

Variable	Response (DCW, 9 months)		Response (CCW, 9 months)	
	Spearman rank correlation	Increase in node purity	Spearman rank correlation	Increase in node purity
Autocovariate	0.79*	0.081	0.53*	0.108
Proportion (%) DCW is of total surface water	0.42*	0.012	-0.11	0.334 ¹
Stream density	-0.64*	0.036 ¹	-0.15	0.060
Wetland density	0.52*	0.048 ¹	0.27	0.057 ¹
Wetland areal abundance	0.51*	0.017 ¹	0.48*	0.855 ¹
Portion of total water from large features	-0.01	0.004	0.30	0.556 ¹
Moisture index (average)	-0.03	0.005	-0.28	0.053 ¹
Precipitation (average)	-0.10	0.008 ¹	-0.33*	0.039 ¹
PET (average)	-0.06	0.011 ¹	-0.13	0.034
Available water storage (0–150 cm)	0.27	0.007	-0.01	0.061
Annual minimum depth to water table	0.56*	0.027 ¹	0.09	0.046
K_{sat}	0.04	0.004	-0.08	0.070 ¹
Slope gradient, weighted average	-0.59*	0.025 ¹	-0.22	0.072
Agricultural land cover	0.31	0.005	-0.05	0.035
Percent drained by anthropogenic means	0.22	0.004	-0.04	0.020

¹ Variables selected by the random forest model selection process, using the R package rUtilities, when the autocovariate was not included.

* Significant correlations ($p < 0.05$).