



Department of Energy

Official File

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

December 8, 2009

In reply refer to: KEC-4

To: People Interested in the Nelson Springs Project

Design and Construction of Office Complex-Yakima/Klickitat Fisheries Project and Floodplain/Wetlands Assessment and Floodplain Statement of Findings

Floodplain/Wetlands Assessment and Floodplain Statement of Findings

Department of Energy Regulations (10 Code of Federal Regulations (CFR) 1021 and 1022), implementing Executive Orders 11988 and 11990 (May 24, 1977), require Bonneville Power Administration (BPA) to ensure that the potential effects of any action it may take in a floodplain are evaluated, that wetlands protection is considered in decision making, and that the potential impacts of any new construction proposed in a wetland are evaluated. In accordance with the Department of Energy regulations on Compliance with Floodplain/Wetlands Environmental Review Requirements (10 CFR 1022.13), BPA has prepared the following assessment of the impacts of the Yakima Fisheries Nelson Springs Project on floodplains and wetlands. This assessment also serves as the floodplain statement of findings required by 10 CFR 1022.14.

Project Description

BPA plans to remove several existing structures and construct a new structure at Nelson Springs in Yakima County, Washington. The location of the project is 771 Pence Road, northwest of the city of Yakima in T13N, R18E, Section 9 of the Selah Quadrangle. The site is approximately 125 meters from the Naches River and 20 meters from Buckskin Slough (See attached map). Buckskin Slough enters the site at the northwest corner, then proceeds south and east before exiting at the approximate center of the eastern boundary of the site. Although the proposed project construction would not be sited in the regulatory floodway of the Naches River, it would be within the 100-year floodplain. In accordance with DOE regulations for compliance with floodplain and wetlands environmental review requirements, the new construction would be located outside of the designated floodway and would be designed not to flood or have a net effect on flood behavior during 100-year flood events.

The proposed plans call for the construction of a modular office structure to replace the three existing buildings that house Yakima/Klickitat Fisheries Project (YKFP) research, monitoring and evaluation and data management activities, including equipment and staff. A mobile home used for data management and office space on the southeastern portion of the site, a wood-framed research and office facility on the northeastern portion of the site, and a small wooden shed/utility building on the south-central portion of the site would be removed and a new structure would be built at the southern end of the parcel. The mobile home is currently located in the floodplain. The other existing structures are located in the regulatory floodway. Most of the site is landscaped lawn or unpaved parking.

The project would serve to provide properly functioning, modern facilities for conducting YKFP Yakima River Basin fisheries research and data management activities. The proposed construction would include several mitigating features including removal of existing structures from the floodway, installation of a

pervious driveway, revegetation with native plants, and installation of a building that complies with National Flood Insurance Program building standards.

The project will include the restoration of that portion of the Buckskin Slough streambank located on the project site. Restoration will include removal of bank armoring, drawing back the bank to a more natural slope, planting of native riparian plant species, and removal of piping, a footbridge and other structures from the stream's riparian corridor. The restoration activities will improve natural floodplain functions.

Floodplain Impacts

The locations of 100-year floodplains were determined from Flood Insurance Rate Maps published by the Federal Emergency Management Agency, U.S. Department of Housing and Urban Development. While the proposed structure would be within the FEMA-designated 100-year floodplain of the Naches River, the structure would not be within the regulatory floodway. The structure will be designed to withstand flooding and would not alter the natural and beneficial floodplain values. The new structure will be elevated above the 100-year floodplain, and the existing buildings in the floodplain would be removed, so displacement of floodwaters by the structure is not expected to alter floodplain storage volume or impact lives or other property by increasing the risk of flooding or flood damage in the vicinity. Soil and vegetation disturbance at structure sites would not adversely impact the floodplain. Minor amounts of fill may be placed where necessary to support structures but would not generally create an elevated area that would divert, alter or impede floodwater flow patterns. Construction impacts within the 100-year floodplain would be mitigated by ensuring that final design would not raise the expected level of the 100-year flood and would include minimal use of impervious surfaces. Additionally, Buckskin Slough restoration activities would enhance floodplain function at the project site.

Wetland Impacts

A wetland delineation survey conducted by Parametrix did not identify or delineate any wetlands on parcel 181309-12022 that would be directly impacted by the construction. However, there were two wetlands noted by the survey near the project site. A wetland to the north of the project site was delineated as a Type III wetland¹. The project is located outside of the standard 75-foot wetland buffer, and the wetland would not be impacted by the proposed structure. The second wetland was identified (but not delineated) to the southeast. The survey noted that this wetland has been partially filled and includes sections of broken concrete culvert. While the proposed structure will fall outside Yakima County's 25-foot minimum buffer required for wetlands, it will be within the County's standard 100-foot wetland buffer. This wetland would not be disturbed during construction, and the natural passage of flood flows would be unimpeded through the high flow channel that supports the wetland.

The siting of the proposed facilities could potentially affect adjacent wetlands through septic system and parking lot drainage. These impacts would be mitigated through careful design and siting of the facilities. Current construction plans call for the inclusion of a bioswale, designed to remove silt and pollution from surface runoff water. The construction sites will be revegetated using native and other suitable plants that should improve the riparian and floodplain functions at the sites. Information from delineation surveys would be used during final design to develop mitigation measures, if necessary, to ensure that the project would result in no net loss to floodplains or wetlands.

¹ The wetland was delineated as Type III due to its connectivity to Buckskin Slough, a Type III stream.

Alternatives

We have evaluated the potential environmental impacts of a No Action alternative. The No Action alternative would not produce additional effects to the floodplain or wetlands. This option was found to be less desirable as the current facilities are reaching the end of their natural lifespan, and can no longer meet the demands placed on them. Due to cost and parcel constraints (size and location) no practical alternative to locate the facility outside of the floodplain exists. Floodplain development is typically discouraged by state, federal, municipal and local regulations; however, floodplain development may be allowed if a no net rise in flood elevation standard can be achieved, and if development would not result in flooding of otherwise flood-free areas. The floodplain encroachment for the proposed project is expected to be minor, with no appreciable rise in water levels; rather, the project would include a removal of structures from the floodway and restoration of natural floodplain features along Buckskin Slough.

Floodplain Statement of Findings

BPA finds that the proposed project activities would not adversely affect human life, property, or natural floodplain/wetland values. Implementation of the project would be consistent with applicable floodplain protection standards in 10 CFR1022.12, Executive Order 11988 and Executive Order 11990.

Comment Opportunities:

Please provide any comments you may have on this review no later than **December 31, 2009**. Comments can be submitted online at: www.bpa.gov/comment, via mail to: Bonneville Power Administration, Public Affairs Office - DKC-7, P.O. Box 14428, Portland, OR, 97293-4428, or faxed to (503) 230-3285. You may also call us with your comments toll free at (800) 622-4519. Please reference "Nelson Springs Project" with your comments. We will post all comments we receive in their entirety on the Nelson Springs Project [comments page](#).

For More Information, Contact:

Israel N. Duran – KEC-4, Bonneville Power Administration, P.O. Box 3621, Portland, Oregon, 97208, phone number 503-230-3967, fax number 503-230-5699.

Thank you for your interest in this project.

Sincerely,

/s/ Israel N Duran 12/08/09

Israel N. Duran
Environmental Protection Specialist

Enclosure:
Vicinity Map