Urban Drool

- Essentially dry weather runoff
- Predominant in the western United States because of the drier climate
- Research focused on determining contaminants
  - Pesticides, pharmaceuticals, PAHs, heavy metals, nutrients
- Potential sources of runoff
  - Residential lawn watering, driveway car washes
- Tasks included locating and documenting several possible sources
- Completed preliminary sampling and various nutrient tests and water quality measurements
- Submitted samples for total organic carbon, heavy metal, and pharmaceutical testing
- Brief analysis of results to determine the significance of urban drool and its possible effects on the environment
Hyporheic Zone

- Assisted Skuyler Herzog in his research concerning the hyporheic zone
  - Groundwater/surface water interaction
- Began construction on a model stream
- In the future will monitor nutrient levels in the stream which will be fed with water from an MBR on site
- Will conduct electrical resistivity tests
- Objective is to confirm that biodegradation of contaminants like pharmaceuticals is occurring in the hyporheic zone. Also, to implement a sub-surface structure that will divert more flow to the hyporheic zone for enhanced biodegradation