Northwest Power and Conservation Council

February 24, 2011

DECISION MEMORANDUM

TO: Fish and Wildlife Committee members

FROM: Mark Fritsch, project implementation manager

SUBJECT: Step 3 review of the Sekokini Springs Westslope Cutthroat Trout Isolation Facility Master Plan, *Hungry Horse Mitigation Program*, Project #1991-019-03.

PROPOSED ACTION:

I. The staff recommends that the Fish and Wildlife Committee approve this facility for construction and operation.

II. Staff further recommends that the Fish and Wildlife Committee call for additional detail requested by the independent review panel be addressed during the Resident Fish/Blocked Areas review.

SIGNIFICANCE: The Sekokini Springs Westslope Cutthroat Trout Isolation Facility is proposed to aid in the recovery of genetically pure westslope cutthroat trout (WCT) populations in the Flathead River drainage. This action is a component of Project #1991-019-03, *Hungry Horse Mitigation Habitat Restoration and Research, Monitoring, and Evaluation (RM&E)*.

BUDGETARY/ECONOMIC IMPACTS

The total estimated construction costs for the new and modified facilities $1,808,413. The total construction cost estimates includes construction, construction management, and permitting. Planning since 1997 has cost $257,300. In addition, costs to date have addressed capping three wells to prevent contaminating the artesian water source ($57,000), and purchasing the improvements on national forest land from former trout farm owner in 1998 ($78,000) and maintenance and upgrading the existing on-site facility to protect investments ($248,200).

Annual operation and maintenance costs for the Sekokini Springs Isolation Facility after it is fully developed are estimated at $150,000 for the first year and $124,000 after initial start up.

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Annual monitoring and evaluation costs of the Hungry Horse Mitigation Program[1] are estimated at $150,000. Assuming that the existing Hungry Horse Mitigation Program and all of its existing work elements are funded, the monitoring and evaluation for the Sekokini Springs component would not require additional funding for Sekokini Springs.

The following cost figures are based on estimates from Montana Fish, Wildlife & Parks.

Future Costs[2]

FY	11	12	13	14	15	16	17	18	19	20
Con-struction	$152	$847	$557	$252						
O&M	$70	$150	$124	$124	$124	$124	$124	$124	$124	$124
M&E	$150	$150	$150	$150	$150	$150	$150	$150	$150	$150

BACKGROUND

Montana Fish, Wildlife & Parks (MFWP), proposes to use the Sekokini Springs site to conserve unique populations of genetically pure westslope cutthroat trout (WCT) populations in the Flathead River drainage. The Sekokini Springs site will provide isolated rearing areas for wild donor WCT whose progeny will be released to targeted restoration areas. Additionally, the site will provide isolation facilities within which wild spawners can be held for collection of milt for infusion into the existing state broodstock to introduce additional genetic complement (i.e., additional genetic variation and reduced domestication) into targeted restoration streams and lakes.

This project is part of the Hungry Horse Mitigation Program (HHMP) funded by Bonneville Power Administration (Bonneville). In 1991, the *Fisheries Mitigation Plan for Losses Attributable to the Construction and Operation of Hungry Horse Dam* (Mitigation Plan) was prepared by MFWP and the Confederated Salish and Kootenai Tribes (CSKT). This Mitigation Plan provided the Council with documentation of fisheries and habitat losses associated with construction and operation of Hungry Horse Dam (HHD) and a flexible strategy to mitigate for those losses. It addressed six specific program measures identified in the 1987 Columbia River Basin Fish and Wildlife Program and subsequent program amendments. The Council approved the loss statement, including annual fisheries losses of 250,000 juvenile bull trout and 65,000 migratory WCT from the Flathead Lake populations. In addition, an estimated 175,483 adfluvial WCT juveniles were lost in tributary reaches of the Hungry Horse Reservoir (HHR) and Flathead Lake due to construction of the HHD. The Mitigation Plan identified 77 miles (124 kilometers (km)) of critical, low gradient spawning and rearing habitat in streams that were inundated and lost when HHR filled.

[1] Project #1991-019-03, *Hungry Horse Mitigation Habitat Restoration and Research, Monitoring and Evaluation (RM&E),* and Project #1991-019-01, *Hungry Horse Mitigation/Flathead Lake Restoration and Research, Monitoring and Evaluation (RM&E).*

[2] Costs in thousands

The *Hungry Horse Dam Fisheries Mitigation Implementation Plan* (Implementation Plan) was adopted by the Council in 1993 and funded by Bonneville. The Implementation Plan describes specific measures to protect and enhance resident fish and aquatic habitat affected by HHD that do not require changes in dam operation. The hatchery portion of the HHMP is transitioning to experimental culture of native species as directed by the Mitigation Plan and the Implementation Plan. The Council approved the plan and amended it into the 1994 Fish and Wildlife Program (Measure 10.3A).

The activities proposed at Sekokini Springs is a component of Project #1991-019-03 (*Hungry Horse Mitigation Habitat Restoration and Research, Monitoring, and Evaluation (RM&E) Hungry Horse Mitigation*), which addresses fishery losses caused by the construction and operation of HHD in the Flathead Basin. This project implements habitat restoration, fish passage improvement, off-site mitigation and monitoring pertaining to Hungry Horse mitigation and includes enhancement and restoration at numerous tributaries in the basin. In association with this effort, Project #1991-019-01 (*Hungry Horse Mitigation/Flathead Lake Restoration and Research, Monitoring, and Evaluation (RM&E)*) included stream and lake restoration projects and monitoring within the Flathead Basin to verify responses of native fish communities, including WCT, to HHD mitigation measures. The Flathead Subbasin Plan calls for renovating the Sekokini Springs facility.

The proposed action at Sekokini Springs was initially discussed with the Council in early 1998. This discussion lead to the Council recommendation on June 27, 2001 associated with the Mountain Columbia provincial review that confirmed the proposed actions associated with the project's activities at Sekokini Springs would trigger a Three-Step Review process. The first master plan was reviewed in 2005.

Major Project Review (The Three-Step Review process)

Between 2005 and 2008 the master plan received several reviews by the ISRP and actions by the Council. Based on this the Council, on January 15, 2008, recommended that activities associated with the Sekokini Springs Isolation Facility proceed to NEPA and final design (Step 3). This decision was conditioned on the understanding that the MFWP continue to address the issues raised by the ISRP in its most recent review (ISRP document 2007-16) and submit a response for review prior to final step submittal (i.e., final design and construction costs).

On August 8, 2008 the Council received from MFWP information intended to addressed the issues raised by the ISRP (ISRP document 2007-16), and on September 29, 2008 the ISRP provided its review (ISRP document 2008-12) stating that the response meets scientific criteria (qualified).

On August 5, 2010 the Council received from MFWP a revised master plan (i.e., *Sekokini Springs Westslope Cutthroat Trout Isolation Facility Master Plan*) amended to address the science review issues (i.e., ISRP documents 2007-16 and 2008-12[3]) raised since the last action taken by the Council in January 2008.

[3] ISRP document provided a review on a submittal received from MFWP on August 8, 2008 (MFWP response to ISRP document 2007-16). The ISRP provided a "meets scientific criteria (qualified)" for the response. It was

On February 4, 2011 the ISRP provided its final review (ISRP document 2011-1) stating that the revised master plan meets scientific criteria (qualified).

ANALYSIS

The ISRP found that the revised master plan is ready to move forward with implementation and construction at the Sekokini Springs Westslope Cutthroat Trout Isolation Facility. Below are the three qualifications outlined by the review panel. Essentially the ISRP is seeking additional detail on the project's methodologies, data, and interpretation for management of the WCT restoration program. Additional information has already been provided by the sponsor, some of which is included after each ISRP comment below.

> 1. *Elimination of hybrids/non-natives before reintroduction*: Addresses the need for additional detail describing the protocol for evaluating whether an eradication effort was completely successful and for confirming the fishless status in each lake before restocking.
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> MFWP agrees with ISRP that the complete eradication on non-native species (genes) is the best outcome prior to replanting with pure WCT. The existing protocol uses gill nets and shoreline observations to detect any fish surviving after treatment (i.e. no fish captured in nets or observed indicates success). MFWP achieved complete kills since the project began being implemented in 2007. If survival would be detected after a future treatment, MFWP retains the option to treat again per the EIS for the mountain lakes actions.
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> 2. *Use of generic broodstock*: Addresses the issue between the existing re-introduction stock as it relates to targeted lake systems and the downstream barriers and the importance that drainage-specific stocks should be targeted for use sooner rather later.
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> MFWP agrees with this and is using Sekokini Springs to hold wild WCT for testing (genetics/pathogens), so that wild genes can be infused into the captive M012 broodstock to maintain wild traits. More importantly, Sekokini Springs will become the genetic conservation facility to provide Montana with alternative sources of pure WCT (unique genetic sources from the S. Fork Flathead) for restoration purposes in the Flathead Subbasin. This was the primary impetus for Sekokini Springs.
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> 3. *Objectives' focused monitoring and evaluation*: Addresses the need for more detail and protocols regarding a specific monitoring plan for the master plan.
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> As mentioned above, the activities at Sekokini Springs comprise just one aspect of the overall Hungry Horse Mitigation Program[4] and the ISRP expects more detail regarding RME protocols for the entire HHM program. MFWP anticipates that compiling RME for

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determined that these qualifications will also be addressed as part of the final submittal when NEPA and final design are complete.

[4] Project #1991-019-03, *Hungry Horse Mitigation Program.*

the entire program will enhance understanding of how the various components of the program relate to, and complement each other.

Information received from MFWP is helpful and indicates that they agree with the findings from the ISRP. However the additional information was not necessary to proceed as the ISRP only requested that the above information be addressed as part of the category review associated with Resident Fish/Blocked.

Based on the long history of the project, its importance to the overall Hungry Horse Mitigation Program in the Flathead, and the ISRP review the Council staff recommends that the Fish and Wildlife Committee approve the Sekokini Springs Westslope Cutthroat Trout Isolation Facility for construction and operation. MFWP will provide additional information requested by the ISRP in upcoming project reviews of the Hungry Horse Mitigation Program.

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