

Ecoli Source Monitoring 2014 Summary

Steve Gruber from Burns and McDonnell and Brian Corcoran from VLAWMO presented the first year results of the Ecoli Source Monitoring project on Lambert Creek at the Minnesota Association of Watershed Districts (MAWD) Conference in Alexandria MN. The creek is on the state impaired list for bacteria and the recently approved Total Maximum Daily Load study (TMDL) suggests a 37%-61% reduction in current bacteria loads to the creek.

The Bacteria Sourcing study uses an integrated approach to identifying and reducing bacteria loads to meet regulatory requirements, in this case the TMDL MS4 wasteload allocations. The three main sources for the bacteria loading to the creek have been identified as wildlife, human and urban stormwater. The sourcing study has broken the creek into five sub-drainages and each sub-drainage will be monitored first during dry conditions and then during wet conditions.

VLAWMO completed the Oakmede and County Road F sub-drainages this summer for dry conditions. Ecoli concentrations were monitored at a primary site and also possible source sites at both locations which were identified during a creek recon this spring. These sites were also tested for the human and bird genetic markers.

Results at both sites showed below state chronic standard levels of ecoli (less than 126cfu/100ml) which indicates the impairment is not dry weather related at these sites. Both sites were also negative for the human genetic marker suggesting there are no septic or sanitary sewer leaks contaminating ground water in these areas leeching into the creek. Both sites were positive for the bird marker suggesting waterfowl have an influence on the bacteria levels in the creek.

VLAWMO will continue the dry weather monitoring of the remaining three sub-drainages next year and then start the wet weather monitoring for all sites.

