## "Granite Creek Recovery & TMDL Implementation"

## City & Borough of Sitka

FY 05 Grant Award: \$24,850 Project Match: \$16,780





#### **Description and Purpose:**

The Granite Creek Watershed Recovery
Strategy and TMDL were approved in September 2002. This project continued successful ongoing recovery efforts. It *implemented* unfinished tasks in the multi-year Action Plan of the Strategy/TMDL that result in consistently meeting water quality standards. Environmental benefits include fully restoring water quality through: 1) constructing new road and stormwater drainage improvements, 2) establishing stable and functional stream buffers, 3) verifying effectiveness of numerous sediment controls (ponds, check dams, swales, turbidity controls) through regular water quality monitoring, 4) preparing development guidelines for future

growth in the watershed, 5) industrial operator education, 6) and environmental audits of compliance with lease terms and 7) routine maintenance of existing pollution control systems (ponds, swales, and splash rocks).

#### **Evaluation of Environmental Benefits:**

The environmental benefits were determined by verified reductions in turbidity and TSS concentrations measured at multiple stations in Granite Creek, a high rate of compliance with water quality standards, healthy adult salmon spawning populations at the mouth of Granite Creek, properly graded roads and newly-constructed detention basins and road improvements, and functional vegetated buffers along the creek. The final report will evaluate the results.

#### **Deliverables Include:**

- Water quality monitoring data (turbidity and TSS)
- Photographic documentation of Granite Creek Road stormwater control and drainage improvements
- Recommendations to CBS on proposed updates to the 1982 Reclamation Plan
- Environmental checklist and lease site inspection form
- Updated stage-discharge curve for Granite Creek, with supporting information
- Development guidelines and pollution control recommendations for future Granite Creek watershed industrial growth
- Report on effectiveness of experimental controls in reducing turbidity in pond effluents
- Updated QAPP to address new adult salmon survey methodology in lower Granite Creek
- Adult salmon population counts in lower Granite Creek
- Photographic documentation and description of structural improvements in the lease sites for flood control, drainage and riparian buffer protection
- Annual Summary Report evaluating monitoring results

## **Project Contacts:**

### Grantee Project Manager

Mark Buggins, Environmental Superintendent City & Borough of Sitka 100 Lincoln Street Sitka, AK 99835

Ph: 907-966-2256 Fax: 907-966-2257 mailto: markb@cityofsitka.com

# **DEC Project Manager**

Laura Eldred, Environmental Specialist Department of Environmental Conservation 555 Cordova Anchorage, AK 99501

Ph: 907-269-1065 Fax: 907-269-7508

laura\_eldred@dec.state.ak.us

