

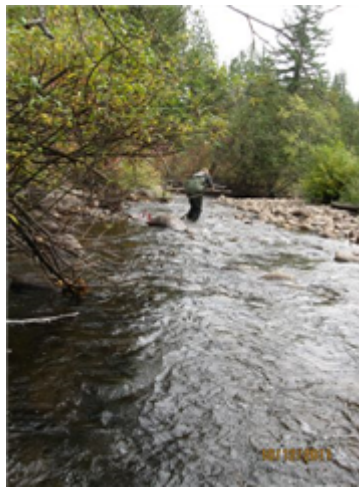
**Site Description**

<b>Study Name</b>	CBWQ-Slocan
<b>Site</b>	NJGOS01
<b>Sampling Date</b>	Oct 14 2011
<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>	49.43917 N, 117.55917 W
<b>Altitude</b>	1597
<b>Local Basin Name</b>	Goose Cr
	Columbia
<b>Stream Order</b>	4

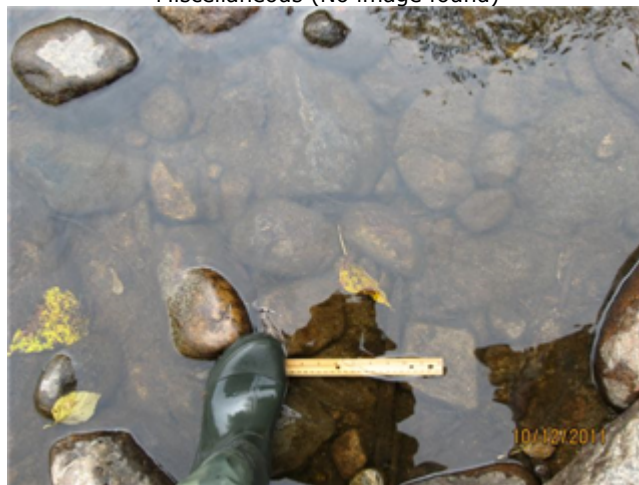


Figure 1. Location Map

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>	0.1%	91.0%	4.7%	4.1%	0.2%
<b>CABIN Assessment of NJGOS01 on Oct 14, 2011</b>	Similar to Reference				

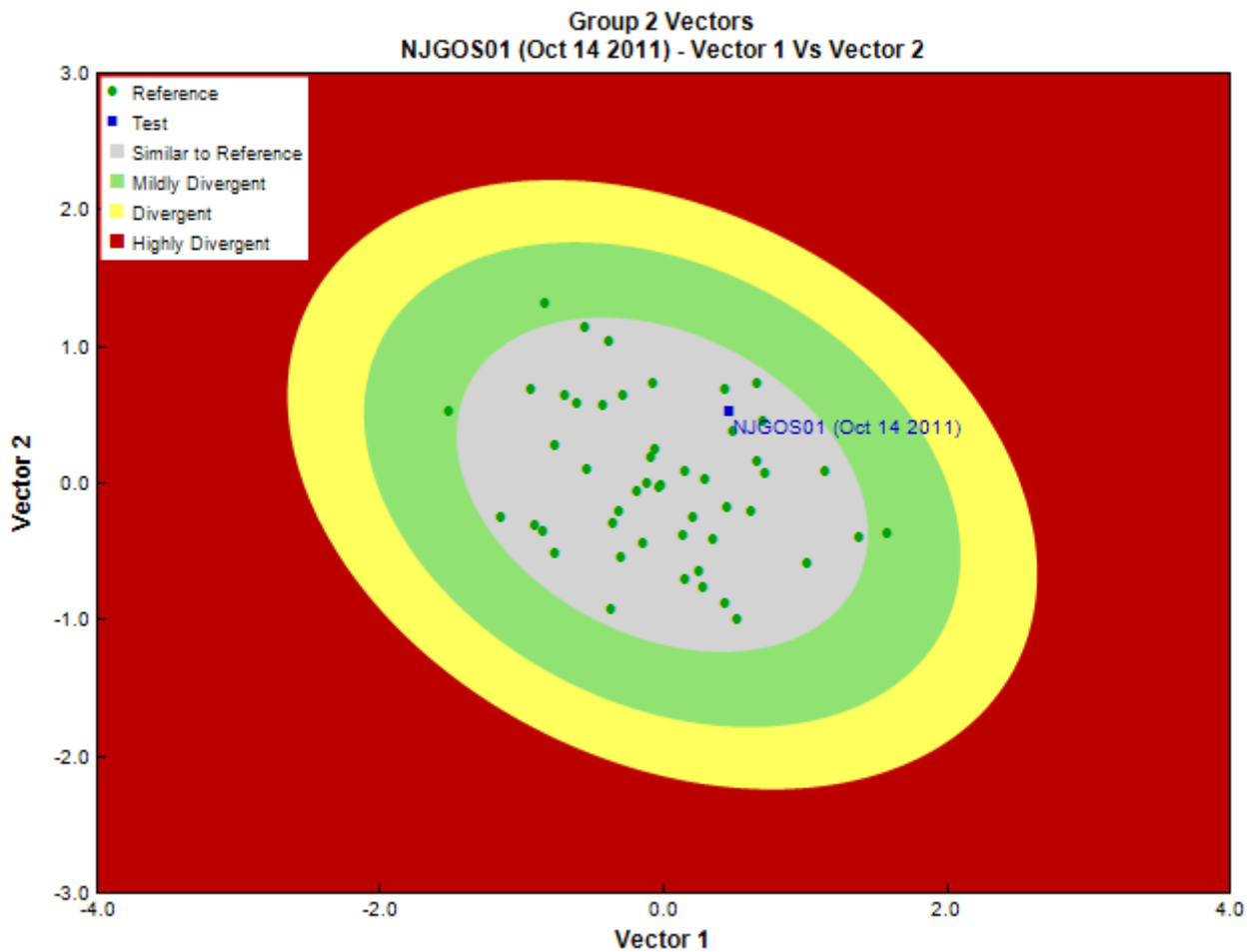


Figure 3. CABIN ordination assessment of the test site with the predicted group of reference sites. Each axis represents the relative abundance of the entire benthic invertebrate community with different organisms weighted differently on each axis.

**Sample Information**

<b>Sampling Device</b>	Kick Net
<b>Mesh Size</b>	400
<b>Sampling Time</b>	3
<b>Taxonomist</b>	Eco Analyts, EcoAnalysts
<b>Date Taxonomy Completed</b>	January 18, 2012
	Marchant Box
<b>Sub-Sample Proportion</b>	10/100

## Community Structure

Phylum	Class	Order	Family	Raw Count	Total Count
Annelida				17	170.0
Arthropoda	Arachnida			33	330.0
	Insecta	Coleoptera	Elmidae	12	120.0
		Diptera	Ceratopogonidae	3	30.0
			Chironomidae	50	500.0
			Empididae	4	40.0
			Simuliidae	5	50.0
			Tipulidae	13	130.0
		Ephemeroptera	Baetidae	95	950.0
			Ephemerellidae	21	210.0
			Heptageniidae	22	220.0
			Leptophlebiidae	2	20.0
		Plecoptera	Nemouridae	4	40.0
			Perlodidae	4	40.0
			Taeniopterygidae	1	10.0
		Trichoptera	Brachycentridae	1	10.0
			Hydropsychidae	12	120.0
			Hydroptilidae	7	70.0
			Rhyacophilidae	14	140.0
			Total	320	3,200.0

## Metrics

Name	NJGOS01	Predicted Group Reference Mean $\pm$ SD
Bray-Curtis Distance	0.38	0.5 $\pm$ 0.1
<b>Biotic Indices</b>		
Hilsenhoff Family index (North-West)	3.9	3.3 $\pm$ 0.5
Intolerant taxa	--	1.0 $\pm$ 0.0
Long-lived taxa	1.0	3.7 $\pm$ 1.9
Tolerant individuals (%)	--	1.3 $\pm$ 1.5
<b>Functional Measures</b>		
% Filterers	5.6	4.5 $\pm$ 4.6
% Gatherers	35.6	46.7 $\pm$ 12.1
% Predatores	28.8	22.1 $\pm$ 11.2
% Scrapers	45.3	53.4 $\pm$ 16.1
% Shredder	9.7	27.8 $\pm$ 12.7
No. Clinger Taxa	13.0	25.5 $\pm$ 6.3
<b>Number Of Individuals</b>		
% Chironomidae	18.5	8.7 $\pm$ 10.4
% Coleoptera	4.4	5.7 $\pm$ 8.6
% Diptera + Non-insects	27.8	15.7 $\pm$ 11.6
% Ephemeroptera	51.9	45.6 $\pm$ 14.3
% Ephemeroptera that are Baetidae	67.9	44.5 $\pm$ 20.4
% EPT Individuals	67.8	78.6 $\pm$ 14.0
% Odonata	0.0	0.0 $\pm$ 0.0
% of 2 dominant taxa	53.7	49.3 $\pm$ 10.6
% of 5 dominant taxa	74.8	76.4 $\pm$ 9.1
% of dominant taxa	35.2	30.6 $\pm$ 8.9
% Plecoptera	3.3	23.2 $\pm$ 13.6
% Tribe Tanyatarisini	--	
% Trichoptera that are Hydropsychida	35.3	27.4 $\pm$ 25.1
% Tricoptera	12.6	9.8 $\pm$ 7.1
No. EPT individuals/Chironomids+EPT Individuals	0.8	0.9 $\pm$ 0.1
Total Abundance	3200.0	3018.4 $\pm$ 2496.0
<b>Richness</b>		
Chironomidae taxa (genus level only)	1.0	1.0 $\pm$ 0.1
Coleoptera taxa	1.0	0.8 $\pm$ 0.7
Diptera taxa	5.0	3.8 $\pm$ 1.4
Ephemeroptera taxa	4.0	4.3 $\pm$ 0.6
EPT Individuals (Sum)	1830.0	2266.9 $\pm$ 1692.6
EPT taxa (no)	11.0	14.0 $\pm$ 2.7
Odonata taxa	0.0	0.0 $\pm$ 0.0

**Metrics**

Name	NJGOS01	Predicted Group Reference Mean $\pm$ SD
Pielou's Evenness	0.8	0.7 $\pm$ 0.1
Plecoptera taxa	3.0	5.3 $\pm$ 1.7
Shannon-Wiener Diversity	2.1	2.2 $\pm$ 0.3
Simpson's Diversity	0.8	0.8 $\pm$ 0.1
Simpson's Evenness	0.3	0.3 $\pm$ 0.1
Total No. of Taxa	17.0	21.8 $\pm$ 4.8
Trichoptera taxa	4.0	4.5 $\pm$ 1.5

**Frequency and Probability of Taxa Occurrence**

Reference Model Taxa	Frequency of Occurrence in Reference Sites					Probability Of Occurrence at NJGOS01
	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%	0.89
Elmidae	0%	86%	50%	50%	5%	0.82
Ephemerellidae	78%	100%	100%	100%	100%	1.00
Heptageniidae	100%	100%	100%	100%	100%	1.00
Hydropsychidae	11%	92%	78%	92%	86%	0.91
Leptophlebiidae	0%	90%	11%	33%	3%	0.84
Nemouridae	100%	100%	100%	100%	100%	1.00
Perlidae	11%	84%	33%	100%	3%	0.82
Perlodidae	78%	78%	89%	92%	81%	0.79
Rhyacophilidae	100%	92%	100%	100%	95%	0.93
Torrenticolidae	11%	86%	11%	17%	11%	0.79

**RIVPACS Ratios**

RIVPACS : Expected taxa P>0.50	17.56
RIVPACS : Observed taxa P>0.50	15.00
RIVPACS : O:E (p > 0.5)	0.85
RIVPACS : Expected taxa P>0.70	11.78
RIVPACS : Observed taxa P>0.70	10.00
RIVPACS : O:E (p > 0.7)	0.85

**Habitat Description**

Variable	NJGOS01	Predicted Group Reference Mean $\pm$ SD
<b>Bedrock Geology</b>		
Alluvium (%)	0.00000	0.35019 $\pm$ 1.57957
Intrusive (%)	93.29676	38.47891 $\pm$ 37.43781
Metamorphic (%)	6.70324	18.30802 $\pm$ 31.64814
Sedimentary (%)	0.00000	27.06556 $\pm$ 35.27962
Ultramafic (%)	0.00000	0.00401 $\pm$ 0.02776
Volcanic (%)	0.00000	15.79332 $\pm$ 25.94101
<b>Channel</b>		
Depth-Avg (cm)	34.3	18.0 $\pm$ 7.8
Depth-Max (cm)	46.0	23.9 $\pm$ 10.9
Macrophyte (PercentRange)	1	0 $\pm$ 1
Reach-%CanopyCoverage (PercentRange)	2.00	2.37 $\pm$ 1.20
Reach-Pools (Binary)	0	1 $\pm$ 0
Reach-Rapids (Binary)	0	0 $\pm$ 0
Reach-Riffles (Binary)	1	1 $\pm$ 0
Reach-StraightRun (Binary)	1	1 $\pm$ 0
Veg-Coniferous (Binary)	1	1 $\pm$ 0
Veg-Deciduous (Binary)	1	1 $\pm$ 0
Veg-GrassesFerns (Binary)	1	1 $\pm$ 0
Veg-Shrubs (Binary)	1	1 $\pm$ 0
Velocity-Avg (m/s)	0.30	0.35 $\pm$ 0.17
Velocity-Max (m/s)	0.63	0.49 $\pm$ 0.22
Width-Bankfull (m)	15.7	10.4 $\pm$ 7.4

## Habitat Description

Variable	NJGOS01	Predicted Group Reference Mean $\pm$ SD
Width-Wetted (m)	9.9	5.6 $\pm$ 3.7
XSEC-VelMethod (Category (1-3))	1	2 $\pm$ 1
<b>Climate</b>		
Precip01_JAN (mm)	126.00000	81.47047 $\pm$ 35.20275
Precip02_FEB (mm)	107.00000	65.66698 $\pm$ 29.19106
Precip03_MAR (mm)	101.00000	58.35127 $\pm$ 26.58828
Precip04_APR (mm)	126.00000	81.47047 $\pm$ 35.20275
Precip05_MAY (mm)	92.00000	63.34988 $\pm$ 14.97909
Precip06_JUN (mm)	96.00000	69.14147 $\pm$ 14.59973
Precip07_JUL (mm)	72.00000	54.44728 $\pm$ 11.94186
Precip08_AUG (mm)	68.00000	51.57730 $\pm$ 11.68151
Precip09_SEP (mm)	66.00000	47.67378 $\pm$ 13.13706
Precip10_OCT (mm)	78.00000	52.16713 $\pm$ 21.59297
Precip11_NOV (mm)	125.00000	81.75742 $\pm$ 35.32603
Precip12_DEC (mm)	141.00000	90.32297 $\pm$ 36.08654
PrecipTotal_ANNUAL (mm)	1158.00000	772.44527 $\pm$ 255.72743
Temp01_JANMax (Degrees Celsius)	-4.00000	-3.37090 $\pm$ 1.49863
Temp01_JANmin (Degrees Celsius)	-10.00000	-10.49459 $\pm$ 1.79438
Temp02_FEBmax (Degrees Celsius)	-2.00000	-0.57452 $\pm$ 1.44723
Temp02_FEBmin (Degrees Celsius)	-9.00000	-8.42703 $\pm$ 1.64036
Temp03_MARmax (Degrees Celsius)	1.00000	3.12925 $\pm$ 2.32321
Temp03_MARmin (Degrees Celsius)	-6.00000	-5.50804 $\pm$ 1.70878
Temp04_APRmax (Degrees Celsius)	6.00000	7.96831 $\pm$ 2.90525
Temp04_APRmin (Degrees Celsius)	-3.00000	-2.11456 $\pm$ 1.53933
Temp05_MAYmax (Degrees Celsius)	11.00000	12.59416 $\pm$ 3.03418
Temp05_MAYmin (Degrees Celsius)	0.00000	1.10761 $\pm$ 1.48840
Temp06_JUNMax (Degrees Celsius)	14.00000	16.26020 $\pm$ 3.04103
Temp06_JUNMin (Degrees Celsius)	4.00000	4.34060 $\pm$ 1.59755
Temp07_JULmax (Degrees Celsius)	18.00000	19.99784 $\pm$ 2.98893
Temp07_JULmin (Degrees Celsius)	7.00000	6.68707 $\pm$ 1.50784
Temp08_AUGmax (Degrees Celsius)	18.00000	19.88203 $\pm$ 2.98805
Temp08_AUGmin (Degrees Celsius)	6.00000	6.60034 $\pm$ 1.49681
Temp09_SEPmax (Degrees Celsius)	13.00000	15.00959 $\pm$ 2.72415
Temp09_SEPmin (Degrees Celsius)	2.00000	2.53046 $\pm$ 1.35863
Temp10_OCTmax (Degrees Celsius)	6.00000	7.86008 $\pm$ 2.25227
Temp10_OCTmin (Degrees Celsius)	-1.00000	-1.03881 $\pm$ 1.02336
Temp11_NOVmax (Degrees Celsius)	-1.00000	0.06401 $\pm$ 1.60290
Temp11_NOVmin (Degrees Celsius)	-6.00000	-5.88590 $\pm$ 1.72037
Temp12_DECmax (Degrees Celsius)	-5.00000	-3.51268 $\pm$ 1.54963
Temp12_DECmin (Degrees Celsius)	-10.00000	-9.74443 $\pm$ 1.75768
TempANNUALmax (Degrees Celsius)	6.00000	7.66280 $\pm$ 2.34917
TempANNUALmean (Degrees Celsius)	2.00000	2.66373 $\pm$ 1.75457
TempANNUALmin (Degrees Celsius)	-2.00000	-1.55489 $\pm$ 1.29635
<b>Hydrology</b>		
Drainage-Area (km <sup>2</sup> )	84.91718	120.15520 $\pm$ 156.34507
Perimeter (Km)	61.63105	73.54528 $\pm$ 45.71924
StreamDensity (m/km <sup>2</sup> )	1825.13229	1876.24064 $\pm$ 506.52423
StreamLength (m)	154985.09	237532.09 $\pm$ 321793.78
<b>Landcover</b>		
Natl-AnnCrops (%)	0.00000	0.00068 $\pm$ 0.00479
Natl-Barren (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-BroadleafDense (%)	0.00000	0.00288 $\pm$ 0.01695
Natl-BroadleafOpen (%)	1.17692	3.22025 $\pm$ 3.93337
Natl-BroadleafSparse (%)	0.00000	0.05623 $\pm$ 0.18673
Natl-Coniferous (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-ConiferousDense (%)	0.70968	9.84810 $\pm$ 8.09809
Natl-ConiferousOpen (%)	74.96221	60.67486 $\pm$ 15.67333
Natl-ConiferousSparse (%)	0.00859	0.63143 $\pm$ 0.83590
Natl-Deciduous (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-Developed (%)	0.00000	0.00276 $\pm$ 0.01063
Natl-ExposedLand (%)	6.75019	4.04930 $\pm$ 6.04778
Natl-Grassland (%)	0.00000	0.94826 $\pm$ 3.07450

## Habitat Description

Variable	NJGOS01	Predicted Group Reference Mean $\pm$ SD
Natl-Herb (%)	3.43976	6.97580 $\pm$ 4.84794
Natl-MixedForest (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-MixedwoodDense (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-MixedwoodOpen (%)	0.00000	2.53336 $\pm$ 4.19462
Natl-MixedwoodSparse (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-PerennCropsPast (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-Rock/Rubble (%)	0.00000	0.80304 $\pm$ 4.44694
Natl-Shrubland (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-ShrubLow (%)	9.65021	6.02525 $\pm$ 3.72888
Natl-ShrubTall (%)	0.00000	0.11588 $\pm$ 0.81115
Natl-SnowIce (%)	0.00000	0.16875 $\pm$ 0.99747
Natl-Water (%)	0.02023	0.42594 $\pm$ 0.89498
Natl-Wetland (%)	0.00000	0.00000 $\pm$ 0.00000
Natl-WetlandHerb (%)	0.05908	0.03236 $\pm$ 0.06982
Natl-WetlandShrub (%)	0.03976	0.05636 $\pm$ 0.09937
Natl-WetlandTreed (%)	0.00000	0.10971 $\pm$ 0.21983
Reg-Ice (%)	0.00000	0.00000 $\pm$ 0.00000
<b>Substrate Data</b>		
%Bedrock (%)	0	0 $\pm$ 1
%Boulder (%)	2	10 $\pm$ 9
%Cobble (%)	76	56 $\pm$ 12
%Gravel (%)	2	5 $\pm$ 5
%Pebble (%)	20	27 $\pm$ 13
%Sand (%)	0	1 $\pm$ 3
%Silt+Clay (%)	0	1 $\pm$ 1
D50 (cm)	9.45	13.08 $\pm$ 14.78
Dg (cm)	9.2	10.8 $\pm$ 15.3
Dominant-1st (Category(0-9))	6	7 $\pm$ 1
Dominant-2nd (Category(0-9))	7	6 $\pm$ 1
Embeddedness (Category(1-5))	4	4 $\pm$ 1
SurroundingMaterial (Category(0-9))	2	3 $\pm$ 1
<b>Topography</b>		
ElevationMax (m)	2265.00000	2134.20408 $\pm$ 321.45042
ElevationMin (m)	477.00000	753.95918 $\pm$ 280.87289
ElevationStdev (m)	461.59479	264.36445 $\pm$ 85.50507
Reg-SlopeLT30% (%)	65.03000	56.46157 $\pm$ 21.18067
Slope30-50% (%)	24.67968	26.07460 $\pm$ 7.88363
Slope50-60% (%)	4.88055	7.33846 $\pm$ 3.98933
SlopeAvg (%)	26.18491	33.03264 $\pm$ 10.18224
SlopeGT60% (%)	4.22110	11.60303 $\pm$ 10.29853
SlopeLT30% (%)	66.21867	54.98391 $\pm$ 18.66092
SlopeMax (%)	126.77668	187.01305 $\pm$ 78.76238
SlopeMin (%)	0.00000	0.05345 $\pm$ 0.18372
SlopeStdev (%)	16.33763	19.94845 $\pm$ 5.16411
<b>Water Chemistry</b>		
General-Alkalinity (mg/L)	37.9000000	74.2090909 $\pm$ 49.2896792
General-DO (mg/L)	10.0000000	10.7197872 $\pm$ 0.8550553
General-pH (pH)	6.3	7.9 $\pm$ 0.4
General-SpCond ( $\mu$ S/cm)	71.5000000	143.9481481 $\pm$ 95.8528053
General-TempAir (Degrees Celsius)	10.0	16.9 $\pm$ 5.3
General-TempWater (Degrees Celsius)	8.0000000	9.5837917 $\pm$ 2.8075507
General-Turbidity (NTU)	0.3500000	0.3928571 $\pm$ 0.4025218
Nitrogen-NO2 (mg/L)	0.0025000	0.0061486 $\pm$ 0.0067934
Nitrogen-NO2+NO3 (mg/L)	0.1470000	0.0178069 $\pm$ 0.0412372
Nitrogen-NO3 (mg/L)	0.1470000	0.0258108 $\pm$ 0.0256957
Phosphorus-OrthoP (mg/L)	0.0025000	0.0078875 $\pm$ 0.0114003