

Site Description

Study Name	CBWQ-Elk
Site	ALX-03
Sampling Date	Sep 12 2018
Know Your Watershed Basin	Central Kootenay
Province / Territory	British Columbia
Terrestrial Ecological Classification	Montane Cordillera EcoZone Northern Continental Divide EcoRegion
Coordinates (decimal degrees)	49.65530 N, 114.73074 W
Altitude	1305
Local Basin Name	Alexander Creek
	Elk River Watershed
Stream Order	4



Across Reach

Cabin Assessment Results

Reference Model Summary					
Model	Columbia-Okanagan Preliminary March 2010				
Analysis Date	November 21, 2018				
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%	0.2%	85.9%	12.3%	1.5%
CABIN Assessment of ALX-03 on Sep 12, 2018	Similar to Reference				

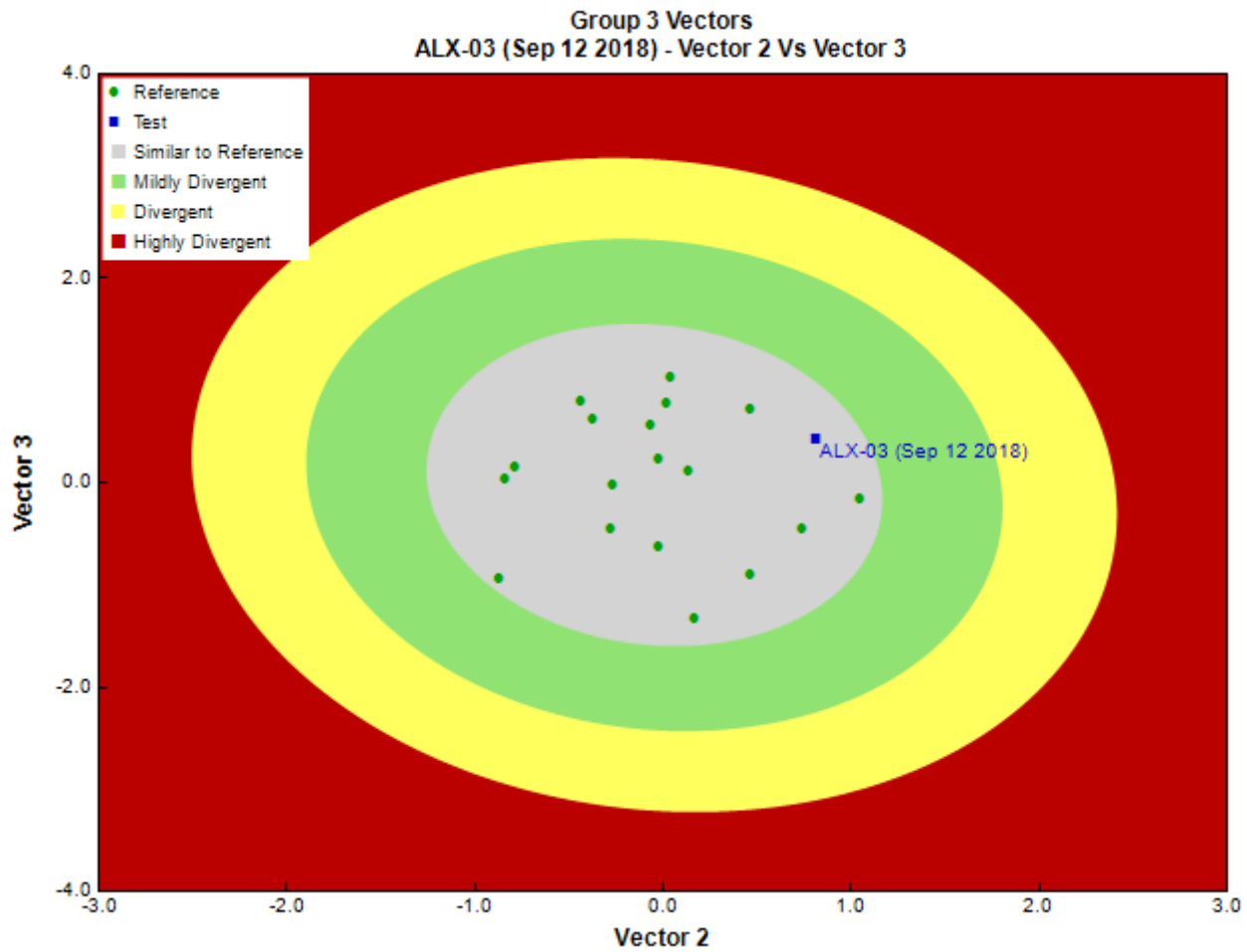


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

Sample Information

Sampling Device	Kick Net
Mesh Size	400
Sampling Time	3
Taxonomist	Pina Viola, Consultant
Date Taxonomy Completed	November 11, 2018
	Marchant Box
Sub-Sample Proportion	12/100

Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count	
Arthropoda	Arachnida	Trombidiformes	Aturidae	1	8.3	
			Hygrobatidae	2	16.7	
			Sperchontidae	1	8.3	
	Insecta	Coleoptera	Elmidae	12	100.0	
			Diptera	20	166.7	
		Ephemeroptera	Empididae	2	16.7	
			Psychodidae	36	300.0	
			Simuliidae	1	8.3	
			Ameletidae	11	91.7	
			Baetidae	36	300.0	
			Ephemerellidae	163	1,358.3	
			Heptageniidae	96	800.0	
			Plecoptera	Chloroperlidae	9	75.0
			Leuctridae	2	16.7	
Nemouridae	26	216.7				

Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
			Perlodidae	6	50.0
			Taeniopterygidae	8	66.7
		Trichoptera	Apataniidae	12	100.0
			Glossosomatidae	3	25.0
			Hydropsychidae	1	8.3
			Limnephilidae	1	8.3
			Rhyacophilidae	13	108.3
			Uenoidae	4	33.3
			Total	466	3,883.3

Metrics

Name	ALX-03	Predicted Group Reference Mean \pm SD
Bray-Curtis Distance	0.41	0.4 \pm 0.2
Number Of Individuals		
% Chironomidae	4.3	6.9 \pm 11.3
% EPT Individuals	83.9	83.1 \pm 12.6
% of 2 dominant taxa	55.6	53.1 \pm 12.3
Total Abundance	3883.3	4956.1 \pm 4202.8
Richness		
Total No. of Taxa	23.0	20.0 \pm 4.2

Habitat Description

Variable	ALX-03	Predicted Group Reference Mean \pm SD
Channel		
Depth-Avg (cm)	29.2	22.5 \pm 10.5
Velocity-Avg (m/s)	0.44	0.50 \pm 0.25
Landcover		
Substrate Data		
%Boulder (%)	3	6 \pm 7
%Cobble (%)	71	61 \pm 27
%Gravel (%)	4	1 \pm 2
%Pebble (%)	22	31 \pm 28
%Sand (%)	0	0 \pm 0
%Silt+Clay (%)	0	0 \pm 1
Topography		
Water Chemistry		