UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

January 16, 2004

MEMORANDUM FOR: F/HC3 - Chris Doley

FROM: F/AKR4 - Jon Kurland

SUBJECT: Review of NOAA Restoration Research Program Proposals

Alaska Region Habitat Conservation Division staff have reviewed the four proposals submitted to the NOAA Restoration Research Program by Alaska Fisheries Science Center Auke Bay Laboratory (ABL) scientists. To assist in the Restoration Center's review, we offer the following comments on the proposals based on our habitat management needs.

Of the four Alaska proposals, our top priority for funding is the proposal by Dr. Adam Moles to complete analyses of low-cost polyethylene strips as water quality assessment devices for restoration monitoring. The requested funding would allow ABL to complete analysis of water samples already gathered by the Kenai Watershed Forum. ABL research has shown that extremely low levels of hydrocarbons can be toxic to early life stages of salmon and herring. Lack of adequate water quality may completely derail the functional value of a habitat restoration project. Inexpensive and effective methods for assessing water quality for restoration projects, particularly in highly urbanized environments, could allow evaluation of habitat suitability and the feasibility of habitat restoration for many projects.

Our second ranked project is Dr. K Koski's coho salmon estuarine rearing and stream overwintering study using otolith analysis to determine estuary residence. This proposal would also provide a useful method to determine habitat functionality, in this case for estuaries and streams as co-components of coho salmon rearing requirements. The results of this study could have new implications for siting restoration projects involving both habitat types. We ranked this proposal second, but it is equal in importance to the water quality project, although the latter is a slightly higher priority because samples are collected and waiting to be processed.

Our third ranked project is Dr. Moles' parasite diversity project. This project would compare parasite loads in coho salmon from an urbanized stream with two streams that are relatively pristine. The objective is to determine if parasite loads may be correlated to the contaminant load from urbanization, and may be used as a diagnostic tool in assessing restoration and recovery. We consider this an innovative and relatively inexpensive project that could have similar benefits to the previous two projects in determining the functional value of restored areas.

We do not support funding Dr. Koski's "Development and monitoring of methods to restore salmon spawning and rearing habitat" because it would fund travel to Juneau for employees of a private company to demonstrate a product called the "Sand Wand" that apparently is not performing as advertised, as well as monitoring to assess the effectiveness of the product. It may be more appropriate for the company to bear the costs of such a demonstration.

cc: F/AKC5 - Mike Dahlberg, K Koski, Adam Moles