



WATER RESOURCES RESEARCH GRANT PROPOSAL

Project ID: AK3481

Title: Mercury Levels in Alaskan Rivers: Relationship between Hg levels and young salmon.

Focus Categories: Education, Toxic Substances

Keywords: salmon, methylmercury, mercury exposure

Start Date: 03/01/2001

End Date: 02/28/2002

Federal Funds: \$22,966

Non-Federal Matching Funds: \$45,973

Congressional District: AK

Principal Investigator:

Lawrence K. Duffy

Professor, University of Alaska-Fairbanks

Abstract

The process of total mercury and methylmercury accumulation from "water to salmon" will be studied in Alaska. Assessment of ingested contribution of mercury exposure for salmon will show the contribution of biogenic routes of exposure. Total mercury (THg) and methylmercury (MeHg) in muscle samples of young salmon species (chinook: *O. tshawytscha*; chum: *O. keta*; sockeye: *O. nerka*; coho: *O. kisutch*) from the western Alaska rivers (Yukon, Kuskokwim, Nushagak and Kvichak) which flow into the Bering Sea, will be measured. The mean THg levels in muscles of all the salmon species from several rivers will be compared to advisory limits for human consumption.