



Figure S1. Upper El Cap site. A. Conditions on September 30, 2017, before the first major rainfall. B. Conditions on January 13, 2018, after the first major rainfall.

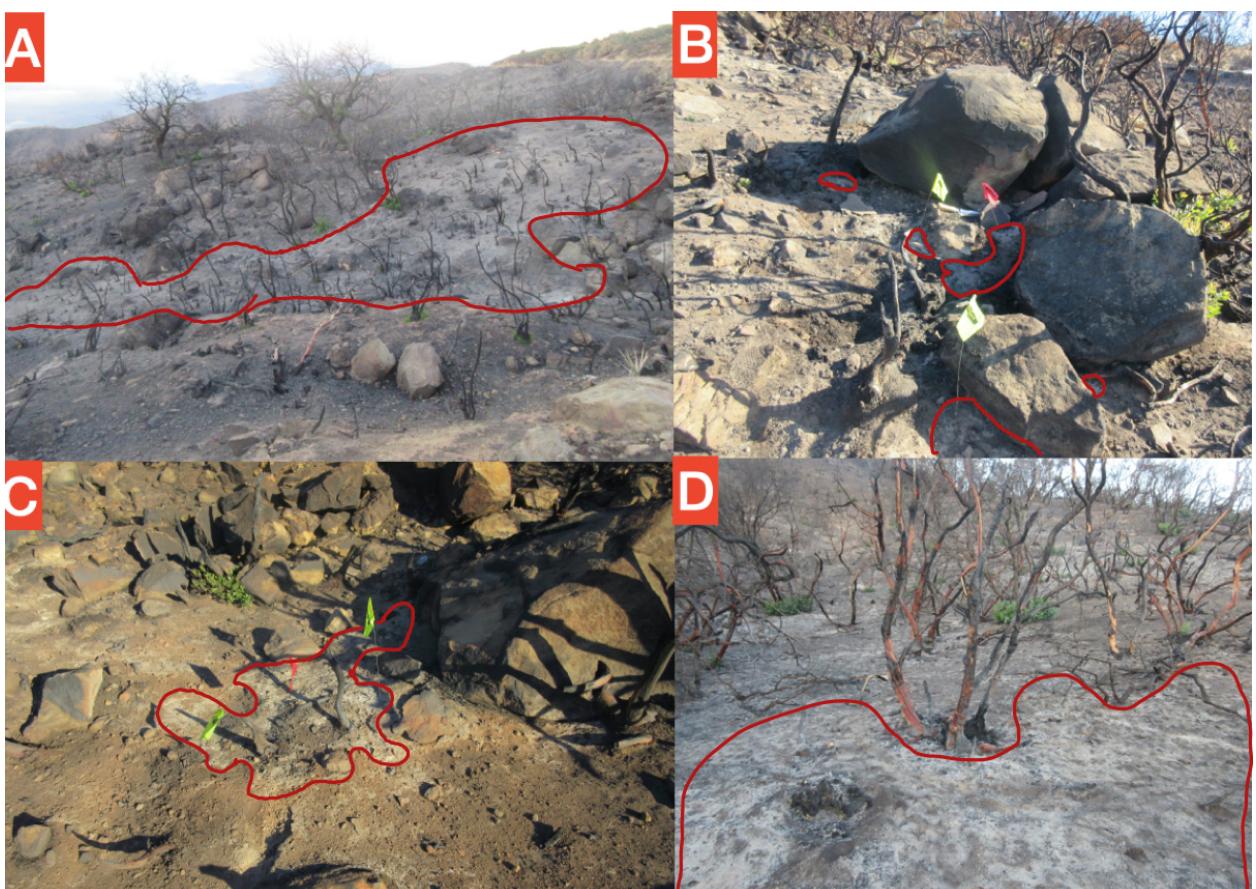


Figure S2. Surficial ash accumulations within the fire scar. Red boundaries delineate surficial ash at several sampling locations. Panel A illustrates ash that has accumulated in a gully at site Ash 1. Panel B illustrates ash that has accumulated in and around crevices near boulders at site Ash 2. Panel C shows ash that has accumulated as a pocket at site Ash 2. Panel D shows ash that has accumulated as a patchy blanket at site Ash 5.

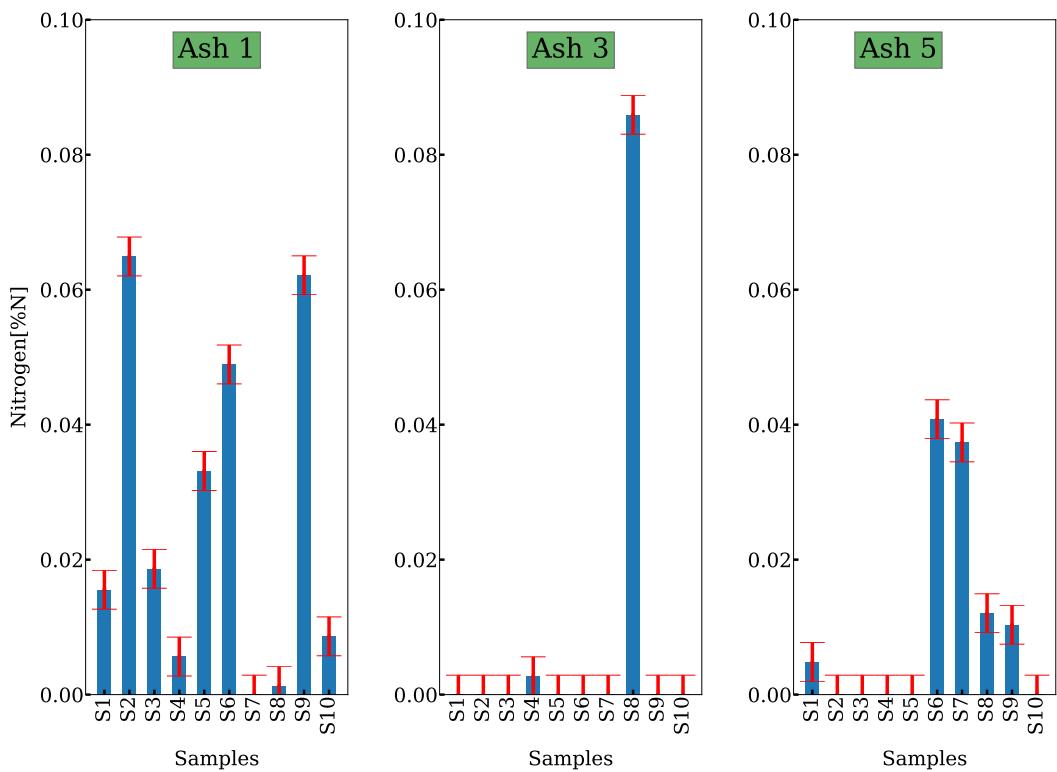


Figure S3. Nitrogen weight percent measurements at sites Ash1, Ash3 and Ash5. At each site 10 samples were taken (S1 to S10). Standard errors ($SE = \sigma / \sqrt{n}$; σ = sample standard deviation, n = number of samples) are indicated by the red bars.

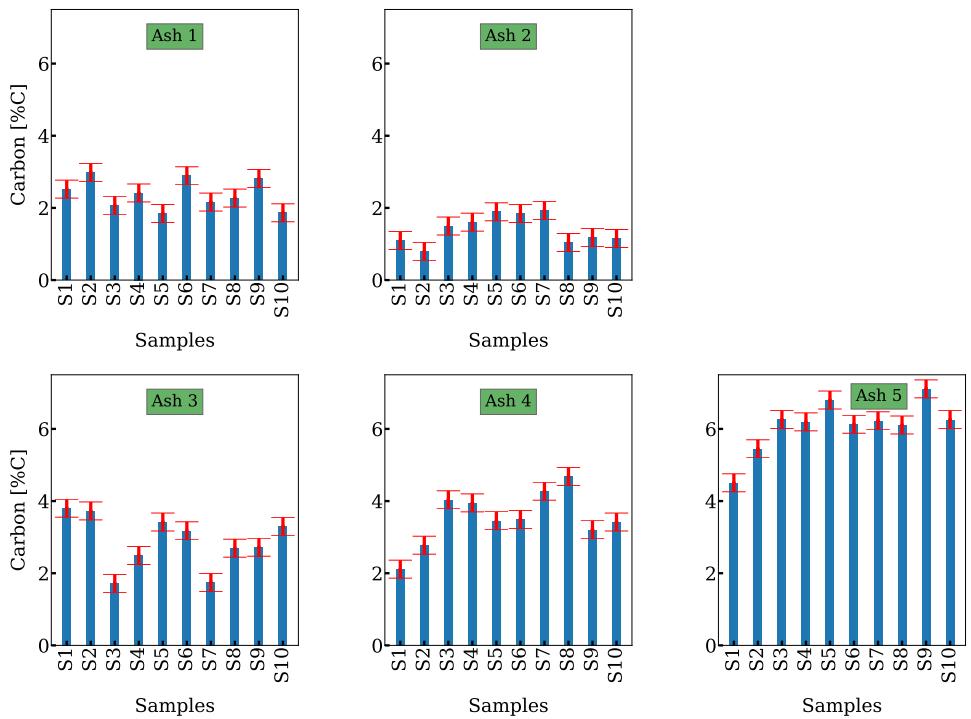


Figure S4. Carbon weight percent measurements at sites Ash1 to Ash5. At each site 10 samples were taken (S1 to S10). Standard errors ($SE = \sigma / \sqrt{n}$; σ = sample standard deviation, n = number of samples) are indicated by the red bars.

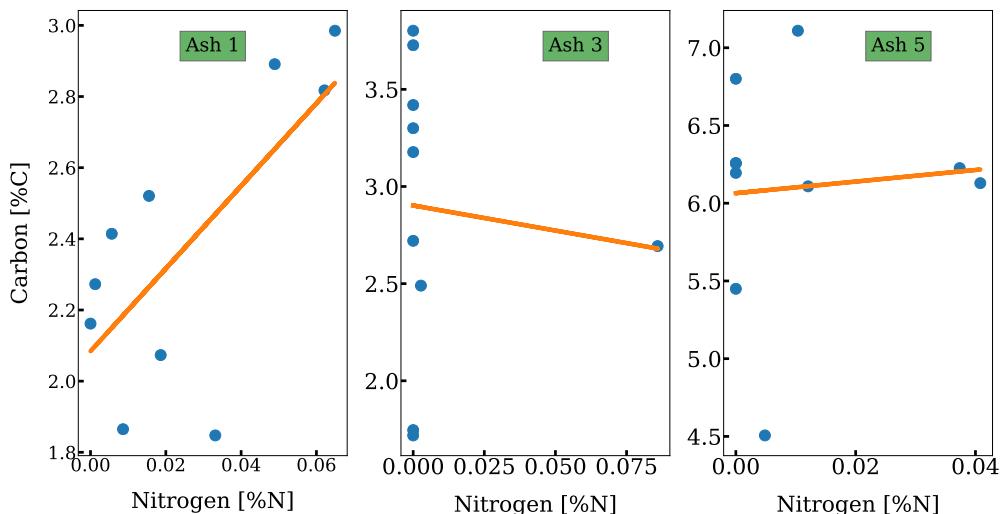


Figure S5. Correlations between nitrogen and carbon weight percentages in ash from sites Ash1, Ash3, and Ash5.

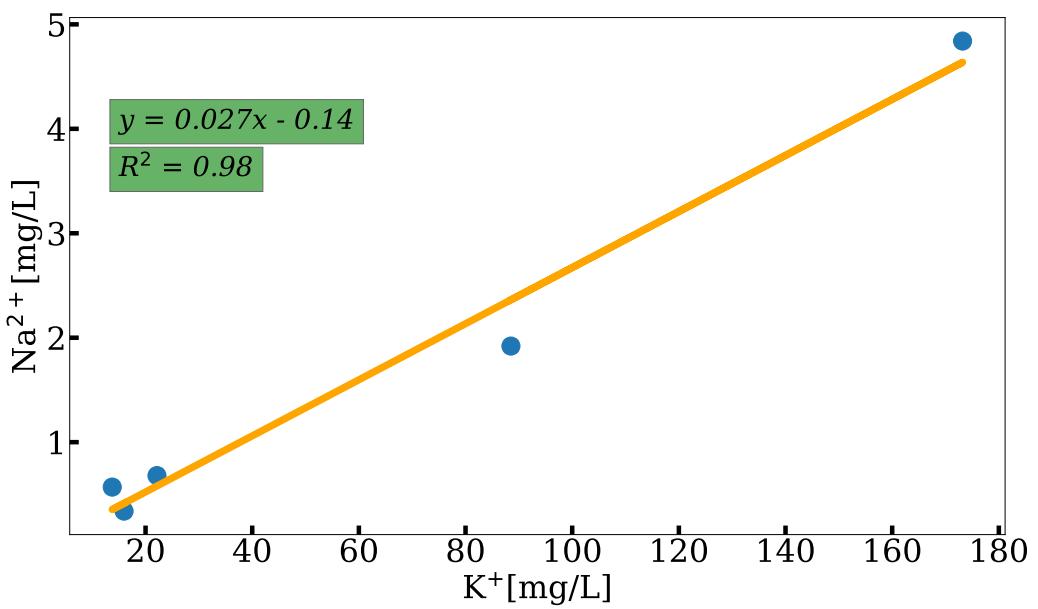


Figure S6. Correlation between Na^+ and K^+ concentrations leached from ash samples taken from all ash sampling sites.

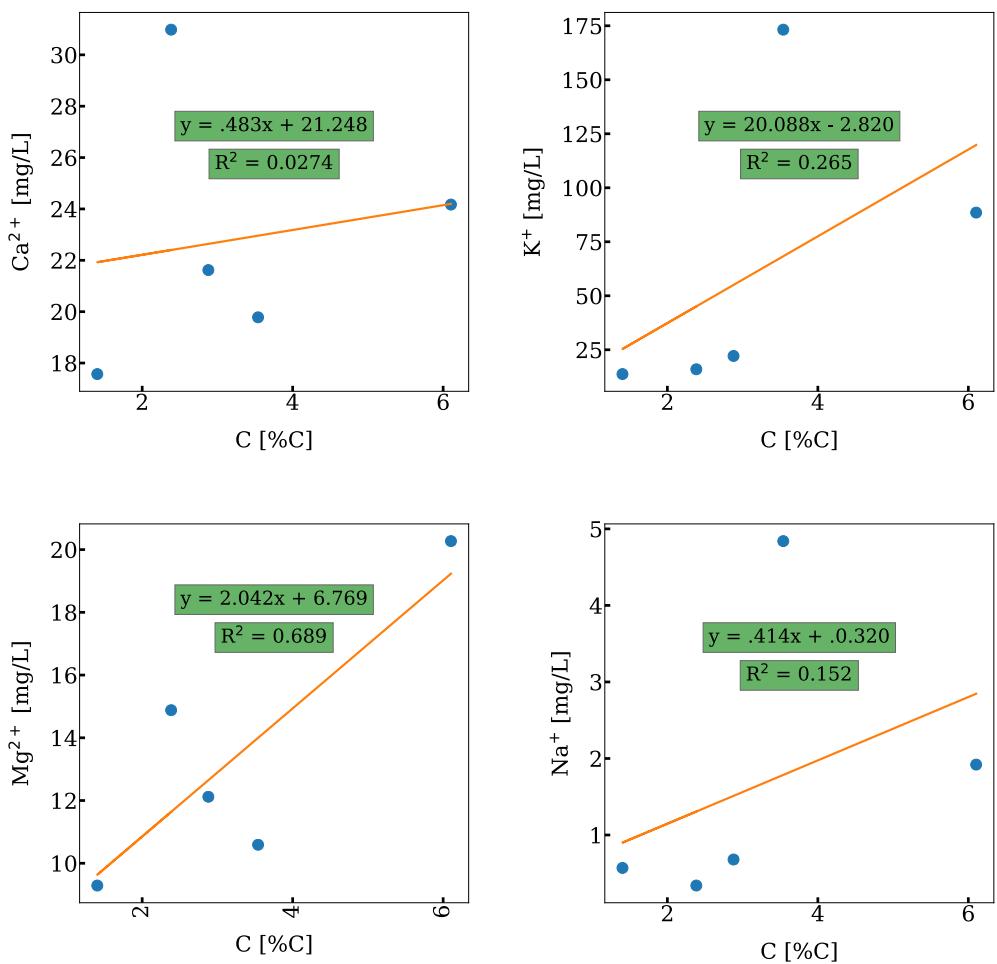


Figure S7. Correlations between carbon and extractible major cations in ash from all ash sampling sites.

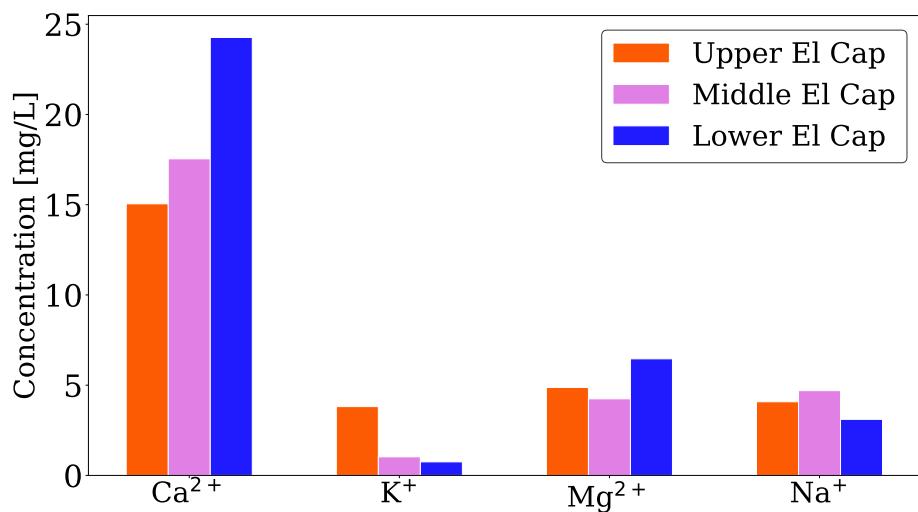


Figure S8. Standard deviations in major cation concentrations in stream water calculated from all samples by sampling site.

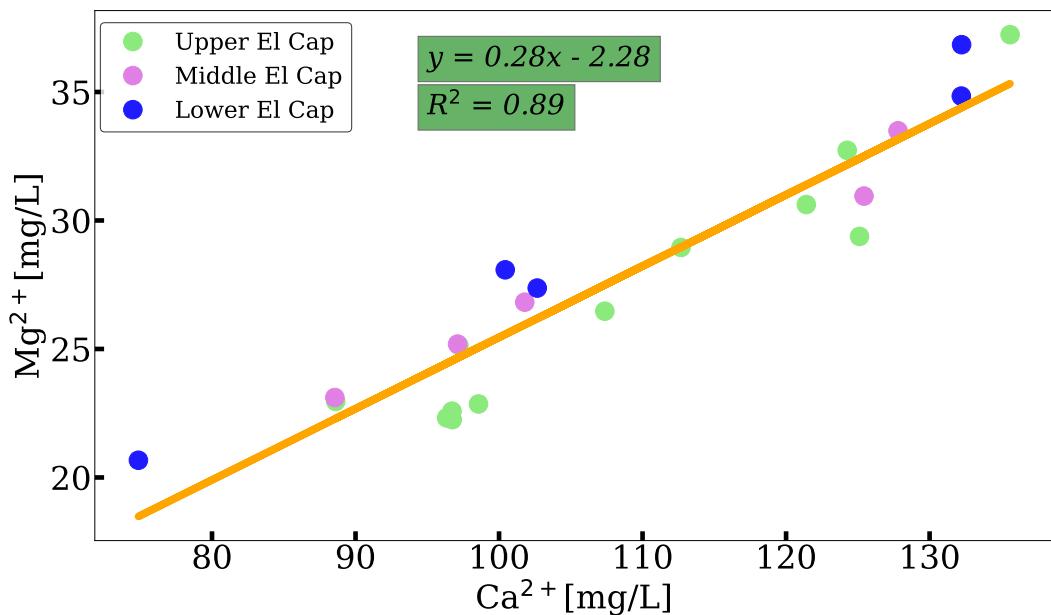


Figure S9. Correlation between Mg²⁺ and Ca²⁺ in stream water sampled from Upper, Middle and Lower El Capitan Creek sites.