WASHINGTON STREAM RESEARCH QUESTIONS:

1. Re-evaluate post-restoration water quality and nutrient concentrations (e.g. dissolved oxygen and nitrates) by comparing them to the initial post-restoration results in 2012
2. Determine the stream’s mass flow (nutrient concentrations and volume) to tell whether the stream corridor is a source or sink for a given compound such as nitrate
3. Continue to analyze data from the soil moisture sensors to evaluate hydrologic cycles and the impact of dry or wet conditions on floodplain saturation, overbank flow, and the shape of the water channel.
4. Measure and evaluate stream stage and discharge during storm events. Use the data to model flood discharges under varying conditions
5. Assess the appropriateness of the Rosgen classification method for urban stream restoration
6. Characterize the stream substrate to interpret water quality and nutrient data, and to explain how the built channel is reaching equilibrium
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8. Explore other methods of measuring water quality such as characterizing the diversity and types of diatoms or macro-invertebrates in the stream
9. Include another surface water monitoring location for nutrient and other pollutants at Washington Stream to be incorporated to ongoing campus surface water monitoring data.

BACKGROUND INFORMATION:
Senior thesis analyzing post-restoration results in 2012:

HYDROMETEROLOGY DATA: Archived and real-time data on air temperature, water temperature, and river/lake level