# Matanuska-Susitna Borough

# "Matanuska-Susitna Borough Quality Monitoring Program"

FY 03 Grant Award: \$37,000

Project Match: \$24,666



## **Description and Purpose:**

The Matanuska-Susitna Borough (MSB) Water Quality Monitoring Program completed its third complete sampling season in the fall of 2002 and started the FY03 sampling season under this grant. The main goal of the lake monitoring program is to utilize volunteers to collect baseline water quality information on lakes within the Borough. The Borough and other interested agencies obtain data in a cost-effective manner on numerous lakes, and the volunteers gain knowledge about the lakes they live on as well as management tips to maintain water quality. Another program goal is to

provide public outreach about watershed integrity, pollution prevention, and watershed best management practices. The MSB accomplishes this through volunteer contact and supplemental school and community programs. The MSB currently collects data on 25 lakes borough-wide. Monitoring includes monthly lake profiles for temperature, conductivity, dissolved oxygen and pH, as well as Secchi disk measurements to assess water clarity. The lake profile information is used to determine the physical characteristics of the lake and note its depth, stratification patterns, and any unusual lake data that would alert resource managers to potential pollution problems. The Secchi clarity, total phosphorous and chlorophyll *a* data analysis collectively yield information on the trophic status of the lake.

Volunteers conducted site surveys for aquatic life, vegetation, algal blooms, wildlife, birds, human use, and land use. This information is used to establish baseline conditions, determine trends in water quality, identify current or emerging problems, and to identify solutions.

## **Evaluation of Environmental Benefits:**

Evaluation of project success was established through the successful training of volunteers in water monitoring and sampling as well as obtaining a full season's data for approximately 25 sites throughout the Borough following the protocols outlined in the QAPP. The MSB also created a database for management of data, equipment and volunteers.



#### **Deliverables:**

- An annual water quality report provided to DEC, borough officials, volunteers, and the general public. This report includes information collected by volunteers, site survey information, analysis of data, and recommendations for modifications to the program.
- Copies of outreach materials shared with lakeshore property owners.

## Project Contacts: Grantee Project Manager

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