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May 1, 2018

DECISION MEMORANDUM

TO: Fish and Wildlife Committee members

FROM: Mark Fritsch

SUBJECT: Proposal #2017-004-00, Northern Pike Suppression and Monitoring.

PROPOSED ACTION: Council staff recommends that the Fish and Wildlife Committee support this proposal for implementation in Fiscal Year 2019. This recommendation is conditioned on funds being secured from the region to meet the goals and objectives of the proposal and the ISRP's qualifications, regarding the proposals deliverables, being addressed in contracting.

SIGNIFICANCE: This proposal addresses a priority of the 2014 Fish and Wildlife Program and continues the ongoing suppression of northern pike in Lake Roosevelt.

BUDGETARY/ECONOMIC IMPACTS

Funds for this proposal have not been identified. Interim funds, in Fiscal Year 2018, provided by the Spokane Tribe's and the Colville Confederate Tribe's re-allocation of funds within their portfolios. This reallocation is allowing the suppression effort to continue from the Programs previous support in Fiscal Year 2017. The proposed five-year budget totals \$4,505,442 with an average annual budget of \$901,088¹.

¹ The proposal was designed to address implementation for FY 2018 through 2022.

BACKGROUND

Northern pike have been found with increasing frequency in Lake Roosevelt since 2009. In early 2015, in association with Annual Fall Walleye Index Sampling (FWIN)² and juvenile white sturgeon sampling, an alarming increase in pike abundance caused concern among co-managers (Spokane Tribe of Indians (STOI), Washington Department of Fish and Wildlife (WDFW), and Colville Confederated Tribes (CCT)). Concurrently, the 2015 spring angler catch rates increased significantly and anglers now starting to routinely captured pike in the shallow bays in the Columbia River near Kettle Falls and on the Kettle River. The co-managers were concerned about the continued expansion of pike in Lake Roosevelt, especially to the Spokane and Sanpoil rivers where native redband trout populations are already hindered by non-native walleye predation. In addition, pike posed an enormous threat to salmon and steelhead recovery efforts below Chief Joseph Dam on the Columbia River.

At its June 3, 2015 meeting, BOG reviewed a request³ from the STOI to fund a multi-agency action to assist in the removal northern pike from Lake Roosevelt. The request was for \$28,531 (Fiscal Year 2015) to begin work immediately⁴. The BOG deemed the request a scope change for the project and due to the urgent nature of the request elevated it to the BOG Management Group. On June 6, 2015 Council members supported this request, but conditioned further funding in FY2016 be contingent on favorable ISRP Review.

At the December 2, 2015 BOG meeting the STOI presented their findings from the 2015 field season associated with the northern pike removal action approved in June and submitted the Lake Roosevelt northern pike Suppression Plan for future activities for ISRP review, as per the condition in the Council's June decision.

On January 25, 2016 the ISRP asked for additional detail and information before its review could be completed. The ISRP requested a *response* on eight issues and concerns from the STOI ([ISRP document 2016-2](#)). The ISRP found that they needed clearly defined hypotheses about several northern pike suppression activities, as well as additional detail and information regarding methods being proposed and time-deliverable objectives. In addition, the ISRP needed to understand the benefit the proposed effort would have to the Columbia River Basin. The STOI appreciated the review and suggestions to improve the credibility of their effort to suppress northern pike.

In an effort to proceed with the suppression effort until the science review was completed, the STOI requested that they be allowed to continue the March gill netting effort as supported last summer by the Council. The cost associated this effort is \$8,507. All other elements associated with the northern pike suppression effort would be dependent on a favorable science review. In addition, the STOI stated that if a

² As part of Project #1994-043-00, *Lake Roosevelt Data Collection*.

³ Project #1994-043-00, *Lake Roosevelt Data Collection*

⁴ Immediate purchase of equipment and associated increase in operational costs associated with a pilot Pike removal program that was implemented in the summer of 2015 by the three co-managers.

favorable review is received from the ISRP and they are able to fully implement their suppression effort they will at the end of the 2018 field season request an ISRP review to determine if benefit and objectives have been met and determine at what level suppression efforts need to be in moving forward.

On February 9, 2016 the Council recommended support only for the March 2016 gill netting effort and conditioned any other support in 2016 on the STOI receiving favorable ISRP and Council review for all remaining efforts associated with the removal of northern pike.

On February 25, 2016 the Council received a submittal that was intended to address the ISRP's previous review (ISRP document 2016-2) and the action taken by the Council at their February meeting. The submittal included specific responses to the ISRP response request and a revised proposal. The submittal was sent to the ISRP on February 26, 2016. The expense budget proposed in the new action for the project for Fiscal Year 2016 was \$69,529 and would be taken from the with-in year placeholder⁵. Cost in years 2017, and 2018 will be addressed by Bonneville in the projects start-of-year budget and was expected to be approximately \$40,000⁶.

On March 28, 2016 the ISRP provided its review ([ISRP document 2016-6](#)). The ISRP found that the proposal *meets science review criteria (qualified)*. On April 13, 2016, based on the ISRP review, past support and the priority that this suppression effort may address in the 2014 Fish and Wildlife Program⁷, the Council recommended to Bonneville the implementation of this proposed action through 2018⁸. This recommendation is conditioned on the ISRP qualifications being addressed in contracting. Support beyond the Fiscal Year 2018 field season would be dependent on ISRP and Council review.

On May 31, 2017 the STOI submitted a request⁹ to the Budget Oversight Group (BOG) for Project #1994-043-00, *Lake Roosevelt Data Collection*. Based on the increased catch rates during the spring 2017 supplemental gill netting, the intent of the submittal was to request additional funding to increase and expand the current northern pike removal efforts by additional gill netting to prevent further establishment and spread of northern pike in Lake Roosevelt. This request for \$123,017 was determined, by BOG, to be an "urgent" request based on time sensitivities and was elevated to the BOG management group. Based on previous Council recommendations, and in an effort to

⁵The balance for the within-year placeholder at the end of the first quarter of Fiscal Year 2016 is \$750,000 (out of \$1,000,000).

⁶ The reduced amount in Fiscal year 2017 and 2018 reflects just staff time and contracted services since equipment was secured in the Fiscal Year 2016 request.

⁷ Emerging priority #3 - Preserve program effectiveness by supporting: (1) expanded management of predators; (2) mapping and determining hotspots for toxic contaminants; and (3) aggressively addressing non-native and invasive species

⁸ The costs in Fiscal Year 2016 will come from the with-in year placeholder (BOG), and in Fiscal Years 2017 and 2018 will be addressed by Bonneville in the projects start-of-year budget process.

⁹ <https://www.cbfish.org/ChangeRequest.mvc/Display/548>

meet the time sensitivities associated with the request, the request was submitted to the ISRP on June 2, 2017.

On June 15, 2017 the Council received the ISRP review ([ISRP document 2017-6](#)). The ISRP found that the proposal *meets science review criteria (qualified)*. The ISRP review was extensive and very detailed and spoke to the need for additional suppression, but was found that previous review qualifications had not been met. Specifically, the ISRP stated the following.

Thus, the following concerns, along with our original qualifications (see Part B below), must be addressed. The responses to the qualifications and concerns should be described in the next annual report and also in the Three-year Northern Pike Relative Abundance Survey and Suppression Plan. The ISRP should review the annual report and the Suppression Plan before long-term commitments are made for this project.

- 1. Provide quantitative objectives and timelines, as discussed below and in [ISRP 2016-6](#). Clearly articulate quantitative catch limits for non-target species.*
- 2. Provide justification for terminating the suppression of northern pike if catch limits are exceeded for non-native walleye and smallmouth bass and hatchery trout.*
- 3. Describe in more detail the methodology and level of effort associated with the proposed expansion of the removal effort, and demonstrate how the methodology will be adequate to track the status of northern pike in Lake Roosevelt over time.*
- 4. Assess whether the benefits of longer nighttime set times outweigh the harm to other species by comparing catch rates of northern pike and mortality rates of other species in daylight versus nighttime sets, and using gillnets versus electrofishing.*

On June 26, 2017, based on the ISRP review, past Council recommendations, and other activities by the co-managers/sponsors to suppress invasive northern pike in Lake Roosevelt the Council recommended the following.

The request for \$123,017 is supportable, with the condition that all further activities in Lake Roosevelt addressing the control of Northern Pike funded through the F&W Program be addressed through a new project proposal narrative. This project proposal should include the following.

- Develop a new proposal/study design that is a joint submittal by the Spokane Tribe of Indians, the Confederated Tribes of the Colville Reservation and Washington Department of Fish and Wildlife, the fish managers in Lake Roosevelt, that describes a comprehensive strategy to assess and remove Northern Pike in Lake Roosevelt, with time deliverable objectives.*

- *This proposal needs to be submitted no later than November so that reviews (i.e., ISRP. Council and Bonneville) and recommendations can be made prior to the start of the field season in 2018.*

This proposal needs to be responsive to previous ISRP reviews and describe an integrated strategy by the co-managers (i.e., STOI, CCT and WDFW) to ensure the Program funds and contracts are efficiently used to address the suppression of Northern Pike.

On November 8, 2017 the STOI, WDFW and CCT submitted proposal #2017-004-00, *Northern Pike Suppression and Monitoring*. The proposal was requested as part of the Council's conditional recommendation in June 2017.

The goal of this proposal is to suppress northern pike in the Lake Roosevelt watershed and prevent the species from spreading and expanding into other water bodies by reducing or eliminating northern pike in the lake Roosevelt watershed (Objective #1) and conducting public outreach (Objective #2). It proposes to use a multi-teared approach that includes mechanical removal techniques, angler incentives, and limited monitoring and research; and to inform and promote public interaction to achieve the goal of the proposal.

On December 7, 2017 the proposal was submitted to the ISRP for review and on January 17, 2018 the ISRP provided a *response* requested ([ISRP document 2018-1](#)). The ISRP found the proposal needed more detail for the ISRP to make a full assessment, particularly, in regard to the monitoring program, and requested additional information regarding seven areas of the proposal. On March 9, 2018 the Council received a response from the proposal sponsors intended to address the information requested by the ISRP. On April 23, 2018 the ISRP provided its review ([ISRP document 2018-3](#)). The ISRP found that the proposal *meets science review criteria (qualified)*.

Concurrent to the proposal development and review, and to continue the on-going suppression efforts for northern pike in Lake Roosevelt the STOI re-allocated funds within their portfolio for Fiscal Year 2018 to provide \$269,222 to Project #1994-043-00. In addition, the CCT re-allocated \$292,858 from unspent CCT Accord Projects (Project # 1990-018-00 and #2008-111-00). It is understood that this is a short-term solution to continue the ongoing suppression until the review and decision is made regarding proposal #2007-372-00.

ANALYSIS

The ISRP found that the proposal met review criteria for a short-term suppression effort that could quickly and significantly change the abundance of northern pike and provide additional information regarding the status of the species in the Upper Columbia Basin. The specific qualifications are intended to benefit and strengthen the proposals seven deliverables, associated with the two objectives of this proposal. As you will note the reservoir study design (i.e., Deliverable #7) is incomplete and once the study plan is

developed the Council should request that the plan be reviewed before it is implemented.

As part of the proposal review the ISRP also raised and reconfirmed previous concerns and comments regarding the complexities of suppressing and the controlling nonnative piscivores within the Columbia River Basin. It is important to note that the 2014 Fish and Wildlife (*Part III; IV Strategies, A. Ecosystem Function; Sub-strategies; 3. Non-native and invasive species, and 4. Predator management*) speaks to the importance of understanding and managing these issues to the Fish and Wildlife managers in the Columbia River Basin. For these reasons the 2014 F&W Program identified expanding management of predators and aggressively addressing non-native and invasive species as a priority. As part of these sub-strategies and priorities of the 2014 Fish and Wildlife Program, and on the urgent needs brought to the Council in 2015 by the managers in Lake Roosevelt the Council initiated regional dialog regarding these issues between the resource managers and sponsors in 2016 and continues to facilitate discussion and coordination¹⁰.

The proposed suppression effort is a shared responsibility as discussed in previous reviews and recommendations. There is a need to ensure that all appropriate entities engage and be supportive of the control of northern pike in the Columbia River Basin. This is especially true in context to the budget associated with this proposal. It is anticipated that the intent of this project would be implementable by the start of Fiscal Year of 2019 and continue over the short-term through Fiscal Year 2022.

Based on the ISRP review and history surrounding the urgent need to get a better understanding of the control and suppression of northern pike in Lake Roosevelt, Council staff recommends that the Fish and Wildlife Committee support this project for implementation. This recommendation is conditioned on funds being secured from the region to meet the proposal goals and objectives.

¹⁰ Initiated in September 2016 (conference call) followed by coordination meeting in Coeur D'Alene in November 2016; Regional Coordination meeting in September 2017, and northern pike discussion and coordination meeting in December 2017.