

Figure 1: Map of lake locations and hydrologic (HUC) regions.

Table 1: Model selection diagnostics

	response	term	$R^2$	elpd_diff
5	tp	corn	0.64	0.00
4	tp	soybeans	0.64	-0.41
3	tp	pasture	0.64	-0.45
2	tp	forest	0.64	-0.85
1	tp	ag	0.64	-1.31
9	tn	corn	0.57	0.00
6	tn	ag	0.56	-3.10
7	tn	forest	0.52	-4.21
10	tn	soybeans	0.52	-16.77
8	tn	pasture	0.52	-17.41

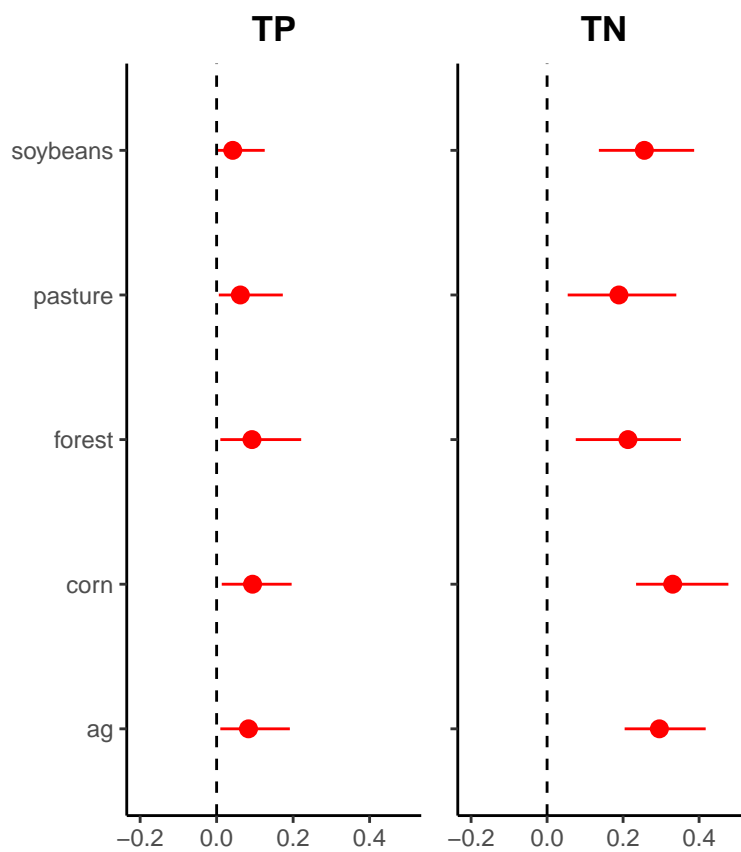


Figure 2: Population level effect of watershed land use on lake TP and TN.

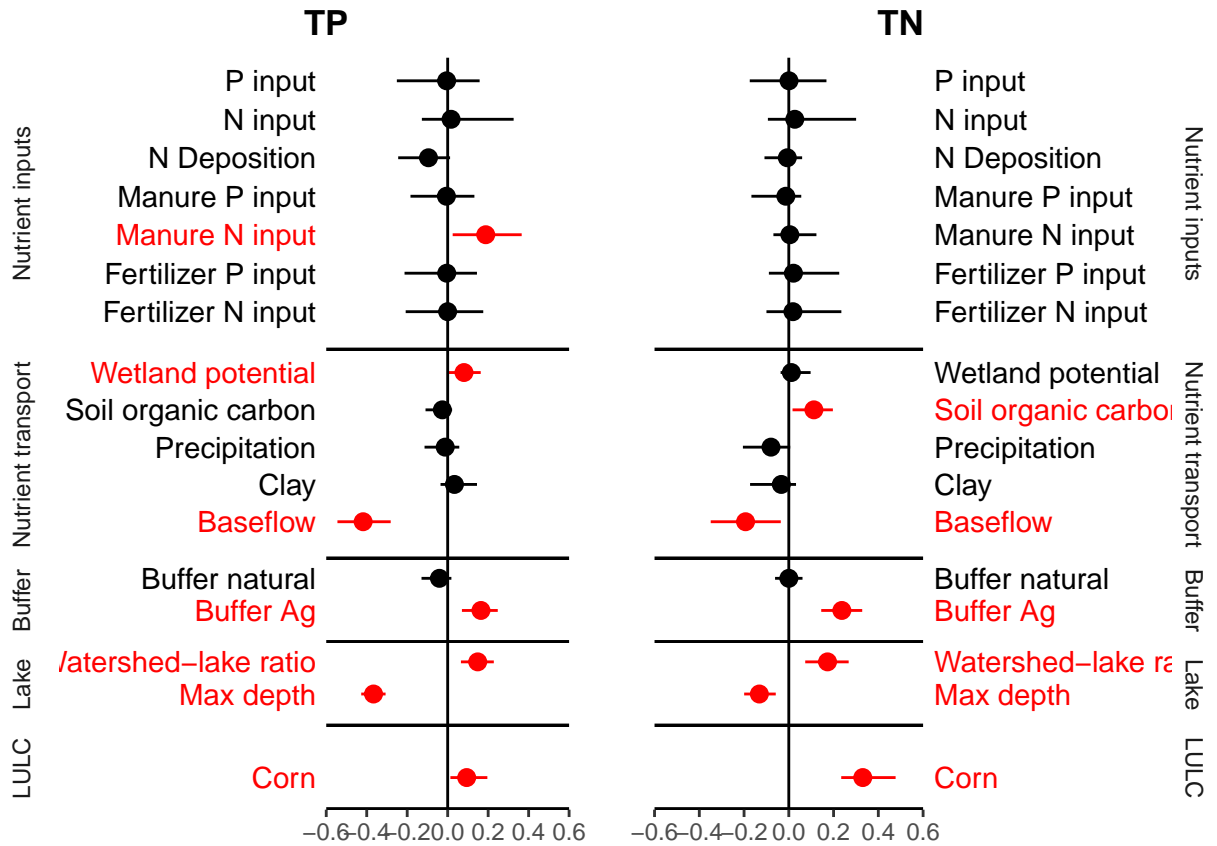


Figure 3: Global (fixed effect) coefficient values and credible intervals. Values that do not overlap zero are shaded in red. Horizontal bars separate coefficients in distinct predictor categories. Coefficient estimates are reported relative to standardized predictor variables centered at zero with unit variance.

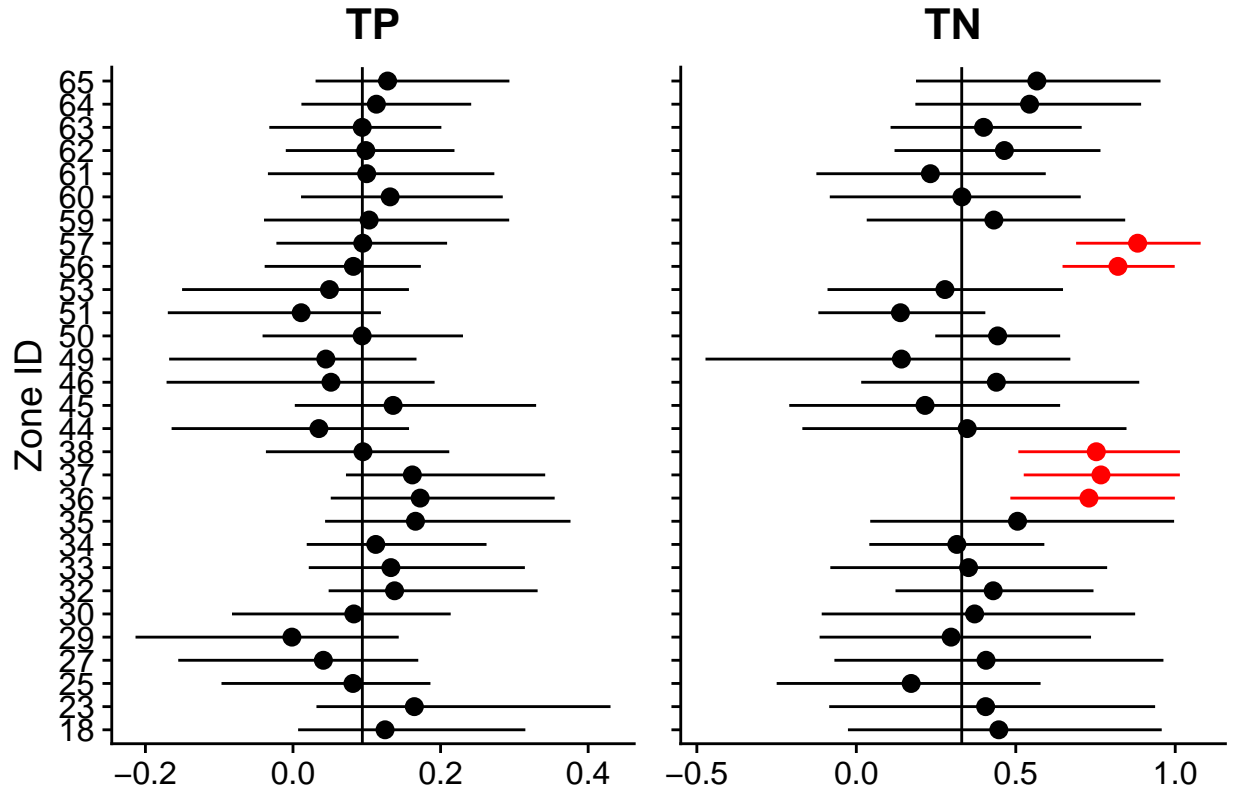


Figure 4: Hydrologic region level effect of watershed land use for the best performing model for TP and TN respectively. Values that do not overlap the population level median are shaded in red.

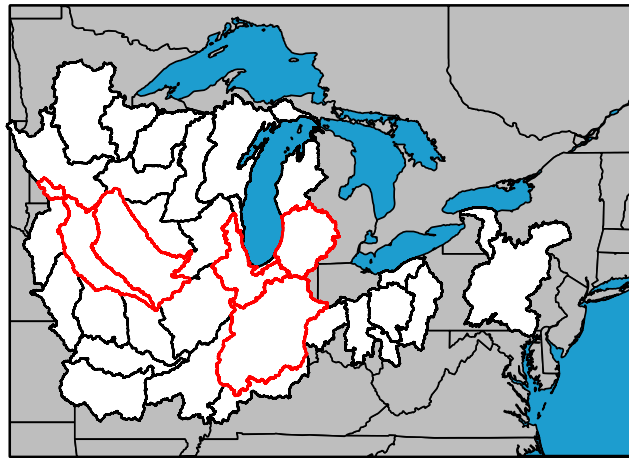


Figure 5: Map highlighting corn sensitive regions from the previous figure.

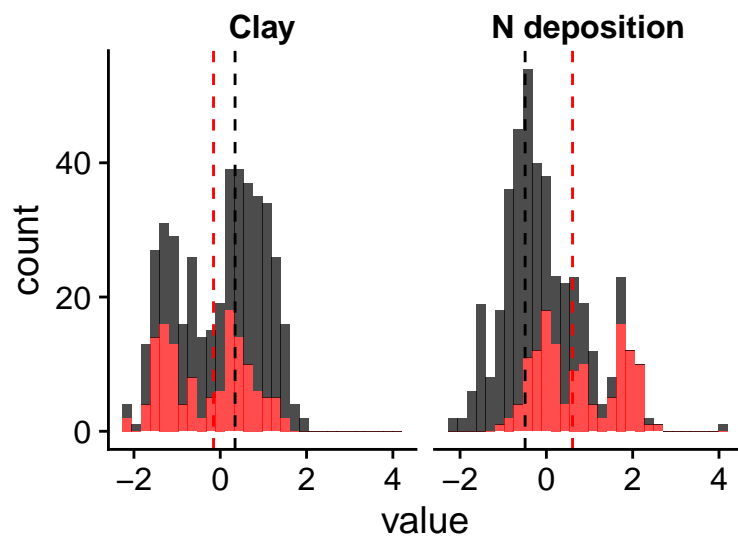


Figure 6: Histograms showing the distribution of Clay and N deposition for the corn sensitive regions compared to all other regions. Medians for each group are shown as vertical dashed lines.