

Table S5. Principle components (PC) of soil properties and their relationship to flood duration. The first three components are significantly correlated to flood duration and their largest variable scores are for clay content, plant available water, and pH, respectively.

	<i>1st PC</i>	<i>2nd PC</i>	<i>3rd PC</i>	<i>4th PC</i>
Standard deviation	1.90	1.68	1.37	1.15
Cumulative variance proportion	0.24	0.43	0.55	0.64
	0.73***	0.24*	0.28*	-0.08
	PC scores			
Clay content	0.49	0.02	0.05	-0.13
Plant available water	0.15	0.50	-0.25	0.13
pH	-0.06	0.25	0.47	-0.16
N content	0.07	0.09	0.22	0.62
Sand content	-0.40	-0.33	0.14	-0.05
Color dry soil	-0.16	0.37	0.16	-0.32
K content	-0.09	0.14	-0.43	-0.16
Electrical conductivity	0.35	0.15	0.12	-0.37
Organic matter content	0.36	-0.11	0.09	0.01
Silt content	-0.14	0.45	-0.27	0.26
Color wet soil	-0.17	0.36	0.30	-0.21
Moisture content	0.35	0.01	0.30	0.29
A horizon depth	-0.01	-0.06	0.24	-0.13
Organic layer depth	0.10	-0.23	-0.21	-0.22
Mottles content	0.33	-0.02	-0.25	-0.14

*: $p \leq 0.05$; **: $p \leq 0.01$; ***: $p \leq 0.001$.