BA/Coords

State of Washington
DEPARTMENT OF FISH AND WILDLIFE

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June 6, 2001

Steve Wright, Administrator
Bonneville Power Administration
905 NE 11th Ave. / P.O. Box 3621
Portland, OR 97208-3621

Dear Mr. Wright:

I wish to take this opportunity to ensure that Bonneville Power Administration (BPA) received the proposals that were submitted on behalf of the State of Washington for the BPA 2001 Action Plan for Fish in Response to Power System Emergency and that BPA understands the context for their submission. In addition, I would like to provide some perspective on the types of actions that we believe are necessary to help mitigate the impacts of the 2001 Power System Emergency on salmon listed for protection under the Endangered Species Act (ESA).

BPA should have received the following proposals from Washington agencies and their cooperators; their abstracts are appended to this letter:

- Design, Fabricate, and Install new Huntsville Mill Fish Screen
- Kittitas Valley Reach Acquisitions
- Methow Basin Screening
- Taneum Creek Water Rights & Restoration
- Buckskin Slough Restoration
- Entiat Subbasin - Stream Gaging Installation and Operations
- Okanogan Subbasin - Stream Gaging Installation and Operations
- Wenatchee Subbasin - Stream Gaging Installation and Operations

Additional proposals may have been received that we are not aware of, as the short time frame for project submission precluded effective coordination.

It goes without saying that BPA has salmon protection responsibilities under the National Marine Fisheries Service 2000 Biological Opinion on the operation of the Federal Hydropwer System (BiOp). The basic premise of the BiOp is to reverse the declining trends in listed salmon juvenile to adult survivals in order to avert extinction. It also goes without saying that this years' drought conditions create a challenging year for salmon, even absent the BPA actions in response to the power system emergency. As a result, we understand and appreciate BPA's objective of providing effective mitigation for

decreases in salmon survival and productivity that are directly linked to BPA operations in 2001. However, time constraints as well as other responsibilities make it very difficult for the Washington Department of Fish and Wildlife (WDFW) and other state agencies to propose more than a handful of projects that fit the narrow criteria BPA developed for this funding category.

The vast majority of the fish that are negatively affected by the power emergency operations are outmigrating smolts that will have left the upper Columbia River system by June, well after the time the funding for projects is available. Thus, our best opportunity now to offset the power emergency impacts is to improve smolt survivals in the lower river through implementation of spill and maintenance of mainstem flow at recommended levels. To that end, WDFW applauds the establishment of limited spill programs at all four lower dams, as a significant improvement over no spill. Even so, spill levels are below optimal and therefore power emergency operations will result in decreased smolt survivals. At this point, the only way to improve overall productivity of the 2001 outmigrants is to increase the survival and success of the 2001 outmigrant class when they begin returning as adults in 2003. Thus, several of our proposals are geared to have improvements completed by fall 2003, prior to spawning by the three year old age class.

Due to the overlapping nature of chinook and steelhead adults returning to the Columbia, survival improvements affecting one brood year can help strengthen the previous or the following brood year, since each return is usually comprised of three, four and five year old spawns. Therefore, an extremely valuable mitigation for the 2001 Power Emergency is for BPA to commit to provide in-river migration conditions in 2002 that are better than BiOp requirements for outmigrants as well as returning adults.

The short time period for developing and submitting proposals dictated that WDFW and other Washington entities rely primarily on "off the shelf" projects: those that were already engineered and ready to go. BPA is well aware that Washington agencies, tribes and others had just finished a round of proposal development and submission for the Columbia Plateau province, which included the Walla Walla and the Yakima basins. All of the salmon recovery projects that were ready for funding for those basins had just been submitted as part of the Provincial funding process. We have submitted some of those same proposals that most closely fit the power emergency funding criteria for funding in the BPA 2001 Action category. This will allow BPA to choose whether to fund these projects under the Provincial Review process or the 2001 Action category. For the other major province, the Columbia Cascade, we are confident that additional proposals will emerge as we engage in the subbasin summary and planning process.

Washington State regards the above-mentioned eight projects as necessary actions for salmon recovery, and appropriate mitigation for fish losses due to the Power System Emergency. They represent the type of activities prescribed in the Washington recommendations to BPA for BiOp implementation: a multi-year approach that addresses culverts, screens, barrier removal, instream flow improvements and habitat protection throughout the Basin, with performance measures and monitoring and evaluation. If the Columbia Plateau projects are not funded by BPA, their next chance for funding will not come for three more years. If the Columbia Cascade projects are not funded in this round, necessary recovery activities are delayed another year.

Finally, we are continuing to look for opportunities to work with the local entities, the Tribes, the Northwest Power Planning Council, and Congress to secure funding for, and implement, a comprehensive package of salmon mitigation actions in all funding categories. We believe that a comprehensive package must be equitable across all mortality factors (all four Hs), and cannot allow any party the ability to act unilaterally. And so, we reiterate our concern that BPA has engaged in almost no consultation with the region, prior to declaring emergencies and to determining what constitutes acceptable mitigation. We'd like to continue the discussion about a longer-term strategy that is responsive to the Four Governor's Recommendations and meets the needs of Washington State citizens and Tribes at your earliest convenience.

Sincerely,

Jeff P. Koenings, Ph.D.
Director

cc: Governor Locke
Curt Smitch
Donna Darm, National Marine Fisheries Service
Larry Cassidy
Tom Karier
Randy Settler, Yakama Nation
Joe Peone, Colville Tribe
Mary Verner, Spokane
Brian Allee, CBFWA

Design, Fabricate, and Install New Huntsville Mill Fish Screen

Abstract

The Washington Department of Fish and Wildlife (WDFW), Yakima Screen Shop (YSS) proposes to replace the Huntsville Mill fish screen facility located on the Touchet River, a tributary to the Walla Walla River. Obsolete Walla Walla basin fish screens constructed in the 1930's, 40's, 50's and 60's must be replaced or updated to comply with current, regional fish screen biological protection criteria adopted by Columbia Basin Fish and Wildlife Authority (CBFWA), Fish Screening Oversight Committee (FSOC) in 1995. The project objective is to provide 100 percent protection from mortality and/or injury for all species and life stages of anadromous and resident salmonids, including bull trout and steelhead trout that are listed as "threatened" under ESA (6/98 and 3/99, respectively). Old screens in the Walla Walla basin, and in other Columbia River sub basins, may provide fair protection for large (4-6 inch long) yearling smolts, but poor protection for fry and fingerling life stages. Mortality of fry and fingerlings by irrigation diversions may reduce subsequent smolt production and hampers efforts to restore depressed salmon and steelhead populations through natural production or hatchery supplementation. Biological evaluation of completed Phase II fish screen facilities by Battelle, Pacific Northwest National Laboratory (PNNL) under Project # 198506200 has quantified survival and guidance rates approaching 100% (ranging from 90 to 99%). Consequently, the state and federal fish agencies and Confederated Tribes of the Umatilla Indian Reservation (CTUIR) propose to complete replacement or upgrade of all obsolete fish screen facilities in the Walla Walla basin.

This project cannot improve survival of the juveniles out-migrating in 2001 that will have reduced survivals due to Power System Emergency Operations, as they will have already left freshwater before funds are appropriated. However, it must be funded in 2001 in order to ensure that the new screen is installed in time to improve the survival of the progeny of 2003 returning brood stock. The 2003 returns are predominantly descendents of the 2001 out migrants, and thus represent our first opportunity to mitigate for losses in 2001.

Kittitas Valley Reach Acquisitions

Abstract

Jack Stanford and other collaborators have identified Yakima River reaches that "appear to be crucial to the long-term survival and recovery of salmon in the Yakima River system." The Kittitas Valley Reach is a "huge flood plain" that begins near Taneum Creek and ends when the river enters the Yakima Canyon. This grant proposal focuses on the most functional and ecologically intact lands west and south of the City of Ellensburg, riparian areas that represent a "very complex upwelling system with substantial intact riparian forest and minimal housing encroachment." (Jack Stanford, 1998).

The upwelling sections of these flood plains have the highest value for conservation and enhancement because they have the most complex habitats. The upwelling creates a mosaic of interconnected aquatic habitats (riparian wetlands) that expand and contract in relation to the river hydrograph. The associated wetlands in the properties to be purchased are fish and wildlife havens. WDFW has designated one of the properties as a bald eagle communal roost, while a 1994 fish survey of the Yakima River side channels reported finding large numbers of anadromous and resident fish.

Based on Stanford's research and the Yakama Nation's EDT model, this proposal is part of a cooperative Yakama Nation/Nature Conservancy/BOR/BLM/Washington State Parks and WDFW strategy to identify and bring into conservation ownership/easement properties in the Kittitas Reach, or to retain agriculture water rights to benefit fish populations. Due to the serious water shortage, one of the Kittitas Reach property owners has sold his year 2001, 600-acre feet senior water right to WDOE.

Methow Basin Screening

Abstract

This project provides fish screen facility upgrades, and new fish screen construction, on Methow River Basin irrigation diversions (Foghorn, Rockview, McKinney Mountain, Kumn Holloway). Within the agency direct appropriation for the 99-01 biennium, funding was appropriated to fabricate and install a replacement screening facility at the Foghorn irrigation diversion. This funding will not carry over into the 01-03 biennium starting July 1, 2001. The Foghorn Fish Screen is located approximately 1 mile west of the town of Winthrop, WA. This facility is located on property owned by the U.S. Fish and Wildlife Service (USFWS), Winthrop Hatchery. The facility is operated by the Foghorn Irrigation Company and does not meet current NMFS and WDFW criteria for fish protection, including approach velocities, sweeping velocities, screen mesh, screen orientation, and bypass criteria. YSS proposes a new electrically driven drum screen with proper orientation relative to flow, and new bypass system. Fabrication of the screen and metal work is scheduled for early summer 2001, with installation scheduled for late fall 2001.

Within the agency direct appropriation for the 99-01 biennium, funding was appropriated to fabricate and install a replacement screening facility at the Rockview irrigation diversion. This funding will not carry over into the 01-03 biennium starting July 1, 2001. The Rockview Fish Screen is located approximately 8 miles northwest of the town of Winthrop, WA. This facility is located on recently acquired WDFW property as part of the Big Valley Unit Wildlife Area; this Wildlife Area provides excellent habitat for fish and wildlife. The facility was originally built in 1965 and does not meet current NMFS and WDFW criteria for fish protection, including approach velocities, sweeping velocities, screen orientation, and bypass criteria. YSS proposes a new paddlewheel driven flat-plate screen with proper orientation relative to flow, and new bypass system. Fabrication of the screen is scheduled for summer 2001, with installation tentatively scheduled for early fall 2001.

Within the agency direct appropriation for the 99-01 biennium, funding was appropriated to fabricate and install replacement screens at the Kumn Holloway and McKinney Mountain irrigation diversions. This funding will not carry over into the 01-03 biennium starting July 1, 2001. YSS proposes two new paddlewheel driven portable modular drum screens with proper orientation relative to flow, and new bypass systems, for the two sites. Fabrication of the portables is scheduled for spring/summer 2001, with installation tentatively scheduled for fall 2001. In the Methow River basin, spring chinook and steelhead are listed by the ESA as **Endangered**. This project cannot improve survival of the juveniles out-migrating in 2001 that will have reduced survivals due to Power System Emergency Operations, as they will have already left freshwater before funds are appropriated. However, it must be funded in 2001 in order to ensure that the new screens are installed in time to improve the survival of the progeny of 2003 returning brood stock. The 2003 returns are predominantly descendents of the 2001 out migrants, and thus represent our first opportunity to mitigate for losses in 2001.

Taneum Creek Water Rights & Restoration

Abstract

Jack Stanford and other collaborators have identified Yakima River reaches that "appear to be crucial to the long-term survival and recovery of salmon in the Yakima River system." The Kittitas Valley Reach is a "huge flood plain" that begins near Taneum Creek and ends when the river enters the Yakima Canyon. This grant focuses in on the "headwaters" of this reach in Taneum Creek, a major tributary of the Yakima River.

Taneum Creek is listed by the Washington Department of Ecology as having in-stream flow deficiencies. Taneum Creek flows are significantly below USFWS flow targets and have been a particular concern to fishery managers in summer and fall months. Historically, Taneum Creek supported anadromous spring chino, coho and steelhead. (Bain,2000) Anadromous fish runs have been thwarted by flow depletions. However, recent passage and flow regulation improvements in Taneum Creek, particularly the purchase of the Heart K Ranch, have improved the potential for greater flows. Spring chinook and steelhead still exist in the project proposal reaches of Taneum Creek. Bull trout may utilize Taneum Creek. (U.S. Forest Service).

The project aims to secure two water rights on the lower Taneum Creek reach, and place 200 rootwads in strategic locations in the stretch of Taneum Creek between the Heart K Ranch and the Springwood Ranch. Native vegetation planting of riparian shrubs and trees would also occur.

Buckskin Slough Restoration

Abstract

Buckskin Slough, a tributary of the Naches River, is a highly productive salmon stream located just outside the Yakima, WA city limits. Twenty active coho redds were counted in October, 2000; the stream also provides spawning and rearing habitat for steelhead and chinook salmon. The Yakama Nation Fisheries staff considers Buckskin Sough to have "extraordinary productivity." (personal communication, Bruce Watson) This is because the slough is a stable "springbrook," and because data taken for the Yakima Klickitat Fisheries Project found Buckskin Slough water quality to be "high." The ***Yakima Planning Unit Habitat Report*** identified the lower Naches River and its tributaries as "one of the most important spawning reaches in the Yakima River watershed...but there is a lack of off- channel rearing habitat." Additionally, "woody debris recruitment is considered deficient in this reach." Phase 1 identified priority sites and initiated conversations with cooperative landowners for restoration projects. WDFW was able to receive a $37,155 grant from the Mid-Columbia Regional Fisheries Enhancement Group to complete a portion of the necessary work. The Buckskin Slough proposal was part of the Jim Waldo Yakima Basin initiative submitted to Governor Gary Locke. This project was recommended for BPA funding.

Due to a combination of high interest landowners coupled with continued development threats along Buckskin Slough, accomplishing the Phase 1 goals is a priority for WDFW, the RFEG and the Yakama Nation. Fisheries habitat function has been severely impacted by riparian clearing, construction of irrigation diversions that form migration barriers, residential encroachment, and removal of woody debris (Gary Koch, Phase 1 contractor, personnel communication).

Entiat Subbasin - Stream Gaging Installation and Operations

Abstract

Salmonid species in the Upper Columbia tributaries will be adversely impacted by 2001 operations of the FCRPS, according to the NW Power Planning Council's analysis (Effects of 2001 Mid-Columbia Hydropower Operations on Fish / Council Document 2001-9). Water conservation efforts and public purchase and lease of water for fish will start the way to recovery for ESA-listed fish species and help offset mortality associated with 2001 mainstem operations.

Irrigation and other out-of-stream water uses have reduced the flows in the Entiat basin. Adequate stream flows influence habitat conditions such as pool size and frequency, flow depth and velocity, temperature and dissolved oxygen. The Entiat stream gaging project will track stream flows over time and ensure that public investments made to enhance flows will be monitored, analyzed, and reported in near real-time. The gages will provide instream flow information during the critical flow times so water can be managed properly and in a timely manner. These data are important to the management of water and salmonid recovery efforts.

Stream flow data is lacking in many critical basins and sub-basins throughout the state, especially where salmon are at risk. It is critical to have accurate and timely (i.e. near real-time) information on how much water is flowing in rivers and streams if water is to be effectively managed for in-stream users (such as fish) and for flood management and protection. Stream flow data are required for most TMDL evaluations, and for evaluating the success of current and future water management decisions. And because stream flows are the result of numerous natural (e.g. precipitation; snowmelt) and anthropogenic factors (withdrawals; storage) these data are essential to implementing effective, meaningful adaptive management strategies.

Current stream gaging efforts in Washington State are not sufficient to meet most of these objectives. The USGS has significantly reduced its stream gaging network while increasing its costs in recent years. Local governments and watershed groups almost universally desire more and better stream flow information but they generally do not have funding to develop their own programs. The Entiat Basin has only 1 real time stream gages.

Okanogan Subbasin - Stream Gaging Installation and Operations

Abstract

Salmonid species in the Upper Columbia tributaries will be adversely impacted by 2001 operations of the FCRPS, according to the NW Power Planning Council's analysis (Effects of 2001 Mid-Columbia Hydropower Operations on Fish / Council Document 2001-9). Water conservation efforts and public purchase and lease of water for fish will start the way to recovery for ESA-listed fish species and help offset mortality associated with 2001 mainstem operations.

Irrigation and other out-of-stream water uses have reduced the flows in the Okanogan basin. Adequate stream flows influence habitat conditions such as pool size and frequency, flow depth and velocity, temperature and dissolved oxygen. The Okanogan stream gaging project will track stream flows over time and ensure that public investments made to enhance flows will be monitored, analyzed, and reported in near real-time. The gages will provide instream flow information during the critical flow times so water can be managed properly and in a timely manner. These data are important to the management of water and salmonid recovery efforts.

Stream flow data is lacking in many critical basins and sub-basins throughout the state, especially where salmon are at risk. It is critical to have accurate and timely (i.e. near real-time) information on how much water is flowing in rivers and streams if water is to be effectively managed for in-stream users (such as fish) and for flood management and protection. Stream flow data are required for most TMDL evaluations, and for evaluating the success of current and future water management decisions. And because stream flows are the result of numerous natural (e.g. precipitation; snowmelt) and anthropogenic factors (withdrawals; storage) these data are essential to implementing effective, meaningful adaptive management strategies.

Current stream gaging efforts in Washington State are not sufficient to meet most of these objectives. The USGS has significantly reduced its stream gaging network while increasing its costs in recent years. Local governments and watershed groups almost universally desire more and better stream flow information but they generally do not have funding to develop their own programs. The Okanogan Basin has only 4 real time stream gages.

Wenatchee Subbasin - Stream Gaging Installation and Operations

Abstract

Salmonid species in the Upper Columbia tributaries will be adversely impacted by 2001 operations of the FCRPS, according to the NW Power Planning Council's analysis (Effects of 2001 Mid-Columbia Hydropower Operations on Fish / Council Document 2001-9). Water conservation efforts and public purchase and lease of water for fish will start the way to recovery for ESA-listed fish species and help offset mortality associated with 2001 mainstem operations.

Irrigation and other out-of-stream water uses have reduced the flows in the Wenatchee basin. Adequate stream flows influence habitat conditions such as pool size and frequency, flow depth and velocity, temperature and dissolved oxygen. The Wenatchee stream gaging project will track stream flows over time and ensure that public investments made to enhance flows will be monitored, analyzed, and reported in near real-time. The gages will provide instream flow information during the critical flow times so water can be managed properly and in a timely manner. These data are important to the management of water and salmonid recovery efforts.

Stream flow data is lacking in many critical basins and sub-basins throughout the state, especially where salmon are at risk. It is critical to have accurate and timely (i.e. near real-time) information on how much water is flowing in rivers and streams if water is to be effectively managed for in-stream users (such as fish) and for flood management and protection. Stream flow data are required for most TMDL evaluations, and for evaluating the success of current and future water management decisions. And because stream flows are the result of numerous natural (e.g. precipitation; snowmelt) and anthropogenic factors (withdrawals; storage) these data are essential to implementing effective, meaningful adaptive management strategies.

Current stream gaging efforts in Washington State are not sufficient to meet most of these objectives. The USGS has significantly reduced its stream gaging network while increasing its costs in recent years. Local governments and watershed groups almost universally desire more and better stream flow information but they generally do not have funding to develop their own programs. The Wenatchee Basin only has 3 real time stream gages.