Water Monitoring by DRCR


Dog River’s watershed

95 sq. miles
70% in city
30% in county

Have had 40 different AWW sites, 6 have over 100 records.
Mobile’s impact on the Dog River Watershed

Urban sprawl →
  Spread of impermeable surfaces
    increased surface runoff
    decreased groundwater recharge

  Stream channelization
    Loss of streamside vegetation
    Loss of wetlands

  Increased runoff volume and speed

Impermeable surfaces upstream lead to flooding downstream: Halls Mill Creek at Halls Mill Road, April 2015
Rapid runoff carries sediment and litter from watershed into river, leads to major trash problem

Photo by Rob Nykvist

June 15, 2015, Bandalong Litter Trap installed on Eslava Creek. #11 in USA
Advantages to DRCR of volunteer monitoring

Connects people to river

Educates volunteers about basic water quality

Establishes long term trend data

AWW Watershed publication, 2004
Air Temperature Minus Water Temperature at Moore Creek

In summer air is warmer than water, in winter, air is cooler than water.

Hardness and Alkalinity, Eslava Creek at McVay
Have had 40 different AWW sites, 6 have over 100 records. Almost all are no longer actively monitored.

**WHY?**
Most monitors don’t last long. Volunteer monitors do not feel like the data they collect is used for anything truly significant. They need more appreciation/recognition for the time they give, and they need to SEE their data used in a meaningful way.

Revamping DRCR’s monitoring program
Provide both timely/quality data and connection/education
Address these issues

- The AWW kits do not detect things like nitrates, biocides, or pathogens that people are concerned about.
- Time lag is too great and too widely spaced in time for this data to be truly meaningful for “Swim Guide”.
- Volunteers want to monitor off their own docks, but that is often not where we need monitors. Recruit fewer but more skillful monitors or equipment for critical sites.
- Develop programs to promote connection/education through local schools and youth programs.