



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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OFFICE OF
WATER AND WATERSHEDS

September 5, 2014

Don Essig
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

RE: EPA comments on Idaho's Discussion Paper #5 Anadromous Fish

Dear Don:

EPA appreciates the opportunity to provide comments on the discussion paper, which the Idaho Department of Environmental Quality (DEQ) provided at the July 23, 2014 negotiated rulemaking meeting. This discussion paper considers some of the issues regarding inclusion or exclusion of anadromous fish in the derivation of a fish consumption rate in Idaho. In our comments, we would like to note that we are discussing inclusion of fish that migrate in the consumption rate. EPA assumes that Idaho already intends to include species that ordinarily migrate but cannot because of physical barriers (e.g., dams) in their fish consumption rate. Whenever salmon are referred to in this comment letter, EPA is referring to salmon that can physically migrate.

EPA found Idaho's discussion paper to be quite comprehensive and well written. However, EPA believes the paper would have been strengthened by incorporating some of the issues analysis that Washington and Oregon did when considering the inclusion of anadromous species in the FCR. These issues are largely those associated with the uncertainties referred to later in these comments. The discussion paper also does not accurately describe the basis for EPA's subsistence default fish consumption rate of 142 g/day, implying it is solely derived from the 99th percentile of the general population (p. 4 under 'EPA's Position'). While EPA's recommendation corresponds to this percentile, the subsistence default rate was developed from a number of consumption estimates for subsistence fishers based on subsistence-fisher specific surveys. The subsistence default rate corresponds to a high-end (>90th percentile) consumption rate for a subsistence fisher population, as evidenced in particular by the 1994 CRITFC Survey. Although it also corresponds to the 99th percentile of the USDA's Continuing Survey of Food Intake by Individuals (CSFII) 1994-96, it was not derived from this data and the CSFII was not the basis for the selection of the 142.4 g/day value.

Although water quality criteria are developed by states and tribes on a local basis, the overall function of the water quality criteria is to support maintenance of appropriate water quality throughout the United States. Individuals should be able to safely consume the amount of fish they wish to and utilize water resources from any location within the U.S. Therefore, it is EPA's

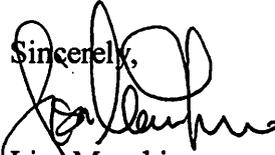
policy that consumption of freshwater and estuarine fish, regardless of source, should be used to develop water quality criteria for the protection of human health.

There are a number of uncertainties to consider in evaluating the inclusion of anadromous species, such as migrating salmon, in the FCR used to compute human health water quality criteria. Although EPA has, on a national basis, considered salmon to be largely a marine species, there is uncertainty as to the body burden of contaminants that salmon acquire in fresh water. Further, the marine food web that adult salmon rely upon is potentially affected by contaminant sources regulated under the Clean Water Act. The importance of considering these uncertainties is magnified by the fact that large amounts of salmon are consumed by tribal members and others in Idaho with associated contaminant exposures and consequent health risks. Yet another source of uncertainty is the market basket preferences of consumers. Individuals desiring to consume fish generally will vary in the species they consume. To protect the public in the face of these uncertainties, EPA believes that salmon should be included in the fish consumption rate used to derive human health water quality criteria in Idaho. Specifically, EPA believes that including salmon at a discounted rate (Option 2) or not including salmon at all (Option 3) would not be appropriate in Idaho.

There are additional arguments for including salmon in the fish consumption rate for chemicals regulated on the basis of their non-cancer toxicity. For these chemicals, EPA considers overall contaminant exposures in determining what allowable exposures are via fish consumption and drinking water ingestion. Specifically, the allowable exposure via fish consumption and drinking water should equal the total allowable exposure minus the exposure from other sources. EPA generally implements this consideration via the “relative source contribution” (RSC) term. The RSC is the fraction of the reference dose (e.g. the allowable daily intake) that can be allocated to fish consumption and water ingestion after considering the dose contributed by other routes of exposure. Though EPA guidance has stated that the primary approach for dealing with exposure to contaminants in salmon should be via reducing the RSC, it is difficult to do this using data because the necessary information is not always available. An alternate, acceptable approach to reducing the RSC is to fully include salmon consumption in the fish consumption rate. Assuming that Idaho would use the fish consumption rate to address exposure to contaminants found in anadromous fish, EPA believes that neither Option 2 nor Option 3 are appropriate.

EPA also has attempted to develop a cohesive regional perspective as it works with states and tribes to develop and/or update human health water quality criteria. Given that Washington and Oregon, which are downstream of Idaho, are considering including or have included salmon in their fish consumption rate, implementation of human health water quality criteria throughout the Pacific Northwest would be facilitated by uniformly including salmon in the fish consumption rate for Idaho. For all of the aforementioned reasons, EPA believes that salmon should be fully included in the fish consumption rate used to develop Idaho’s human health water quality criteria.

We look forward to continued work with DEQ on this effort and are available if you would like to discuss our comments further. Please contact Lon Kissinger (206-553-2115) or myself (206-553-1834) if you have any questions.

Sincerely,


Lisa Macchio
Water Quality Standards Coordinator