Program Manager: Dr. Rachel Malison
mmw@flbs.umt.edu; (406) 872-4518
32125 Bio Station Lane
Polson, Montana, U.S.A. 59860
http://flbs.umt.edu/newflbs/outreach/mmw

MONITORING MONTANA WATERS

Providing assistance with water monitoring efforts in Montana

THE IMPORTANCE OF SCIENTIFICALLY VALID WATER QUALITY MONITORING

Why Monitor?

Detecting environmental changes, pollutants, or being able to inform management decisions, laws and regulations depends on the collection of scientifically sound and credible data. Without water management, drinking water would be contaminated, surface and ground waters would be polluted and there would be a greater likelihood of water being unavailable for all users in Montana.

Water quality monitoring is conducted in Montana by many groups including the Montana Department of Environmental Quality (DEQ), water quality protection districts, conservation districts, universities, researchers, schools, watershed groups, non-profit organizations and other entities. High quality, scientifically credible data is required to support decision making regarding our water resources and it is collected using scientifically valid methods and protocols.

Trained volunteers serve a crucial role by monitoring water quality in Montana and helping to protect the water quality of our rivers, streams, lakes, and wetlands. The activities of volunteer groups strongly increase the capacity for water quality monitoring in the state because agencies can only devote significant resources to a few watersheds at a time.

By sampling a water body several times each year (usually once/month during the summer), often over a period of years, volunteer monitors help develop comprehensive data sets from which longer-term water quality trends can be discerned. Monitoring data sets allow the early detection of water quality changes, and can make it possible to trace potential problems to their source. Additionally, if sampling reveals a significant water quality problem, then baseline data can be used to justify the implementation of more intensive watershed studies and it can set the stage for formal water quality assessments to take place.