

“Lower Ship Creek Stream Gaging”

Department of Natural Resources Alaska Hydrologic Survey

FY 05 Grant RSA Award: \$19,000

Project Match: \$13,690



Description and Purpose:

Ship Creek is a priority water in need of recovery due to water quality and quantity concerns. Allocated water use is very high which could reduce baseflow and negatively impact aquatic life. A modified workplan for this project was approved effective 12/01/2004. The modifications to the plan were necessitated due to the unexpectedly high flow velocities encountered that combined with channel debris destroyed instream sensor units. The modified workplan substituted the continuous recorder with more frequent site visits to complete discharge measurements. While this does not provide the continuous record of the original workplan, it does provide weekly documentation of discharge for the period of the project, as well as monthly data on water quality. These data should prove invaluable in recovery plans, help adjudicate instream flow reservation applications, and help provide flow data necessary to successfully manage the stream to provide for a highly important sport fishery.

Project Objectives:

Establishes a stream discharge station and record on lower Ship Creek for collection of streamflow and water quality data, intended to meet the following objectives:

- start to ascertain if water appropriations are affecting stream baseflow
- provide streamflow and water quality data for fecal coliform TMDL recovery plan
- help adjudicate instream flow reservation applications
- extend record through correlations with historic USGS data
- provide flow data for highly visible fishery

Evaluation of Environmental Benefits:

A final report was produced that describes the project accomplishments and their environmental benefit. These environmental benefits were determined by the quality and quantity of data collected, the correlation that is possible with historic data that extends the period of record, and the ability to assess how current-day flow conditions and quality compare with historic data. The final report describes the evaluation of these results.



Deliverables Include:

- **Final project report & evaluation**

Project Contacts:

RSA Project Manager

Mark Inghram, Hydrologist
DNR Alaska Hydrologic Survey
550 West 7th Avenue, Suite 1020
Anchorage, AK
99501

Ph: 269-8638 Fax: 269-8947

Mark_ingham@dnr.state.ak.us

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