

## "Swan Lake Protection & Restoration"

### City & Borough of Sitka

FY 05 Grant Award: \$13,600

Project Match: \$11,121



#### Description and Purpose:

This project continued to restore and protect Swan Lake by implementing the approved *Swan Lake Watershed Recovery Strategy and TMDL*, *Stormwater Control Strategy*, and *Monitoring Strategy*. The project included protecting and restoring the full uses of the lake through: 1) manual plant harvests; 2) water quality and stormwater monitoring; 3) reviewing and evaluating stormwater ordinances from similar communities for possible application to Sitka; 4) written operation and maintenance practices to guide improved stormwater controls; 5) an engineering analysis of drainage problems and recommendations for needed upgrades; and 6) continuing public

education through volunteer storm drain stenciling and annual trash cleanups.

#### Evaluation of Environmental Benefits:

Benefits to the community will include increased small boat access and usage, a larger percentage of the lake accessible to fishing and boating, improved habitat for the over 200 resident trout stocked annually by ADF&G, increased levels of dissolved oxygen in the lake, lower sediment levels entering the lake, and a more visually pleasing lake. These environmental benefits will be realized by expanded water quality monitoring data, enhanced recreational access and use of Swan Lake, reductions in sediment and nutrient loadings to the lake, increased dissolved oxygen levels to support fish, more vegetated swales to filter sediments, consistent municipal O&M procedures, new guidelines for developers, active citizen participation, and tried-and-true techniques in lake management and restoration. Environmental indicators include lake dissolved oxygen levels, adopted municipal policies, ordinances and procedures, miles of vegetated drainage ditches treating stormwater, acres of nuisance aquatic vegetation removed, total suspended solids concentrations in culverts discharging to the lake, number of stations monitored for assessing trends, and number of watershed residents participating in the project tasks.



#### Deliverables Include:

- [Stormwater and lake water quality monitoring data](#)
- Photographic documentation of areas manually cleared of vegetation, monitoring activities, and storm drain stenciling efforts
- [Report summarizing findings on small community stormwater ordinances](#)
- [Procedures on municipal stormwater operation and maintenance \(O & M\) practices](#)
- [Draft of a Local Development Agreement for CBS review](#)
- [Stormwater drainage analysis](#)
- [Municipal Ditch Maintenance Plan](#)
- Annual Summary Report evaluating monitoring results

#### Project Contacts:

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