

## **Benthic Community Structure along a Disturbance Regime - Vulnerability to Extreme Flooding**

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**Abstract.** Torrential rains fell along the Colorado Front Range in September of 2013. This resulted in non-seasonal flooding, the magnitude of which arguably exceeded historic variation. Due to an ongoing project benthic community data previously collected, yielded the opportunity for a pre-post analysis of the extreme disturbance. Because the magnitude of the event varied across the landscape, a well-defined disturbance gradient was seen directly overlaying fourteen previously sampled streams. Using both qualitative and quantitative sampling methods macroinvertebrate communities were accessed in the summer of 2014 following the event. We tested pre/post species richness and abundance, and by assigning functional feeding groups (FFG) we could analyze changes trait composition. This extreme disturbance acted as a novel “filter” which varied in intensity, altering benthic community structure.