

"Cottonwood Creek TMDL Development - Residues"

Aquatic Restoration & Research Institute

FY04 DNR 6217 Grant Award: \$14,155

FY04 DEC 319 Grant Award: \$9,722

Project Match: \$14,155

Project Match: \$6,481



Description and Purpose:

This project combines funding sources for water quality work on Cottonwood Creek. At present the entire 13 miles of Cottonwood Creek is listed as an impaired waterbody due to the presence of residue and foam. Lesions and growths have been found on juvenile salmon and may be linked to the residue. Specific project tasks will be determining the extent and timing of residue development, evaluation of all point source and non-point-source inputs (runoff), longitudinal measures of some water chemistry parameters, fish sampling, and chemical analyses of residue. The primary objective of this project is to evaluate the presence, location, and

variability in foam abundance and causes within Cottonwood Creek. Foam will be evaluated to determine whether it is human caused or whether human activities influence natural foam development processes. The secondary objective is to determine whether anthropogenic factors that cause or influence foam abundance are related to other potential water quality problems. The determination of the presence, causes, and sources of the foam will provide a direct link to the development of a recovery plan for Cottonwood Creek.

Evaluation of Environmental Benefits:

Environmental benefits will be determined by data that describes the distribution of residue over space and time (within the project year) and potential causes of residue development. Project success will be evaluated by the overall final project report and recommendations, which should provide a detailed understanding of the problem and identify specific actions or management options to address water quality concerns.

Deliverables Include:

[Quality Assurance Project Plan](#)

[Water Quality Report](#)

List of Volunteer Observers

Project Electronic Photographs

Data entry into SIM-DE and CIMMS databases



Project Contacts:

Grantee Project Manager

Gay Davis

Aquatic Restoration & Research Institute

P.O. Box 923

Talkeetna, AK 99676

Ph: 907-733-5432

<mailto:arri@mtaonline.net>

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