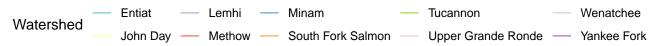
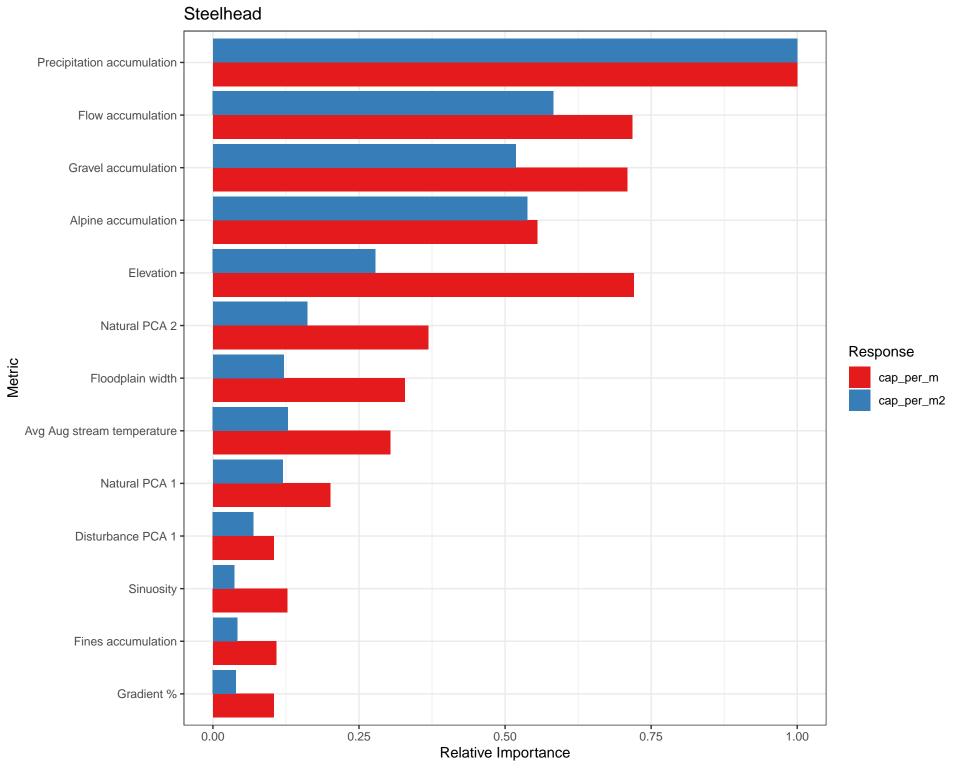


# Chinook Natural PCA 2 Precipitation accumulation Alpine accumulation Elevation 0.0020 0.0023 0.0024 0.001989 0.0023 $0.0021 \cdot$ $0.0019 \cdot$ 0.0022 0.0019 -0.001986 0.0018 -0.0021 0.0017 0.0017 0.001983 0.0020 1000 1500 2000 500 0e+00 2e+10 4e+10 6e+10 8e+10 250006000000500000000000002500 0 Natural PCA 1 Avg Aug stream temperature Flow accumulation Gravel accumulation 0.0020020 0.00210 -0.0022 0.0020015 0.00189 -0.0020010 0.00205 -0.00188 0.0021 0.0020005 Dediction of the control of the cont 0.00200 -0.0020000 0.0020 0.00195 0.0019995 0.0e+005.0e+071.0e+081.5e+08 15 20 0.0e+00 5.0e+07 1.0e+08 1.5e+08 10 Floodplain width Disturbance PCA 1 Sinuosity Gradient % 0.00211 0.00200 0.00230.00209 0.00195 0.00203 0.0022 0.00207 0.00190 -0.00202 0.00185 -0.00205 0.0021 0.00201 0.00180 0.00203 1.0 1.5 1000 2000 3000 -2 2.0 2.5 Fines accumulation 0.00198 -0.00197 0.00196 0e+00 2e+06 4e+06 6e+06 Covariate Value

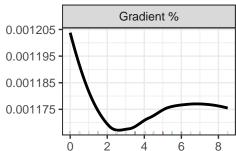


## Chinook Alpine accumulation Precipitation accumulation Natural PCA 2 Elevation 0.00014 0.00020 -0.00017 0.00016 -0.00013 0.00018 -0.00015 0.00014 -0.00016 0.00012 -0.00013 0.00012 -0.00014 0.00011 0.00011 1000 1500 2000 0e+002e+104e+106e+108e+10 0 Avg Aug stream temperature Natural PCA 1 Flow accumulation Gravel accumulation 0.000150 -0.000155 0.00016 0.00019 0.000154 0.00018 0.000148 -0.00015 0.000153 -0.00017 0.000152 -0.000146 -0.00016 Prediction per meter<sup>2</sup> 0.00014 0.000151 -0.00015 0.000144 0.0001500.00014 0.00013 0.0e+005.0e+071.0e+081.5e+08 0.0e+00 5.0e+07 1.0e+08 1.5e+08 20 10 15 Disturbance PCA 1 Floodplain width Sinuosity Fines accumulation 0.000150 0.000154 0.0001459 0.000165 -0.000145 -0.000152 -0.0001458 0.000160 -0.000140 -0.0001457 0.000150 -0.000135 -0.000155 0.0001456 0.000148 0.000130 -0.0001455 0.000150 0.000125 1000 2000 3000 1.0 1.5 2.0 2.5 0e+00 2e+06 4e+06 6e+06 Gradient % 0.000160 -0.000156 -0.000152 0.000148 Covariate Value

# Watershed — Entiat — Lemhi — Minam — Tucannon — Wenatchee — John Day — Methow — South Fork Salmon — Upper Grande Ronde — Yankee Fork



#### Steelhead Precipitation accumulation Elevation Flow accumulation Gravel accumulation 0.00145 0.00120 0.0013 -0.00115 -0.00140 0.00115 -0.00110 0.00135 0.0012 0.00130 0.00110 -0.00105 0.0011 0.00125 0.00100 0.00105 0.00120 0e+00 2e+10 4e+10 6e+10 8e+10 0.0e+00 5.0e+07 1.0e+08 1.5e+08 0.0e+005.0e+071.0e+081.5e+08 500 1000 1500 2000 Natural PCA 2 Floodplain width Avg Aug stream temperature Alpine accumulation 0.00130 -0.00140 0.0011 0.00135 0.00125 0.001200 0.00130 0.0010 0.00120 -0.00125 0.001195 0.00120 0.0009 0.00115 0.00115 15 2 1000 2000 3000 20 Natural PCA 1 Sinuosity Disturbance PCA 1 Fines accumulation 0.00127 0.00121 -0.00130 0.00119 0.00125 -0.00120 0.00125 0.00118 - $0.00123 \cdot$ 0.00119 0.00120 0.00117 0.00121 0.00118 0.00115 0.00116 0.00119 2.0 -3 1.0 1.5 2.5 0e+00 2e+06 4e+06 6e+06 Gradient %



Prediction per meter

# Covariate Value



### Steelhead Alpine accumulation Precipitation accumulation Flow accumulation Gravel accumulation 0.00014 -0.000105 9e-05 -0.000104 0.00012 -0.000100 -8e-05 0.000100 0.00010 -7e-05 0.0000950.000096 0.00008 6e-05 0.000092 0.000090 0e+00 2e+10 4e+10 6e+10 8e+10 0.0e+005.0e+071.0e+081.5e+08 0.0e+00 5.0e+07 1.0e+08 1.5e+08 Floodplain width Elevation Natural PCA 2 Avg Aug stream temperature 0.000115 0.00013 -9.9e-05 -0.000110 -0.00012 -0.00011 0.000105 9.8e-05 0.000100 -0.00011 -Prediction per meter<sup>2</sup> 9.7e-05 0.00010 -0.000095 -0.00010 -0.000090 -9.6e-05 1000 1500 2000 2000 0 10 15 20 1000 3000 Natural PCA 1 Disturbance PCA 1 Gradient % Fines accumulation 9.60e-05 9.85e-05 9.9e-05 0.00011 9.58e-05 9.80e-05 9.8e-05 -0.00010 -9.56e-05 9.75e-05 9.54e-05 0.00009 9.7e-05 9.52e-05 9.70e-05 -2 0 0e+00 2e+06 4e+06 6e+06 -3Sinuosity 9.95e-05 9.90e-05 9.85e-05 -9.80e-05 9.75e-05 2.0 2.5 1.0 1.5 Covariate Value

