



water

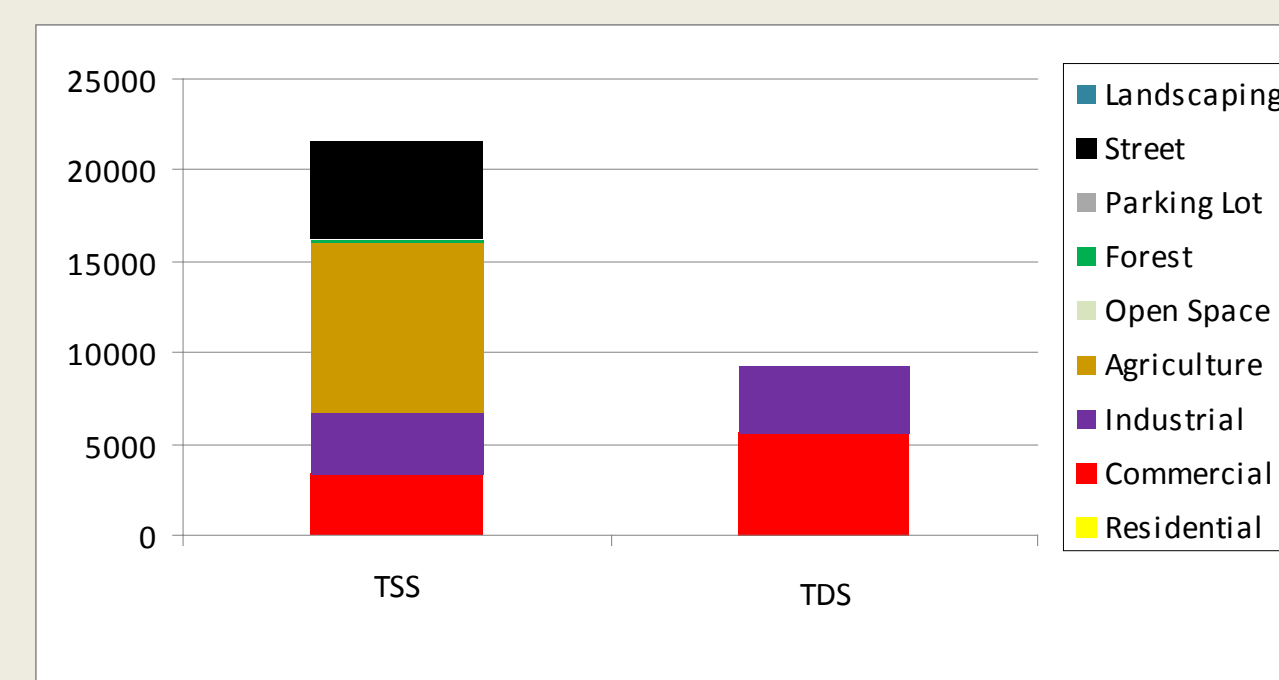
WATERSHED ACTION TEAM FOR ECOLOGICAL RESTORATION

Estimated Pollutant Loads (Lbs/sub-watershed/yr)

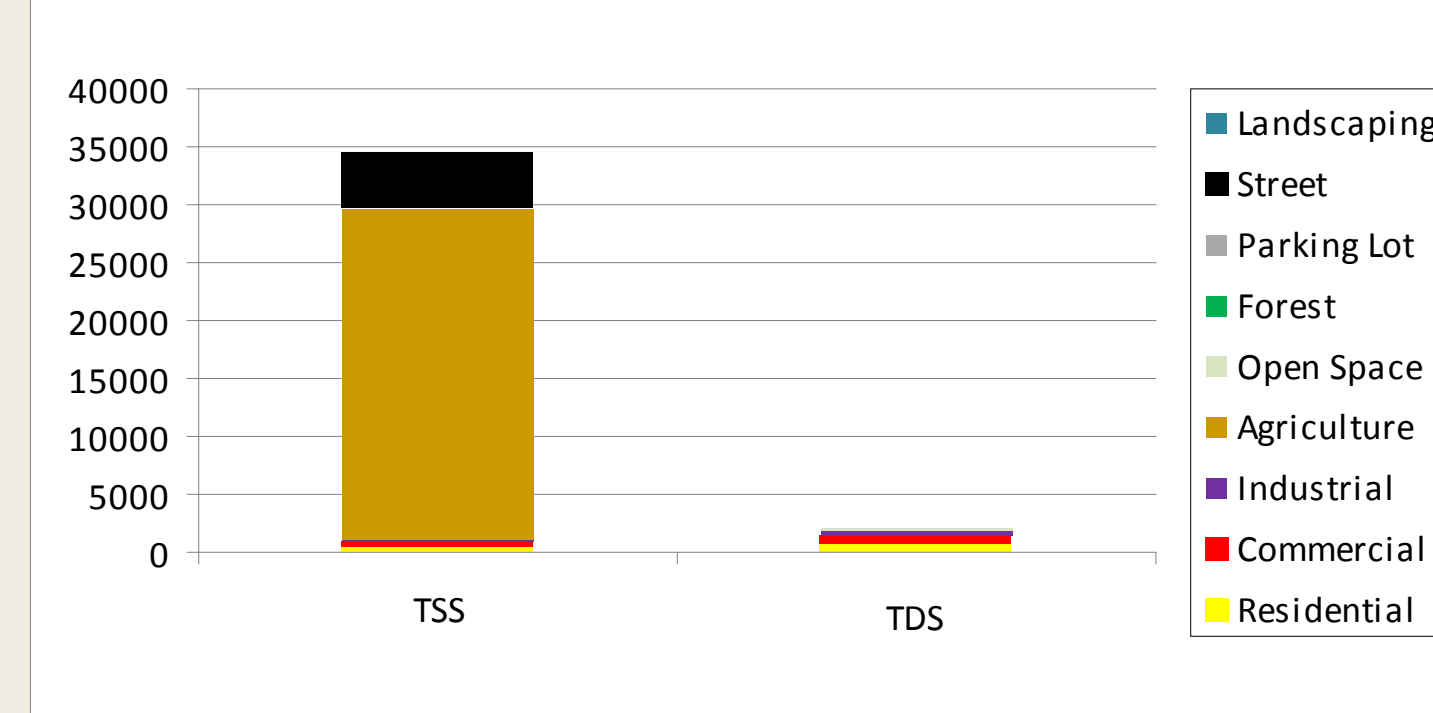
(Values based on known runoff coefficients)

CM4

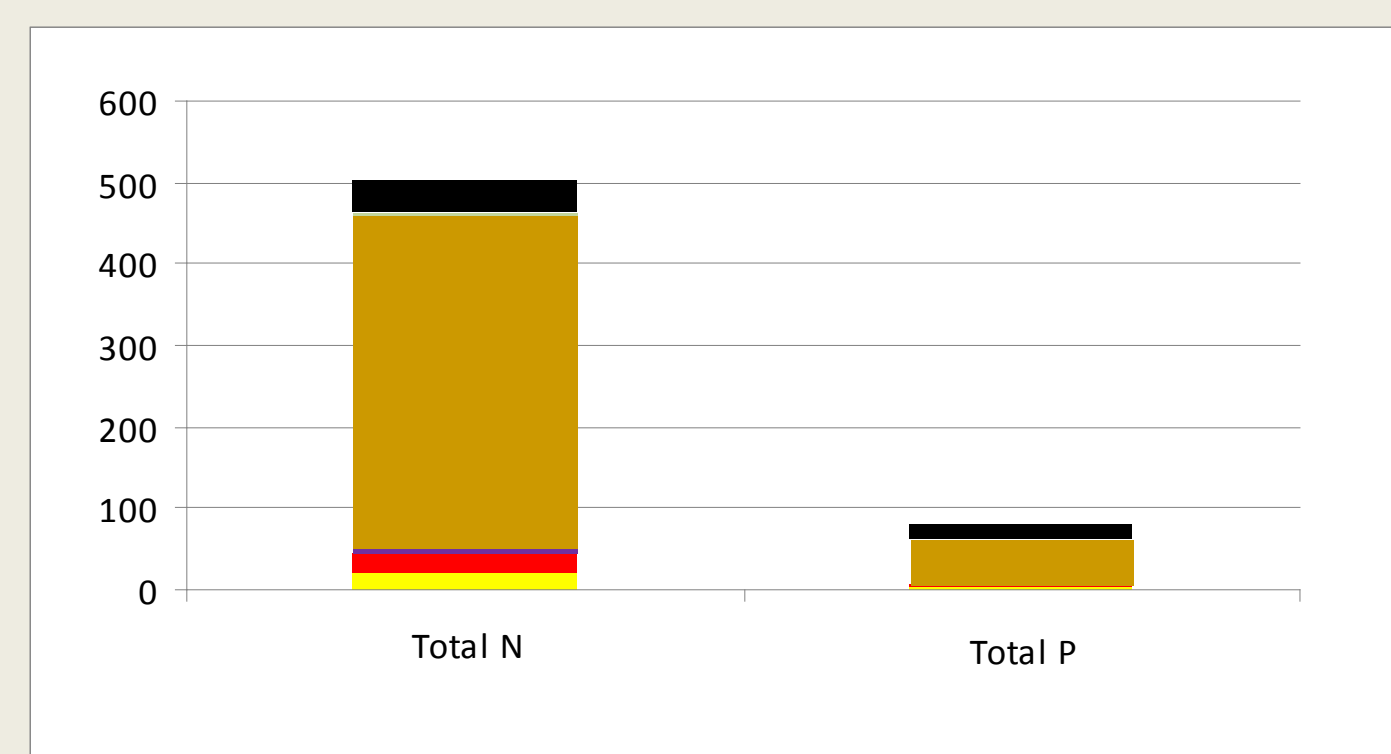
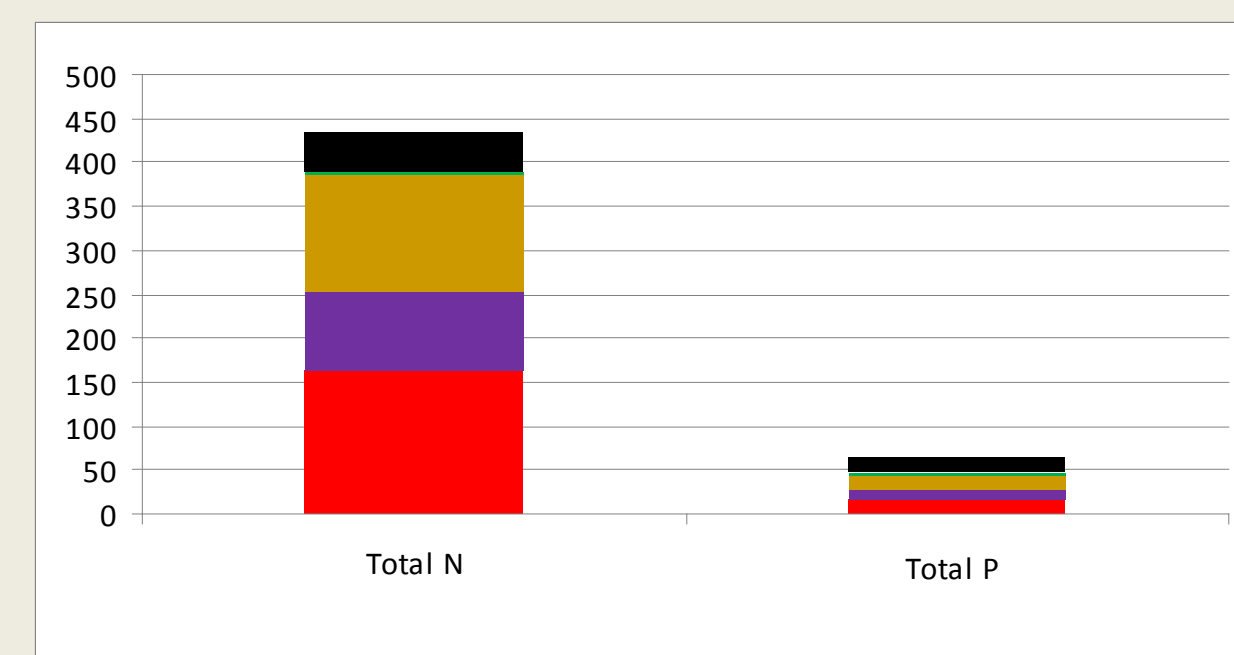
Sediment



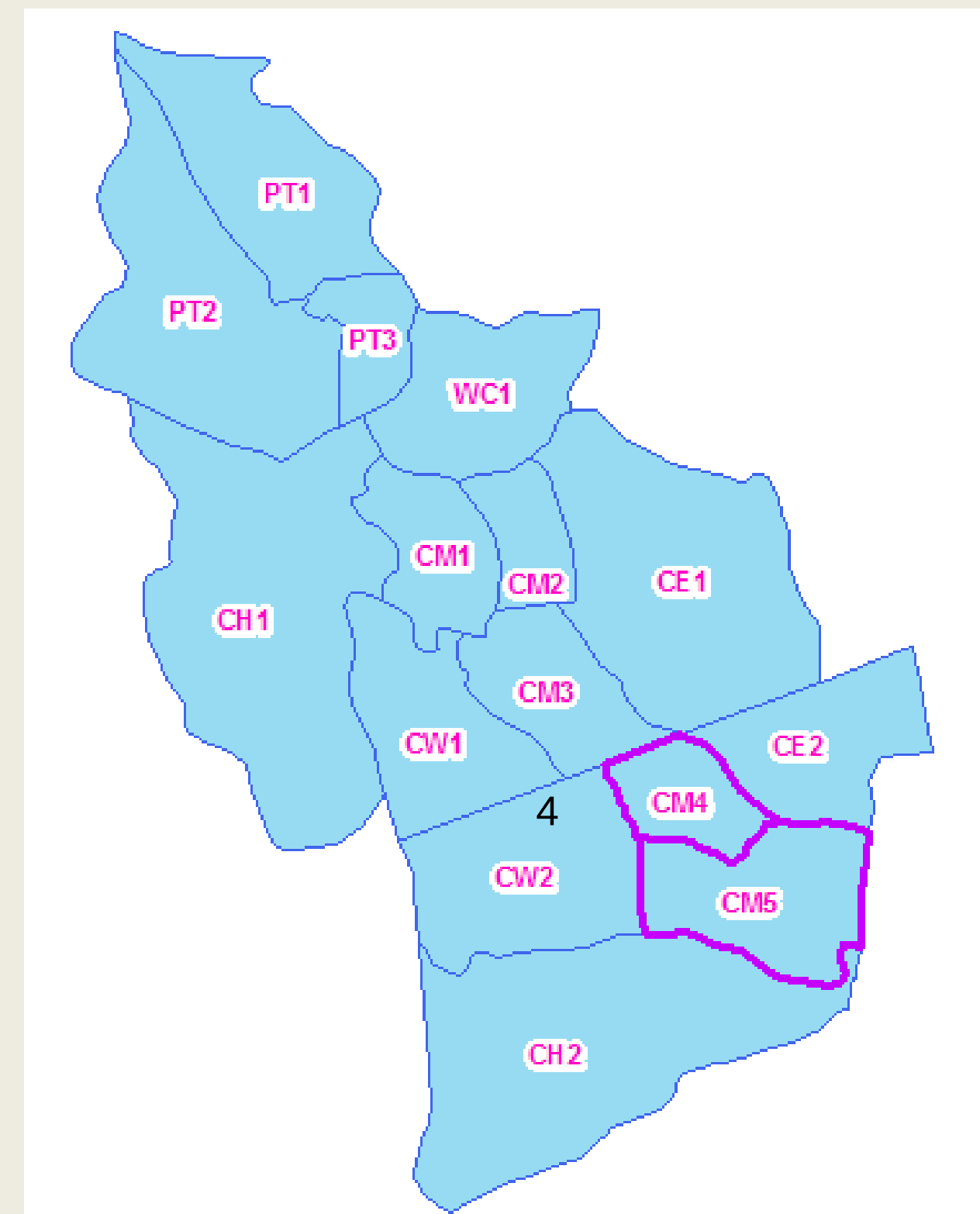
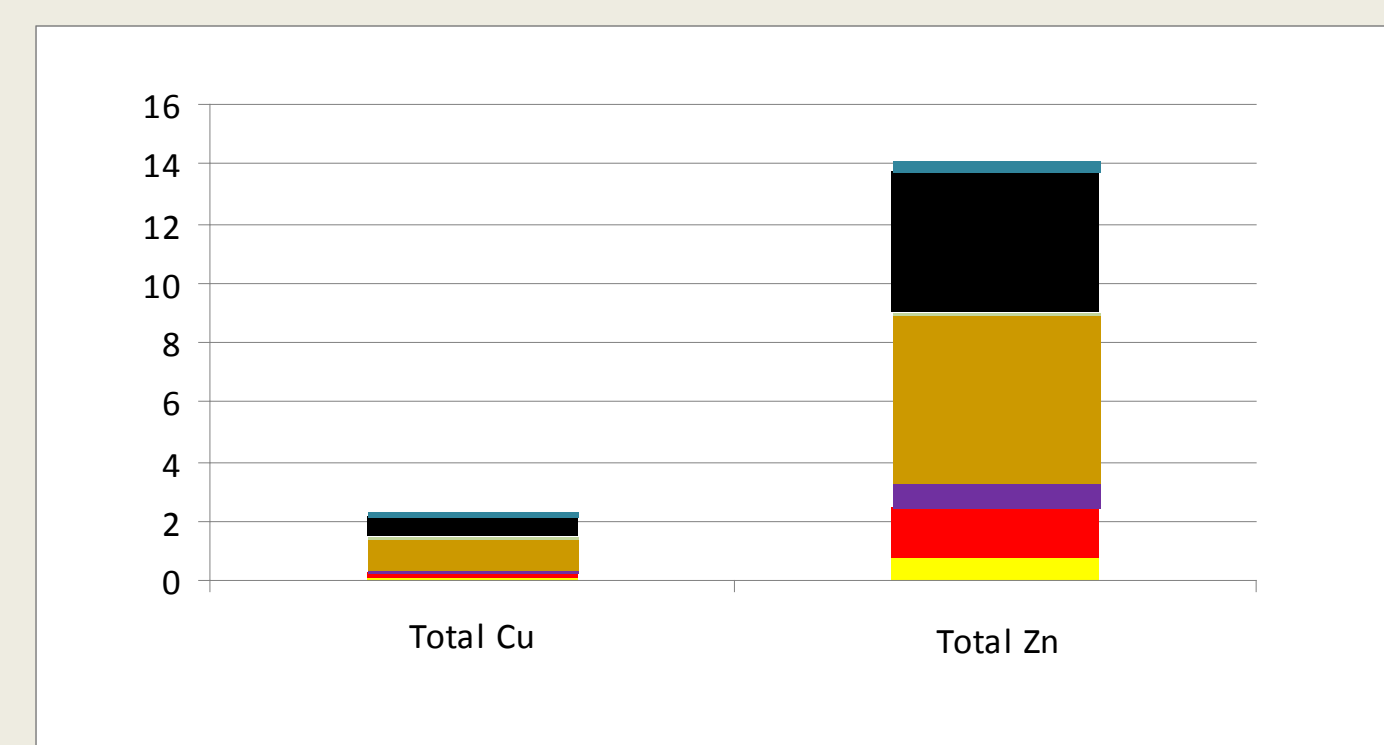
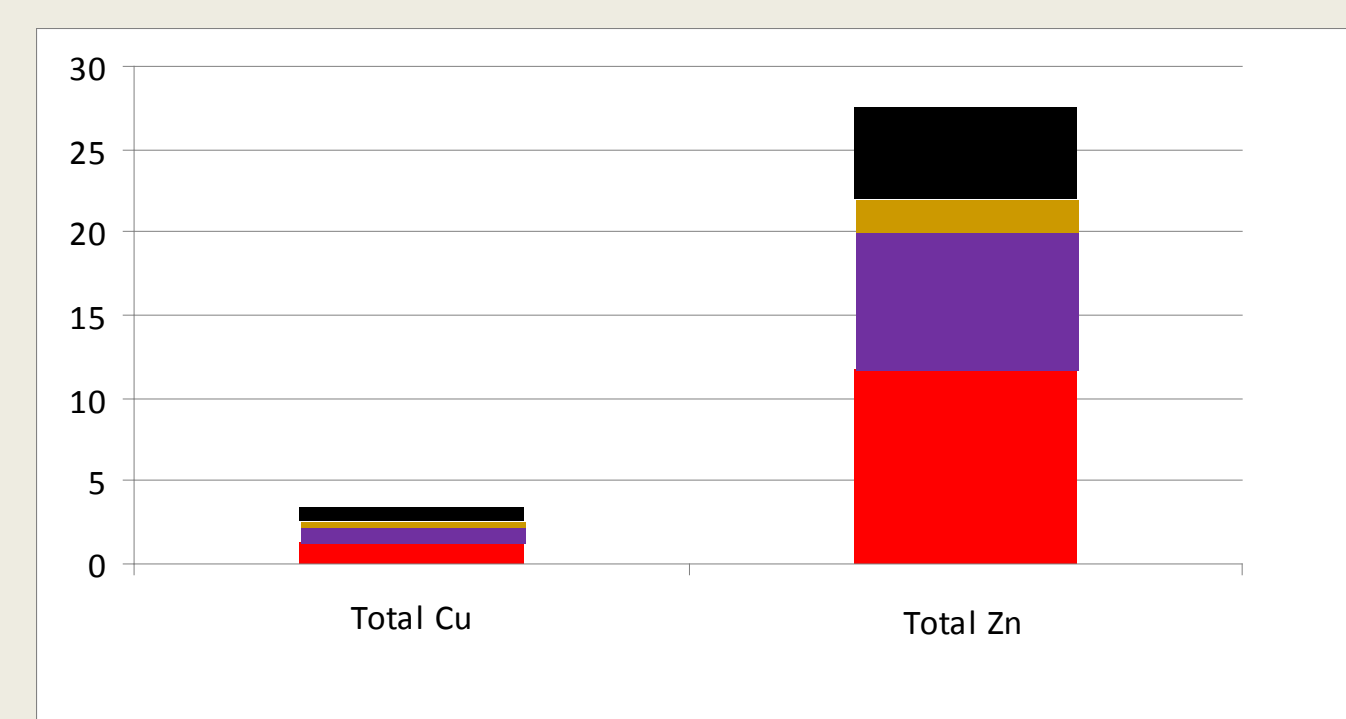
CM5



Nutrients



Metals



Stream Health Indicators

- Sediment (TSS & TDS)
- Nutrients (N & P)
- Metals (Zn & Cu)
- DO
- Fecal Coliform
- Volume

Sampling Sites

Site 2



Site 3



Site 4



Sub-Watersheds: CM4 & CM5

Developing a Watershed Management Plan

Sources of Pollution

Pollutant Type

- ◆ Sediment
- ◆ Nutrients
- ◆ Metals

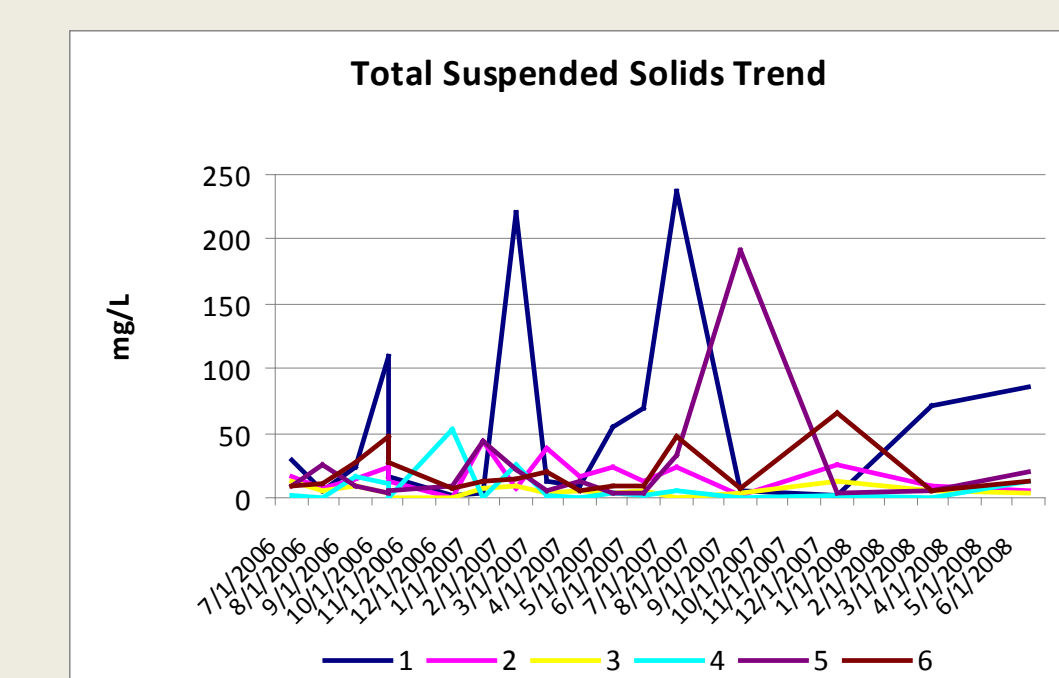
Major Sources

- ◆ Erosion from crops, pastures, urban runoff, stream channels
- ◆ Fertilizers, manures, soil erosion
- ◆ Streets, roofs, parking lots, junkyard, railroad

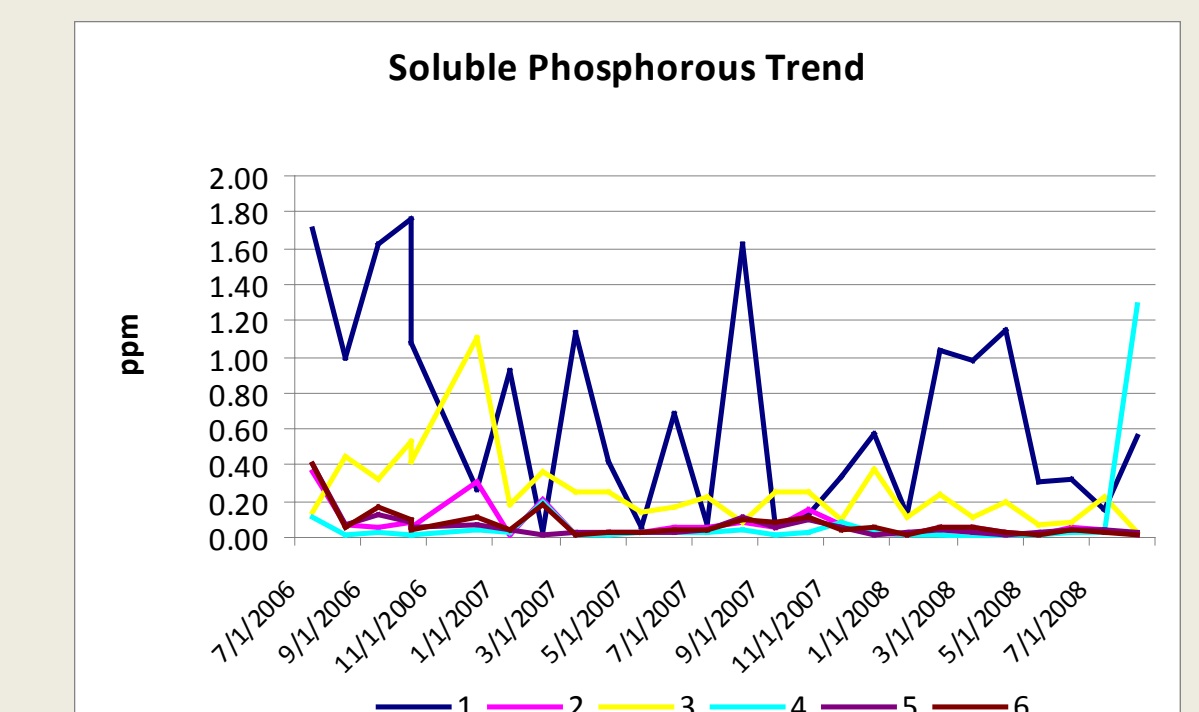
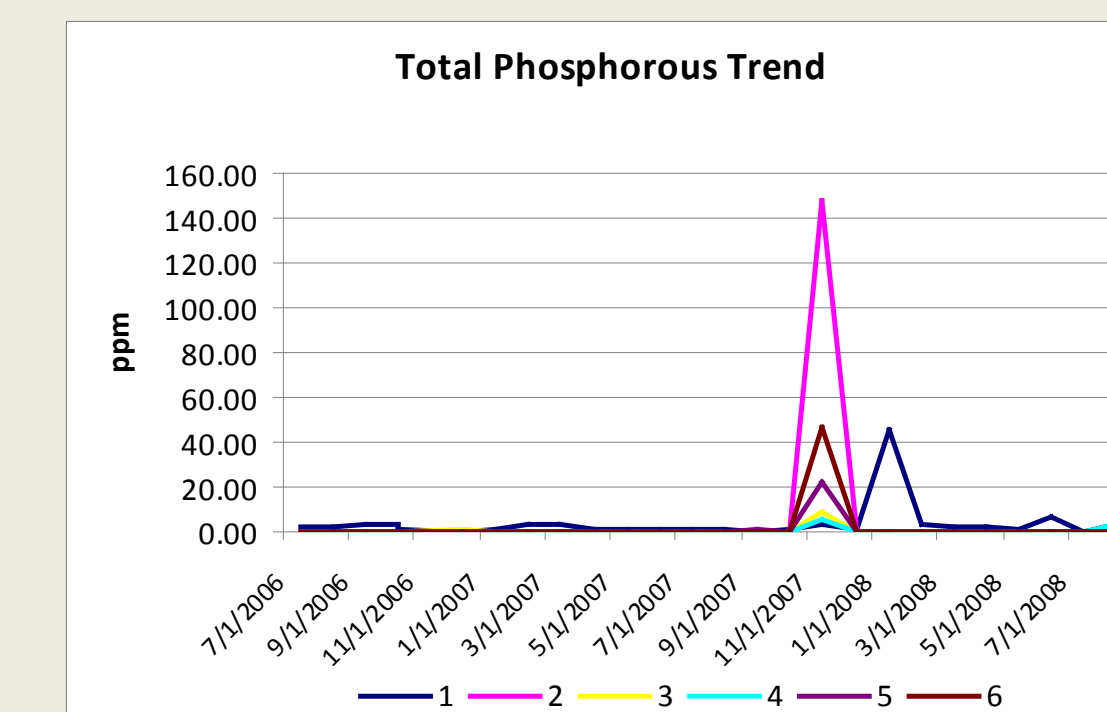
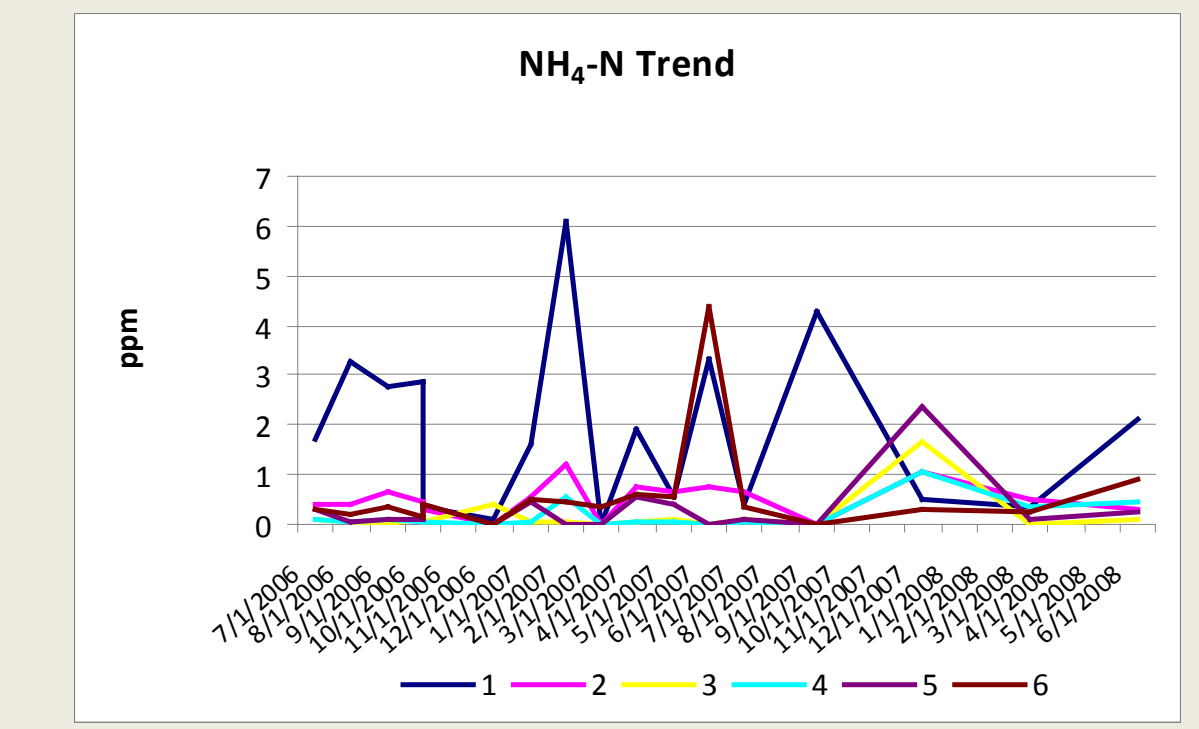
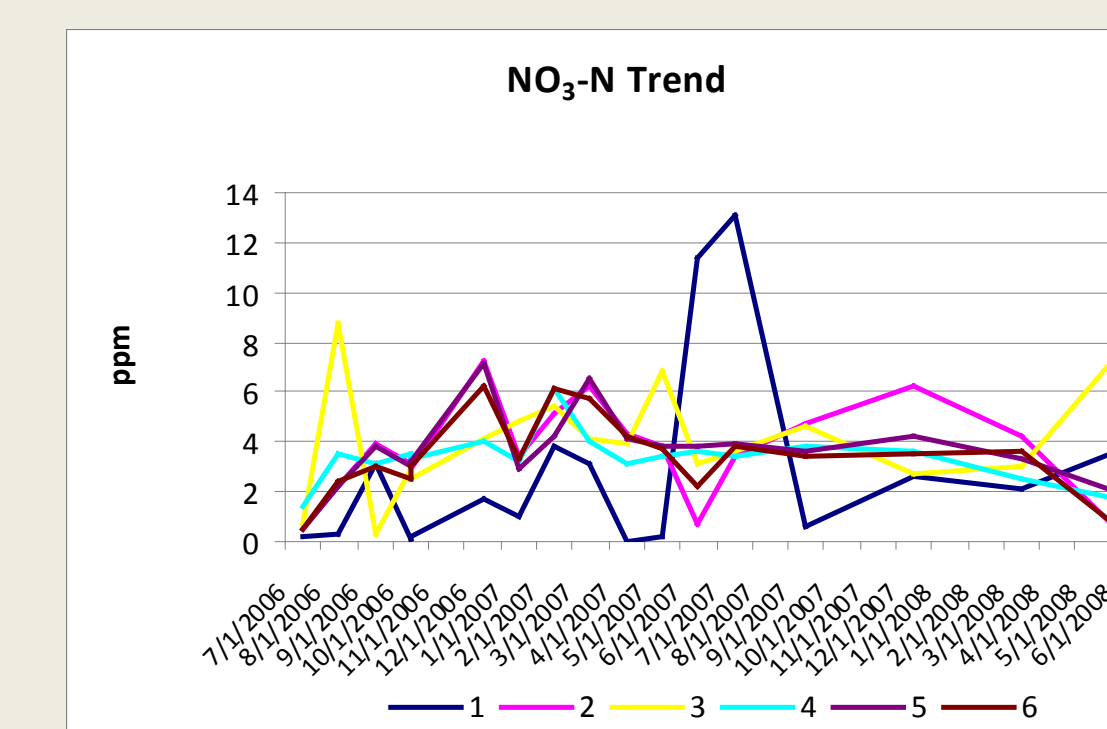
Water Trends within Cool Run

(Sites 1-6, South of Railroad, 2006-2008)

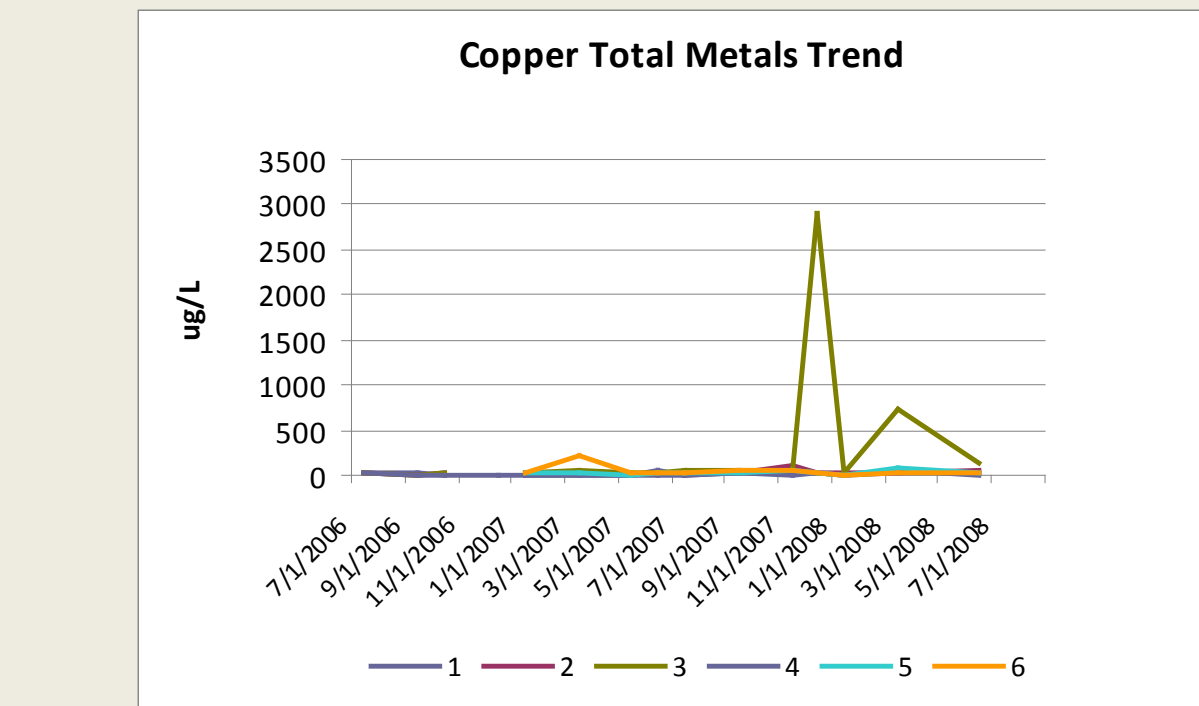
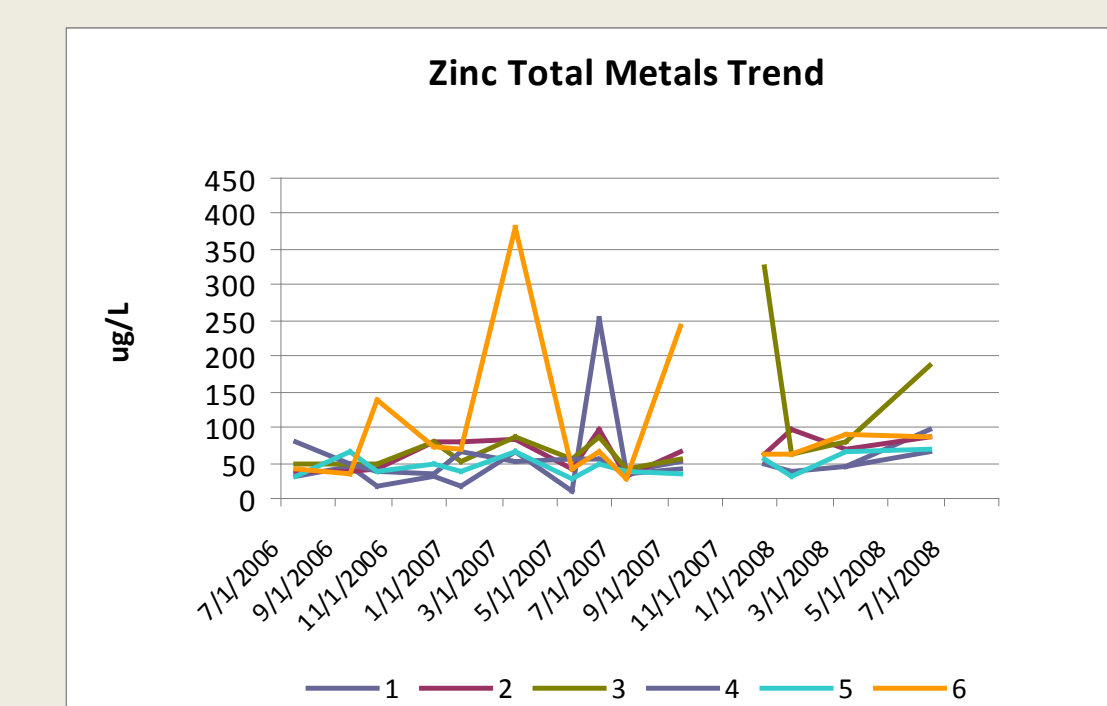
Sediment



Nutrients



Metals



Best Management Practices for Pollution Control

Current

- ◆ Nutrient management plan
- ◆ Winter cover crops
- ◆ Buffers/filter strips
- ◆ Stormwater management
- ◆ Compost/export manure

Recommended

- ◆ Redesign weir & retention basin
- ◆ Drainage system capable of pollutant removal near junkyard
- ◆ Reevaluate cement plant permit
- ◆ Stream channel restoration
- ◆ Wetlands to filter runoff (increase)
- ◆ Cover crops (increase acreage)
- ◆ Manage/replace invasive species

Future Work

- ◆ Fix/redesign weir & retention basin which collects stormwater from Main Campus.
- ◆ Stream restoration
- ◆ Junkyard area: install a pollutant-removal drainage system
- ◆ Cement Plant: reevaluation of current permit; work with local government to improve area