	1.0	1.0 $\pm$ 0.0
<b>Coleoptera taxa</b>	1.0	0.4 $\pm$ 0.5
<b>Diptera taxa</b>	4.0	3.3 $\pm$ 1.0
<b>Ephemeroptera taxa</b>	5.0	3.8 $\pm$ 0.8
<b>EPT Individuals (Sum)</b>	1605.2	526.0 $\pm$ 285.8
<b>EPT taxa (no)</b>	15.0	13.3 $\pm$ 2.7
<b>Odonata taxa</b>	--	0.0 $\pm$ 0.0
<b>Pielou's Evenness</b>	0.6	0.7 $\pm$ 0.1
<b>Plecoptera taxa</b>	3.0	6.3 $\pm$ 1.1
<b>Shannon-Wiener Diversity</b>	1.7	1.9 $\pm$ 0.4
<b>Simpson's Diversity</b>	0.7	0.8 $\pm$ 0.1
<b>Simpson's Evenness</b>	0.2	0.3 $\pm$ 0.1
<b>Total No. of Taxa</b>	22.0	19.3 $\pm$ 3.7
<b>Trichoptera taxa</b>	7.0	3.2 $\pm$ 1.4

**Frequency and Probability of Taxa Occurrence**

Reference Model Taxa	Frequency of Occurrence in Reference Sites					Probability Of Occurrence at NESNO01
	Group 1	Group 2	Group 3	Group 4	Group 5	
Baetidae	100%	100%	100%	100%	97%	1.00
Capniidae	78%	55%	50%	92%	68%	0.84
Chironomidae	100%	100%	100%	100%	95%	0.99
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%	0.89
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlidae	11%	84%	33%	100%	3%	0.79
Perlodidae	78%	78%	89%	92%	81%	0.89
Rhyacophilidae	100%	92%	100%	100%	95%	0.99
Taeniopterygidae	89%	49%	100%	92%	97%	0.92

**RIVPACS Ratios**

<b>RIVPACS : Expected taxa P&gt;0.50</b>	13.69
<b>RIVPACS : Observed taxa P&gt;0.50</b>	12.00
<b>RIVPACS : O:E (p &gt; 0.5)</b>	0.88
<b>RIVPACS : Expected taxa P&gt;0.70</b>	11.30
<b>RIVPACS : Observed taxa P&gt;0.70</b>	9.00
<b>RIVPACS : O:E (p &gt; 0.7)</b>	0.80

**Habitat Description**

Variable	NESNO01	Predicted Group Reference Mean $\pm$ SD
<b>Bedrock Geology</b>		
<b>Channel</b>		
<b>XSEC-VelMethod (Category (1-3))</b>	1	1 $\pm$ 0
<b>Climate</b>		
<b>Hydrology</b>		
<b>Landcover</b>		
<b>Substrate Data</b>		
<b>Topography</b>		
<b>Water Chemistry</b>		