

**Site Description**

<b>Study Name</b>	CBWQ-Central Kootenay
<b>Site</b>	NGJOS02
<b>Sampling Date</b>	Oct 22 2008
<b>Know Your Watershed Basin</b>	Central Kootenay
<b>Province / Territory</b>	British Columbia
<b>Terrestrial Ecological Classification</b>	Montane Cordillera EcoZone Southern Rocky Mountain Trench EcoRegion
<b>Coordinates (decimal degrees)</b>	49.50194 N, 115.75472 W
<b>Altitude</b>	3067
<b>Local Basin Name</b>	Joseph Creek
	St Mary River
<b>Stream Order</b>	3



Figure 1. Location Map



Across Reach  
Aerial (No image found)



Down Stream

A photograph of a CABIN Field Sheet form. The form is titled "CABIN Field Sheet" and "Page 1 of 6". It contains handwritten information: Field Crew: J. D. G. L. Site Code: N6-10-02. Sampling Date (DMY): 08, 10, 08. QA/QC site: Yes No. Site Inspection Sheet Completed: No. Primary Site Data: CABIN Study Name: Columbia Basin Watershed: Kootenay. Local Basin Name: Central Kootenay Basin/River Name: Joseph Co. Stream Order (map scale 1:50,000): 2. Ecoregion: Southern Rocky Mtn Trench. There is a section for "Geographical description/notes" which is currently blank.

Field Sheet  
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>	July 29, 2013				
<b>Taxonomic Level</b>	Family				
<b>Predictive Model Variables</b>	Depth-Avg Latitude Longitude Reg-Ice 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>	0.0%	36.5%	60.2%	3.1%	0.2%
<b>CABIN Assessment of NGJOS02 on Oct 22, 2008</b>	Mildly Divergent				

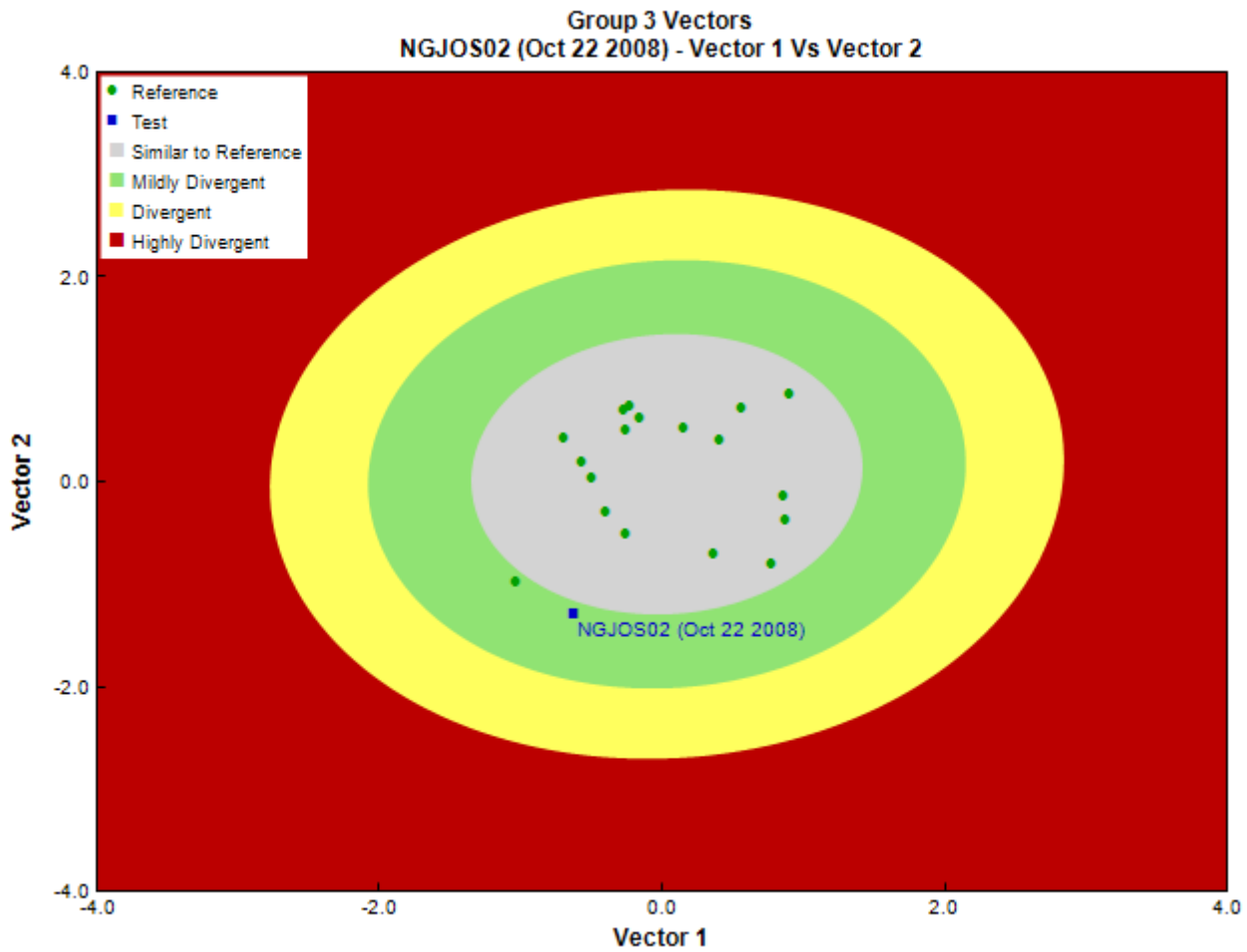


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

**Sample Information**

<b>Sampling Device</b>	Kick Net
<b>Mesh Size</b>	400
<b>Sampling Time</b>	3
<b>Taxonomist</b>	Dave Langill, EcoAnalysts, Inc.
<b>Date Taxonomy Completed</b>	October 15, 2008
	Marchant Box
<b>Sub-Sample Proportion</b>	2/100

**Community Structure**

Phylum	Class	Order	Family	Raw Count	Total Count	
Annelida	Oligochaeta	Enchytraeida	Enchytraeidae	1	50.0	
Arthropoda	Insecta	Coleoptera	Elmidae	52	2,600.0	
			Diptera	Chironomidae	13	650.0
				Pelecorhynchidae	2	100.0
		Ephemeroptera	Simuliidae	1	50.0	
			Tipulidae	3	150.0	
			Baetidae	75	3,750.0	
			Ephemerellidae	12	600.0	
			Heptageniidae	88	4,400.0	
			Leptophlebiidae	18	900.0	
			Plecoptera	Chloroperlidae	1	50.0
		Trichoptera	Nemouridae	3	150.0	
			Perlidae	1	50.0	
			Perlodidae	1	50.0	
			Brachycentridae	4	200.0	

## Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
			Glossosomatidae	6	300.0
			Hydropsychidae	3	150.0
			Lepidostomatidae	45	2,250.0
Mollusca	Bivalvia	Veneroida	Pisidiidae	4	200.0
			Total	333	16,650.0

## Metrics

Name	NGJOS02	Predicted Group Reference Mean $\pm$ SD
<b>Bray-Curtis Distance</b>	0.76	0.4 $\pm$ 0.2
<b>Number Of Individuals</b>		
% Chironomidae	3.9	8.2 $\pm$ 13.6
% Ephemeroptera	57.6	43.5 $\pm$ 15.9
% Ephemeroptera that are Baetidae	38.9	33.9 $\pm$ 27.7
% of 2 dominant taxa	48.7	59.2 $\pm$ 10.0
% of dominant taxa	26.3	39.7 $\pm$ 10.9
% Plecoptera	1.8	34.8 $\pm$ 17.8
% Tricoptera	17.3	6.9 $\pm$ 8.6
No. EPT individuals/Chironomids+EPT Individuals	1.0	0.9 $\pm$ 0.1
<b>Total Abundance</b>	16750.0	5757.3 $\pm$ 4889.9
<b>Richness</b>		
Ephemeroptera taxa	4.0	3.4 $\pm$ 0.5
EPT taxa (no)	12.0	11.5 $\pm$ 1.2
Plecoptera taxa	4.0	5.3 $\pm$ 0.9
Shannon-Wiener Diversity	2.1	1.9 $\pm$ 0.3
Simpson's Diversity	0.8	0.8 $\pm$ 0.1
<b>Total No. of Taxa</b>	20.0	17.1 $\pm$ 2.4
Trichoptera taxa	4.0	2.8 $\pm$ 1.0

## Frequency and Probability of Taxa Occurrence

Reference Model Taxa	Frequency of Occurrence in Reference Sites					Probability Of Occurrence at NGJOS02
	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%	0.92
Ephemerellidae	78%	100%	100%	100%	100%	1.00
Heptageniidae	100%	100%	100%	100%	100%	1.00
Hydropsychidae	11%	92%	78%	92%	86%	0.83
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlodidae	78%	78%	89%	92%	81%	0.85
Psychodidae	22%	65%	94%	8%	11%	0.81
Rhyacophilidae	100%	92%	100%	100%	95%	0.97
Taeniopterygidae	89%	49%	100%	92%	97%	0.81

## RIVPACS Ratios

<b>RIVPACS : Expected taxa P&gt;0.50</b>	13.48
<b>RIVPACS : Observed taxa P&gt;0.50</b>	10.00
<b>RIVPACS : O:E (p &gt; 0.5)</b>	0.74
<b>RIVPACS : Expected taxa P&gt;0.70</b>	10.19
<b>RIVPACS : Observed taxa P&gt;0.70</b>	8.00
<b>RIVPACS : O:E (p &gt; 0.7)</b>	0.78

## Habitat Description

Variable	NGJOS02	Predicted Group Reference Mean $\pm$ SD
<b>Channel</b>		
<b>Depth-Avg (cm)</b>	10.5	22.5 $\pm$ 10.5
<b>Depth-BankfullMinusWetted (cm)</b>	73.50	26.00 $\pm$ 4.24
<b>Depth-Max (cm)</b>	13.0	32.9 $\pm$ 17.9

## Habitat Description

Variable	NGJOS02	Predicted Group Reference Mean $\pm$ SD
Macrophyte (PercentRange)	0	0 $\pm$ 0
Reach-%CanopyCoverage (PercentRange)	1.00	0.94 $\pm$ 0.80
Reach-%Logging (PercentRange)	0	0 $\pm$ 0
Reach-DomStreamsideVeg (Category (1-4))	1	3 $\pm$ 1
Reach-Pools (Binary)	0	0 $\pm$ 1
Reach-Rapids (Binary)	0	0 $\pm$ 1
Reach-Riffles (Binary)	1	1 $\pm$ 0
Reach-StraightRun (Binary)	1	1 $\pm$ 0
Slope (m/m)	0.0060000	0.0235102 $\pm$ 0.0284557
Veg-Coniferous (Binary)	0	1 $\pm$ 0
Veg-Deciduous (Binary)	1	1 $\pm$ 0
Veg-GrassesFerns (Binary)	1	1 $\pm$ 0
Veg-Shrubs (Binary)	0	1 $\pm$ 0
Velocity-Avg (m/s)	2.06	0.51 $\pm$ 0.25
Velocity-Max (m/s)	2.17	0.75 $\pm$ 0.28
Width-Bankfull (m)	8.7	15.6 $\pm$ 12.8
Width-Wetted (m)	4.9	10.2 $\pm$ 7.0
XSEC-VelInstrumentDirect (Category (1-3))	3	2
XSEC-VelMethod (Category (1-3))	3	2 $\pm$ 1
<b>Landcover</b>		
Reg-Ice (%)	0.00000	0.46949 $\pm$ 1.15785
<b>Substrate Data</b>		
Dominant-1st (Category(0-9))	5	6 $\pm$ 2
Dominant-2nd (Category(0-9))	6	6 $\pm$ 2
PeriphytonCoverage (Category(1-5))	1	2 $\pm$ 1
SurroundingMaterial (Category(0-9))	4	4 $\pm$ 2
<b>Topography</b>		
SlopeLT30% (%)	75.73061	27.92073 $\pm$ 14.83033
<b>Water Chemistry</b>		
Ca (mg/L)	36.7000000	38.6142857 $\pm$ 14.8464843
General-Alkalinity (mg/L)	140.0000000	121.5944444 $\pm$ 36.7225924
General-DO (mg/L)	15.0000000	10.4922222 $\pm$ 0.8833463
General-Hardness (mg/L)	140.0000000	146.8222222 $\pm$ 41.6699011
General-pH (pH)	8.3	8.0 $\pm$ 0.6
General-SolidsTSS (mg/L)	2.0000000	0.5604289 $\pm$ 1.4627232
General-SpCond ( $\mu$ S/cm)	270.0000000	214.2437500 $\pm$ 77.1891440
General-TempWater (Degrees Celsius)	2.0000000	6.8794444 $\pm$ 1.7335020
Mg (mg/L)	11.7000000	9.8814286 $\pm$ 6.1601202
Nitrogen-TN (mg/L)	0.0600000	0.0688889 $\pm$ 0.0759171
Phosphorus-TP (mg/L)	0.0060000	0.0032778 $\pm$ 0.0061816