

Site Description

Study Name	CBWQ-Arrow
Site	NESNO01
Sampling Date	Oct 10 2011
Know Your Watershed Basin	Central Columbia
Province / Territory	British Columbia
Terrestrial Ecological Classification	Montane Cordillera EcoZone Columbia Mountains and Highlands EcoRegion
Coordinates (decimal degrees)	49.96694 N, 117.88331 W
Altitude	1535
Local Basin Name	Snow Cr.
	Columbia River
Stream Order	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

Reference Model Summary	
Model	Columbia-Okanagan Preliminary March 2010
Analysis Date	August 11, 2017
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%	4.1%	5.3%	71.5%	19.1%
CABIN Assessment of NESNO01 on Oct 10, 2011	Mildly Divergent				

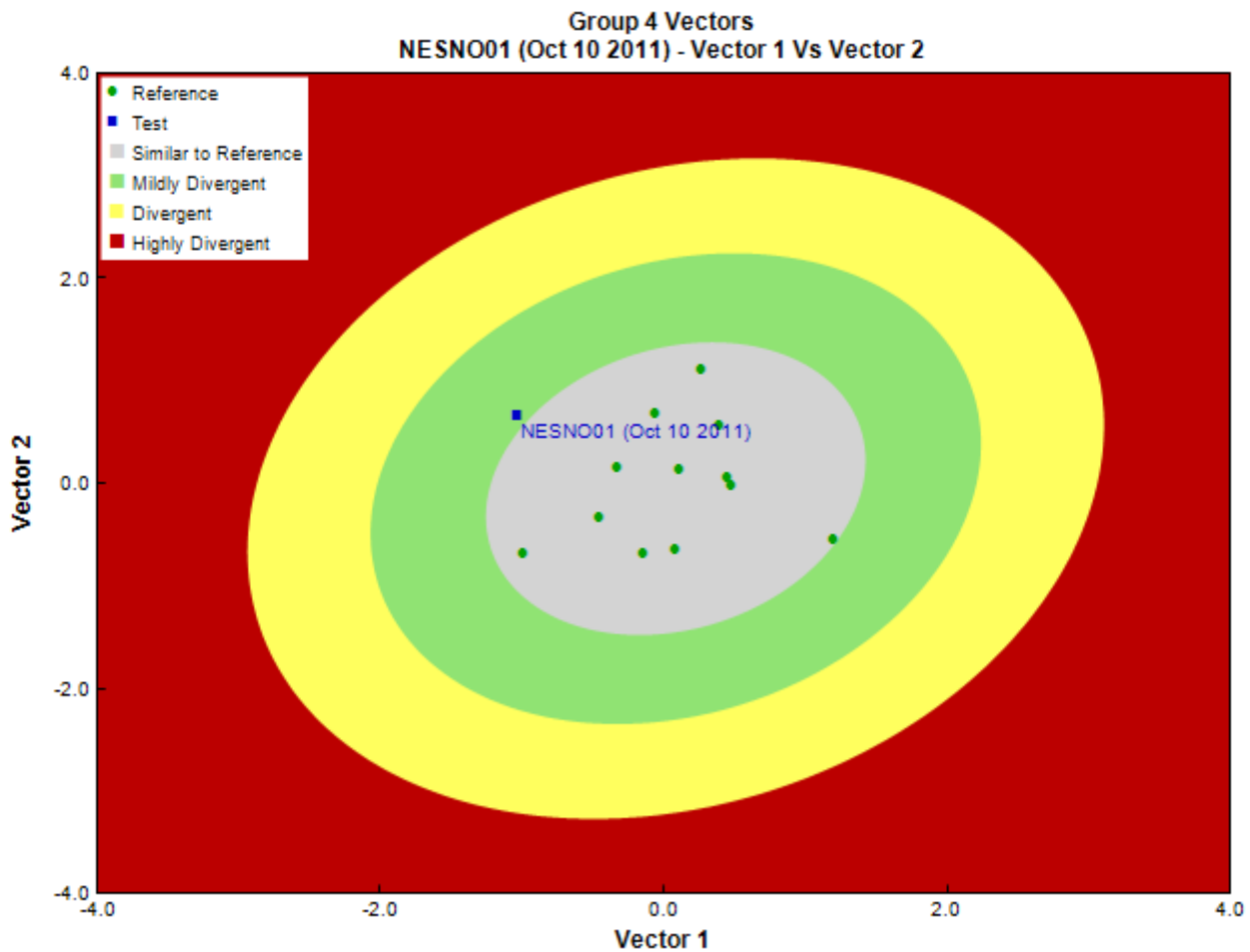


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

Sample Information

Sampling Device	Kick Net
Mesh Size	400
Sampling Time	3
Taxonomist	Eco Analyts, EcoAnalysts
Date Taxonomy Completed	January 27, 2012
	Marchant Box
Sub-Sample Proportion	19/100

Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
Arthropoda	Arachnida	Trombidiformes	Lebertiidae	7	36.8
	Insecta	Coleoptera	Elmidae	1	5.3
		Diptera	Chironomidae	6	31.6
			Psychodidae	13	68.4
			Tipulidae	4	21.0
		Ephemeroptera	Ameletidae	1	5.3
			Baetidae	68	357.9
			Ephemerellidae	35	184.2
			Heptageniidae	170	894.7
			Leptophlebiidae	1	5.3
		Plecoptera	Chloroperlidae	11	57.9
			Nemouridae	3	15.8
			Perlodidae	5	26.3
			Taeniopterygidae	11	57.9
		Trichoptera	Rhyacophilidae	3	15.8
			Total	339	1,784.2

Metrics

Name	NESNO01	Predicted Group Reference Mean \pm SD
Bray-Curtis Distance	0.65	0.4 \pm 0.1
Biotic Indices		
Hilsenhoff Family index (North-West)	3.8	3.2 \pm 0.3
Intolerant taxa	--	
Long-lived taxa	1.0	2.1 \pm 1.0
Tolerant individuals (%)	--	0.8 \pm 0.3
Functional Measures		
% Filterers	--	2.2 \pm 1.8
% Gatherers	25.4	38.4 \pm 12.4
% Predatores	9.4	19.0 \pm 8.5
% Scrapers	77.0	63.2 \pm 19.7
% Shredder	5.6	27.6 \pm 15.2
No. Clinger Taxa	10.0	23.2 \pm 6.3
Number Of Individuals		
% Chironomidae	1.8	7.4 \pm 6.4
% Coleoptera	0.3	1.5 \pm 3.9
% Diptera + Non-insects	8.8	10.8 \pm 7.6
% Ephemeroptera	81.1	51.7 \pm 18.8
% Ephemeroptera that are Baetidae	24.7	40.6 \pm 30.0
% EPT Individuals	90.9	87.7 \pm 7.4
% Odonata	--	0.0 \pm 0.0
% of 2 dominant taxa	70.2	57.9 \pm 14.2
% of 5 dominant taxa	87.6	81.6 \pm 7.9
% of dominant taxa	50.1	39.8 \pm 14.9
% Plecoptera	8.8	31.4 \pm 15.4
% Tribe Tanyatarisini	--	
% Trichoptera that are Hydropsychida	0.0	27.0 \pm 26.2
% Tricoptera	0.9	4.5 \pm 2.8
No. EPT individuals/Chironomids+EPT Individuals	1.0	0.9 \pm 0.1
Total Abundance	1784.1	587.4 \pm 299.1
Richness		
Chironomidae taxa (genus level only)	1.0	1.0 \pm 0.0
Coleoptera taxa	1.0	0.4 \pm 0.5
Diptera taxa	3.0	3.3 \pm 1.0
Ephemeroptera taxa	5.0	3.8 \pm 0.8
EPT Individuals (Sum)	1621.0	526.0 \pm 285.8
EPT taxa (no)	10.0	13.3 \pm 2.7
Odonata taxa	--	0.0 \pm 0.0
Pielou's Evenness	0.6	0.7 \pm 0.1
Plecoptera taxa	4.0	6.3 \pm 1.1
Shannon-Wiener Diversity	1.7	1.9 \pm 0.4
Simpson's Diversity	0.7	0.8 \pm 0.1

Metrics

Name	NESNO01	Predicted Group Reference Mean \pm SD
Simpson's Evenness	0.2	0.3 \pm 0.1
Total No. of Taxa	15.0	19.3 \pm 3.7
Trichoptera taxa	1.0	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%	0.99
Capniidae	78%	55%	50%	92%	68%	0.83
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%	0.90
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlidae	11%	84%	33%	100%	3%	0.77
Perlodidae	78%	78%	89%	92%	81%	0.89
Rhyacophilidae	100%	92%	100%	100%	95%	0.99
Taeniopterygidae	89%	49%	100%	92%	97%	0.91

RIVPACS Ratios

RIVPACS : Expected taxa P>0.50	13.65
RIVPACS : Observed taxa P>0.50	11.00
RIVPACS : O:E (p > 0.5)	0.81
RIVPACS : Expected taxa P>0.70	11.27
RIVPACS : Observed taxa P>0.70	9.00
RIVPACS : O:E (p > 0.7)	0.80

Habitat Description

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