

NRSA-CA

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Predictor Variable Summaries

Summary statistics for all predictor variables used in the BRT analyses. Statistics include: N, mean, standard deviation, standard error, and 95% confidence intervals.

Summary of Predictors for the CUS

Calculating means and measures of variation (e.g. standard errors, confidence intervals) for predictor variables at the level of the CUS.

Table 1: Summary of NO3 for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	0.7143026	2.133234	0.0695414	0	6.803095

Table 2: Summary of NH4 for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	0.0643716	0.307853	0.0100357	0.001	0.411

Table 3: Summary of total P for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	180.0069	660.7856	21.54099	3.2594	1040.178

Table 4: Summary of pH for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	7.852604	0.6239329	0.0203396	6.52	8.655

Table 5: Summary of conductivity for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	526.2932	755.4457	24.62683	23.4	2554.42

Table 6: Summary of DOC for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	4.846419	6.419545	0.2092712	0.57	18.09

Table 7: Summary of LWD for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	3.779326	9.73958	0.3175012	0	28.45387

Table 8: Summary of natural cover for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	0.3799285	0.3099499	0.0101041	0.0181818	1.152273

Table 9: Summary of algal cover for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	0.0435796	0.1111449	0.0036232	0	0.4284091

Table 10: Summary of percent forested land cover for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	40.88989	32.17892	1.049003	0.0545	96.59

Table 11: Summary of percent agricultural land cover for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	23.73926	29.78161	0.9708528	0	90.2695

Table 12: Summary of percent urban land cover for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	6.757966	13.87609	0.4523476	0	65.6215

Table 13: Summary of percent impervious land cover for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	1.410535	4.401467	0.1434837	0	13.707

Table 14: Summary of site latitude for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	40.14744	4.600089	0.1499586	30.95559	47.94436

Table 15: Summary of site longitude for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	-94.85355	13.87972	0.452466	-122.5858	-72.37849

Table 16: Summary of basin area for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	40.88989	32.17892	1.049003	0.0545	96.59

Table 17: Summary of mean annual flow for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	1.8712e-11	5.541e-11	1.806e-12	1.49e-13	1.39487e-10

Table 18: Summary of site centrality for the CUS.

CUS	N	mean	sd	se	LL	UL
CUS	941	622.4488	214.2755	6.985181	318.1416	1131.493

Summary of Predictors for the Ecoregions

Calculating means and measures of variation (e.g. standard errors, confidence intervals) for predictor variables for each of the nine ecoregions.

Table 19: Summary of NO3 for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	0.3339490	0.6067733	0.0619285	0.0000000	1.7215000
NAP	93	0.3090409	0.6466262	0.0670520	0.0031410	2.5633550
NPL	88	0.1214956	0.2378233	0.0253520	0.0000000	0.8881508
SAP	174	0.7611177	2.2782515	0.1727138	0.0010932	5.9198702
SPL	90	1.0979874	3.8554736	0.4064026	0.0000000	6.7989212
TPL	108	2.5187573	3.3014749	0.3176846	0.0000000	10.4591435
UMW	86	0.8231622	1.7701174	0.1908767	0.0000000	6.5047913
WMT	122	0.0478126	0.1252038	0.0113354	0.0000000	0.3253447
XER	84	0.2471789	0.7360419	0.0803088	0.0000000	1.7242382

Table 20: Summary of NH4 for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	0.2059125	0.7427262	0.0758042	0.005375	1.171375
NAP	93	0.0395914	0.1022003	0.0105977	0.001300	0.253100
NPL	88	0.0328500	0.0621343	0.0066235	0.006000	0.090200
SAP	174	0.0374603	0.0829711	0.0062900	0.003000	0.223950
SPL	90	0.0911222	0.4025945	0.0424372	0.004225	0.299050
TPL	108	0.1183222	0.3835099	0.0369033	0.006675	1.114650
UMW	86	0.0499302	0.0907166	0.0097822	0.005125	0.419000
WMT	122	0.0109197	0.0329860	0.0029864	0.000000	0.029800
XER	84	0.0132048	0.0220290	0.0024036	0.001075	0.054025

Table 21: Summary of total P for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	204.14085	342.1258	34.91807	13.845775	1241.2238
NAP	93	58.10709	116.7998	12.11158	2.229300	287.2965
NPL	88	203.00203	416.5658	44.40607	2.382918	1092.5929
SAP	174	83.42188	196.3003	14.88149	3.374048	559.0836
SPL	90	508.40123	1486.3076	156.67057	5.845925	4634.6305
TPL	108	237.85171	500.4056	48.15155	27.069490	879.4885
UMW	86	150.53829	381.4865	41.13675	12.970050	769.0657
WMT	122	131.08871	955.3988	86.49775	2.309375	190.7246
XER	84	138.35984	444.4096	48.48906	2.894938	390.3263

Table 22: Summary of pH for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	7.115938	0.7933945	0.0809755	4.81375	8.16250
NAP	93	7.595269	0.5985046	0.0620620	6.14200	8.39800
NPL	88	8.380909	0.3903627	0.0416128	7.85000	9.46300
SAP	174	7.595402	0.5816357	0.0440937	6.53650	8.38375
SPL	90	8.148778	0.2840194	0.0299383	7.43625	8.60550
TPL	108	8.099537	0.4930799	0.0474466	7.31375	8.51325
UMW	86	7.928605	0.4616216	0.0497779	6.64125	8.40750
WMT	122	7.868115	0.4097678	0.0370986	7.19075	8.49900
XER	84	8.223571	0.3270630	0.0356855	7.46900	8.65550

Table 23: Summary of conductivity for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	194.8413	243.4230	24.84426	18.93500	637.4262
NAP	93	276.3367	330.4750	34.26866	23.98900	1194.3080
NPL	88	1635.4257	1287.4220	137.23965	160.91925	4509.9348
SAP	174	254.3991	291.4036	22.09125	18.27875	976.2442
SPL	90	952.7967	1169.3555	123.26089	181.17575	3444.2258
TPL	108	679.9115	391.5767	37.67948	253.76225	1772.1650
UMW	86	375.5078	239.2639	25.80049	46.64125	792.9362
WMT	122	198.3884	232.5070	21.05019	21.74925	834.8487
XER	84	559.2343	701.2795	76.51586	46.70025	2810.0865

Table 24: Summary of DOC for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	8.179167	9.956899	1.0162217	0.83750	29.52875
NAP	93	4.086882	2.938196	0.3046767	0.80600	12.02700
NPL	88	8.238182	6.103676	0.6506541	0.91975	17.76275
SAP	174	2.388678	1.851976	0.1403979	0.46000	7.59350
SPL	90	4.555000	2.882866	0.3038807	0.90575	11.68300
TPL	108	5.545463	8.649752	0.8323228	1.33050	15.25150
UMW	86	9.411046	10.113992	1.0906198	0.90500	41.05125
WMT	122	1.921393	1.957528	0.1772263	0.36050	6.40700
XER	84	2.404643	1.578555	0.1722344	0.68300	5.65100

Table 25: Summary of LWD for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	2.6358939	5.262935	0.5371461	0	19.080989
NAP	93	5.2713808	8.338701	0.8646830	0	30.439716
NPL	88	0.8248073	2.117915	0.2257705	0	7.437554
SAP	174	4.8455392	13.293985	1.0078144	0	32.941563
SPL	90	2.5027876	8.375818	0.8828887	0	15.959002
TPL	108	3.8776190	10.108355	0.9726769	0	30.577241
UMW	86	3.5150455	5.771537	0.6223608	0	21.693119
WMT	122	6.7810157	14.520647	1.3146376	0	51.271035
XER	84	1.4731288	2.810430	0.3066430	0	8.382023

Table 26: Summary of natural cover for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	0.3826609	0.3120238	0.0318458	0.0181818	1.2443182
NAP	93	0.5485961	0.3432974	0.0355983	0.1327273	1.3081818
NPL	88	0.2580647	0.2743399	0.0292447	0.0090909	1.0391477
SAP	174	0.3728849	0.2076823	0.0157444	0.0772727	0.9054545
SPL	90	0.2615105	0.2243407	0.0236476	0.0010227	0.8450244
TPL	108	0.2321212	0.1822830	0.0175402	0.0000000	0.6984091
UMW	86	0.2921622	0.1946115	0.0209855	0.0278409	0.7760511
WMT	122	0.5584572	0.4047596	0.0366452	0.0773864	1.6628409
XER	84	0.4798025	0.3826669	0.0417524	0.0188636	1.5091477

Table 27: Summary of algal cover for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	0.0375568	0.1270012	0.0129620	0	0.5426136
NAP	93	0.0394958	0.0937027	0.0097165	0	0.3959091
NPL	88	0.0739308	0.1571884	0.0167563	0	0.5511364
SAP	174	0.0147696	0.0428653	0.0032496	0	0.1477273
SPL	90	0.0710869	0.1498176	0.0157922	0	0.5571023
TPL	108	0.0411406	0.1041726	0.0100240	0	0.3247159
UMW	86	0.0407329	0.0976834	0.0105335	0	0.4022727
WMT	122	0.0425161	0.0992750	0.0089879	0	0.4500000
XER	84	0.0609889	0.1259428	0.0137415	0	0.3968040

Table 28: Summary of percent forested land cover for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	39.304552	25.91399	2.644835	0.016125	86.94400
NAP	93	65.225860	27.21323	2.821880	9.631500	98.39740
NPL	88	11.233420	18.86328	2.010833	0.014875	64.33482
SAP	174	62.224851	25.82362	1.957683	10.402225	98.46128
SPL	90	14.783678	18.77138	1.978677	0.037725	58.30720
TPL	108	9.944898	15.76351	1.516844	0.000000	60.54270
UMW	86	38.203384	24.41971	2.633245	2.348500	88.99638
WMT	122	67.541738	21.35925	1.933775	23.839725	96.84597
XER	84	34.432321	27.72642	3.025201	0.040050	83.98108

Table 29: Summary of percent agricultural land cover for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	25.6377917	26.7893675	2.734178	0.000000	86.13038
NAP	93	15.9779462	22.3972153	2.322483	0.000000	73.05240
NPL	88	19.4692955	23.1288499	2.465544	0.000000	76.86335
SAP	174	20.1622471	21.7577050	1.649447	0.000000	78.50995
SPL	90	27.7614889	28.0906993	2.961020	0.032000	88.42950
TPL	108	71.9685741	24.8941514	2.395441	1.969725	94.83978
UMW	86	31.6836512	29.8033368	3.213776	0.000000	84.13425
WMT	122	0.2673689	0.9976721	0.090325	0.000000	3.37455
XER	84	1.6831548	5.8559083	0.638932	0.000000	13.10027

Table 30: Summary of percent urban land cover for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	11.930240	20.221046	2.0638018	1.703875	84.407875
NAP	93	9.046032	15.305661	1.5871231	0.000000	62.096500
NPL	88	1.775398	1.509976	0.1609640	0.000000	4.132900
SAP	174	11.634310	19.260582	1.4601410	0.000000	80.451975
SPL	90	4.392289	4.882396	0.5146498	0.134975	16.087075
TPL	108	8.132426	12.989078	1.2498746	1.945375	38.483425
UMW	86	7.065047	14.593473	1.5736546	0.367625	28.563125
WMT	122	1.389279	2.634350	0.2385029	0.000000	6.316175
XER	84	1.682893	4.004181	0.4368920	0.000000	7.912125

Table 31: Summary of percent impervious land cover for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	2.8649688	7.4895614	0.7644002	0.057500	29.086500
NAP	93	2.0567204	4.3946835	0.4557075	0.000000	15.337800
NPL	88	0.2848295	0.1904687	0.0203040	0.017100	0.764950
SAP	174	2.3563678	5.6261474	0.4265171	0.000000	20.419725
SPL	90	0.6892556	1.5272529	0.1609866	0.054125	5.821300
TPL	108	1.5661481	3.8282185	0.3683705	0.159775	10.542925
UMW	86	1.5162791	5.8587297	0.6317631	0.047125	9.992125
WMT	122	0.2356148	0.5055348	0.0457690	0.000000	1.256850
XER	84	0.4238810	1.0512012	0.1146955	0.000000	2.089625

Table 32: Summary of site latitude for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	33.82891	3.377806	0.3447458	28.25695	39.33775
NAP	93	42.84786	1.660083	0.1721426	40.49672	46.87420
NPL	88	45.55381	1.728262	0.1842333	42.81949	48.70151
SAP	174	36.81545	2.123139	0.1609548	33.17366	40.83253
SPL	90	37.12002	3.706606	0.3907106	30.33800	42.44558
TPL	108	41.27380	2.740069	0.2636632	37.12520	48.18187
UMW	86	44.91145	1.713853	0.1848095	42.34253	48.32381
WMT	122	42.03498	4.126090	0.3735586	33.67793	48.34485
XER	84	39.79368	3.113450	0.3397052	33.32895	46.01297

Table 33: Summary of site longitude for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	-86.14273	6.915812	0.7058421	-95.70375	-75.33429
NAP	93	-74.96810	3.902712	0.4046924	-82.46690	-68.93948
NPL	88	-104.36066	3.831507	0.4084400	-111.99375	-98.92691
SAP	174	-83.81619	5.544183	0.4203034	-94.16352	-75.30215
SPL	90	-99.87741	2.837282	0.2990758	-105.09343	-96.37008
TPL	108	-92.23368	4.377579	0.4212327	-98.04799	-82.94661
UMW	86	-89.63437	3.246742	0.3501052	-94.51570	-83.21417
WMT	122	-114.51683	6.458046	0.5846840	-124.07929	-105.12993
XER	84	-114.49862	4.504292	0.4914586	-122.62952	-106.08964

Table 34: Summary of basin area for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	77.15287	265.4121	27.08851	0.912000	618.7905
NAP	93	82.75833	230.2890	23.87986	0.444900	690.2942
NPL	88	992.32689	1242.5382	132.45502	31.527775	4189.7695
SAP	174	89.83683	236.4888	17.92817	0.492475	807.7772
SPL	90	3064.39511	9203.9404	970.18051	9.509000	18181.4274
TPL	108	475.93217	1692.3939	162.85068	1.517450	3633.1614
UMW	86	243.80506	567.9282	61.24127	1.299250	2560.7009
WMT	122	238.38459	565.6428	51.21090	2.119625	1909.4898
XER	84	2823.96571	21301.4622	2324.18007	2.086250	4779.3223

Table 35: Summary of mean annual flow for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	1.2546e-11	3.92040e-11	4.0010e-12	2.71e-13	1.01556e-10
NAP	93	1.8735e-11	4.92930e-11	5.1110e-12	3.08e-13	1.13846e-10
NPL	88	1.2051e-11	3.17600e-11	3.3860e-12	1.01e-13	5.98490e-11
SAP	174	1.9376e-11	5.51500e-11	4.1810e-12	1.90e-13	1.52919e-10
SPL	90	4.1264e-11	1.23603e-10	1.3029e-11	1.01e-13	2.41829e-10
TPL	108	1.1378e-11	2.04460e-11	1.9670e-12	3.00e-14	7.15110e-11
UMW	86	1.9031e-11	3.33840e-11	3.6000e-12	4.00e-13	1.21316e-10
WMT	122	1.9125e-11	4.45520e-11	4.0340e-12	2.54e-13	1.52705e-10
XER	84	1.5671e-11	3.52650e-11	3.8480e-12	8.50e-14	9.59500e-11

Table 36: Summary of site centrality for each ecoregion.

ecoregion	N	mean	sd	se	LL	UL
CPL	96	625.0323	166.6011	17.00365	340.4650	974.9484
NAP	93	568.2456	203.7035	21.12307	326.6422	980.1257
NPL	88	488.6717	160.0801	17.06459	283.9612	857.2271
SAP	174	620.0584	209.9580	15.91687	318.1070	1008.8999
SPL	90	637.4603	235.6118	24.83567	342.6723	1156.4432
TPL	108	659.4304	221.4588	21.30988	314.9216	1054.5550
UMW	86	765.3063	240.6588	25.95091	365.9471	1212.9221
WMT	122	595.6190	189.7087	17.17542	326.3848	1073.5336
XER	84	653.6826	203.5973	22.21428	340.7970	1140.8644