UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
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OFFICE OF
ECOSYSTEMS, TRIBAL AND
PUBLIC AFFAIRS

February 5, 2010

Allyn Meuleman
Snake River Area Office
230 Collins Road
Boise, ID 83702-4520

RE: EPA Region 10 Review of the Draft Environmental Impact Statement for the Minidoka Dam Spillway Replacement (EPA Project Ref: 08-063-DOI)

Dear Mr. Meuleman:

The U.S. Environmental Protection Agency (EPA) has reviewed draft Environmental Impact Statement (DEIS) for the Minidoka Dam Spillway Replacement Project (CEQ Number 20090429) in Minidoka County, Idaho. Our review of the DEIS was conducted in accordance with our responsibilities under National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

Section 309 specifically directs the EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our Section 309 authority, our review of the DEIS considers the expected environmental impacts, and the adequacy of the EIS in meeting procedural and public disclosure requirements of NEPA.

The DEIS examines two action alternatives to correct structural problems at the Minidoka Dam Spillway and associated facilities on Lake Walcott. We focused our review on Alternative B (total replacement of the spillway and headgate structures), which was identified as the preferred alternative in the DEIS. We recognize the importance of this facility in southern Idaho, and the need to prevent structural failure of the spillway and canal headworks. We also appreciate the attention given to the need to maintain flow to the wetland complex below the dam. We do have a limited range of concerns with the project, principally related to the analysis of water quality impacts, the potential extent of jurisdictional wetlands, and the extent to which the wetlands below the dam would be monitored and adaptively managed. Each of these concerns is detailed below:

Water Quality

In section 3.4.2 the DEIS describes the methods to be used to evaluate potential water quality impacts, and the indicators to be used. The water quality impact indicators listed are:

- Movement of sediment as channel substrate
- Suspended sediment concentration and movement through the water column
- Water temperature
- Nutrients – Total Phosphorous concentration and movement through the water column.

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We concur with the selection of impact indicators. What is less clear is how the conclusions in the DEIS regarding water quality impact were reached. Page 82 of the DEIS, for example, indicates that Alternative B should not affect the normal cycling and transport of nutrients in the reservoir. A similar conclusion is reached on page 83 for the reach downstream of the dam. We recommend that the FEIS provide a more robust discussion as to how these conclusions were reached. The application of the MODSIM model provided a good comparison of hydrologic conditions under different alternatives, but it does not allow for the comparison of other parameters, such as temperature, phosphorous, or suspended sediments. This may require the employment of a model capable of simulating water quality in lakes and reservoirs, such as CE-QUAL-R1[1].

Wetland Delineation

The DEIS notes that 5.2 acres of spillway habitat would be converted to permanently watered reservoir habitat. Although the DEIS describes the physical characteristics of the site, it is not clear whether a wetland delineation has been conducted for this site. We recommend that the FEIS clarify whether any jurisdictional wetlands exist in the area to be inundated. If wetlands are present, we recommend that a functional assessment be conducted. This information will be necessary to inform the CWA 404 permitting process.

Monitoring and Adaptive Management

Page 147 of the DEIS indicates that monitoring would be conducted to determine whether the wetland complex below the dam would be affected by the reduction in flow from the spillway. We are pleased to see this monitoring component included in the DEIS. We recommend that this discussion be expanded in the FEIS to include a discussion of thresholds, and how impacts to the wetlands would be defined. We further recommend the inclusion of potential mitigation measures, such as increased flow from the water release gates.

Based on our analysis, we have rated this DEIS as EC-1 (Environmental Concerns – Insufficient Information). An explanation of this rating is enclosed. We appreciate the opportunity to provide comments, and I encourage you to contact Teresa Kubo of my staff with any questions at 503-326-2859 or kubo.teresa@epa.gov.

Sincerely,

Christine B. Reichgott

Christine B. Reichgott, Manager
Environmental Review and Sediment Management Unit

[1] http://smig.usgs.gov/cgi-bin/SMIC/model_home_pages/model_home?selection=cequalr1

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