



# United States Department of the Interior



**FISH AND WILDLIFE SERVICE**  
**Washington Fish and Wildlife Office**  
Eastern Washington Field Office  
11103 East Montgomery Drive  
Spokane Valley, Washington 99206

In Reply Refer To:  
**01EWF00-2018-F-1145-R001**

**SEP 18 2018**

Mark Robertson  
Lower Snake River Compensation Plan Office  
U.S. Fish and Wildlife Service  
1387 S. Vinnell Way, Suite 343  
Boise, Idaho 83709

Dear Mr. Robertson:

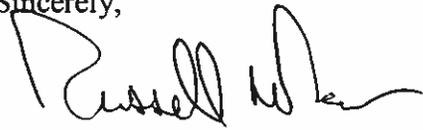
**Subject: Walla Walla and Touchet River Hatchery Program Reinitiation**

This letter transmits the U. S. Fish and Wildlife Service's revised Biological Opinion on the proposed funding of Walla Walla and Touchet River Summer Steelhead Programs located in southeast Washington, and their effects on bull trout (*Salvelinus confluentus*) and critical habitat for the bull trout. Formal consultation on the proposed action was conducted in accordance with section 7 of the Endangered Species of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). Your July 11, 2018, request for reinitiation of formal consultation was received via email on July 11, 2018.

The enclosed Biological Opinion is based on information provided in the June 12, 2017, Biological Assessment and subsequent December 22, 2017 Biological Opinion (01EWF00-2018-F-1145), revised information provided (Reinitiation Assessment, July 11, 2018), the Touchet River Spring Chinook Hatchery and Genetic Management Plan dated May 21, 2018, telephone conversations, field investigations, and other sources of information cited in the Biological Opinion. A complete record of this consultation is on file at the Eastern Washington Field Office in Spokane, Washington.

If you have any questions regarding the enclosed revised Biological Opinion, our response to your concurrence request(s), or our shared responsibilities under the Act, please contact Russ MacRae at 509-893-8001, or Michelle Eames at 509-893-8010.

Sincerely,

  
For

Eric V. Rickerson, State Supervisor  
Washington Fish and Wildlife Office

Enclosure(s)

cc:

WDFW, Dayton, WA (J. Bumgarner)

CTUIR, Pendleton, OR (B. Zimmerman)

Endangered Species Act - Section 7 Consultation

**BIOLOGICAL OPINION**

U.S. Fish and Wildlife Service Reference:  
01EWF00-2017-F-1145-R001  
[Cross reference#:01EWF00-2017-F-1145]

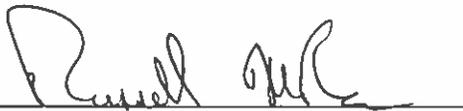
**Walla Walla and Touchet River Summer Steelhead and Spring  
Chinook Programs, Reinitiation of Consultation**

Federal Action Agency:

US Fish and Wildlife Service, Lower Snake River Compensation Plan Office

Consultation Conducted By:

U.S. Fish and Wildlife Service  
Washington Fish and Wildlife Office  
Spokane, Washington



Eric V. Rickerson, State Supervisor  
Washington Fish and Wildlife Office

GC

Date

9/18/18

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## ACRONYMS AND ABBREVIATIONS

Act	Endangered Species Act of 1973, as amended (16 U.S.C. 1531 <i>et seq.</i> )
BA	Biological Assessment
cfs	cubic feet per second
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DAP	Dayton Acclimation Pond
DAT	Dayton Adult Trap
FMO	Foraging, Migration and Overwintering
HGMP	Hatchery and Genetic Management Plan
LPO	Lake Pend Oreille
LSRCP	Lower Snake River Compensation Program
M&E	monitoring and evaluation
Opinion	Biological Opinion
Reinitiation BA	July 11, 2018, amended proposed action and incidental take request
RM&E	research monitoring and evaluation
RPM	Reasonable and Prudent Measures
Service	U.S. Fish and Wildlife Service
WDFW	Washington Department of Fish and Wildlife

## **INTRODUCTION**

This document represents the U. S. Fish and Wildlife Service's (Service) revised Biological Opinion (Opinion) based on our review of the original proposed action, and the addition of a spring chinook (*Oncorhynchus tshawytscha*) program (Chinook Program) to the continued funding and operation of summer steelhead hatchery programs in southeast Washington, and their effects on bull trout (*Salvelinus confluentus*), in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act). An amended proposed action and incidental take request, along with a request for reinitiation of formal consultation, were received via email on July 11, 2018.

This Opinion is based on information provided in the original June 12, 2017, Biological Assessment (BA), an amended proposed action and incidental take request dated July 11, 2018, and the Touchet River Spring Chinook Hatchery and Genetic Management Plan (HGMP) dated May 21, 2018 (Reinitiation BA). A complete record of the consultation is on file at the Eastern Washington Field Office in Spokane, Washington.

## **CONSULTATION HISTORY**

The following is a summary of important events associated with this consultation:

- The original Biological Opinion on the Walla Walla and Touchet River Summer Steelhead Programs was issued on December 22, 2017 (01EWF00-2017-F-1145; 2017 Opinion).
- The Reinitiation BA, the Touchet River Spring Chinook HGMP, and request for reinitiation was received on July 11, 2018.
- Formal consultation was initiated on July 11, 2018.

Because the Proposed Action is similar to the action addressed in the 2017 Opinion, the USFWS has incorporated numerous sections from the 2017 Opinion by reference in this document.

## **BIOLOGICAL OPINION**

### **DESCRIPTION OF THE PROPOSED ACTION**

A federal action means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by federal agencies in the United States or upon the high seas (50 CFR 402.02).

The Lower Snake River Compensation Program (LSRCP) funds and authorizes the operation of hatchery facilities and Maintenance and Evaluation (M&E) related to two steelhead programs in Southeast Washington. The LSRCP is now proposing to add a spring chinook (chinook) component to overall hatchery operations, for the purpose of recreational and tribal fisheries

(segregated harvest). A complete summary of the program facilities, locations, and activities can be found in Table 1 of the 2017 Opinion (USFWS 2017) including facilities located in the Touchet River, Cottonwood Creek, and Snake River drainages. Activities described at the Lyons Ferry Hatchery and Cottonwood Adult Trap have been previously described in the NE Oregon/SE Washington BA and 2017 Opinion (USFWS 2016a, respectively, hereby incorporated by reference), and will not be discussed further in this document. All facilities described in detail in this Opinion are co-managed by the Washington Department of Fish and Wildlife (WDFW) and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR).

### **General Program Activity Categories**

The majority of general program activities remain the same as described in the 2017 Opinion, and the new Chinook Program occurs in the same area and uses the same facilities, so detailed program activities that have not changed are incorporated here by reference. Additions and/or modifications to the original program activities include the following:

#### ***Adult Collection***

In the long term, all aspects of broodstock collection remain similar to that described and evaluated originally in the 2017 Opinion. The Chinook Program will require approximately 150-176 (75-88 females, depending on fecundity) total adults to produce enough eggs to support an intended release of 250,000 yearling smolts. However, until adequate Chinook Program adult returns to the Dayton Adult Trap (DAT) occur, it is anticipated that green eggs will be collected at the Carson National Fish Hatchery in the Wind River drainage of Washington for the first 5 years of program implementation.

Broodstock collection at the DAT for the Chinook Program will occur from May to June, which is within the collection period discussed in the 2017 Opinion for steelhead (January through October). Long term holding, spawning, incubation, rearing, and marking will occur at the Lyons Ferry Hatchery on the Snake River. The intent is to collect eggs in the fall of 2018.

#### ***Acclimation and Release***

Direct stream releases are proposed for the mainstem Touchet River (Dayton Acclimation Pond; (DAP), the North Fork Touchet River (Wolf Fork Road Bridge), and in the Wolf Fork of the Touchet River upstream from its confluence with the North Fork. With the addition of the Chinook Program, a further 250,000 smolts will be released into the Touchet River compared to the current 150,000 smolt release for the steelhead programs, with first releases occurring in the Spring of 2020. Chinook smolts will be direct released at a time when flows and physiology promote rapid emigration from the Touchet River basin.

#### ***Monitoring and Evaluation***

Standard research monitoring and evaluation (RM&E) hatchery program activities will be implemented, including the use of coded wire tags and Passive Integrated Transponder tags, to evaluate in-hatchery and downstream migration survival metrics, adult return goals, and fisheries. In addition, smolt trapping and spawning ground surveys (previously

described for steelhead actions in the 2017 Opinion) will be conducted in the Touchet River for chinook as well.

### Spawner Surveys

Spawning ground surveys for the Chinook Program would occur mainly during mid-August to mid-September with generally two survey events planned. In contrast, spawning ground surveys for the steelhead programs in the 2017 Opinion were evaluated for a March through May time frame.

### **Program Descriptions and Activities**

All hatcheries, associated satellite facilities, and attendant infrastructure remain unchanged from that described and evaluated originally in the 2017 Opinion, or the 2016 NEOR/SEWA Hatchery Programs Opinion (TAILS# 01EOFW00-2015- 0154) with the small exception regarding interim operations discussed above at Carson National Fish Hatchery. In summary, additions and/or modifications to the original program activities include the following:

- For first 5 years, collect chinook green eggs from the Carson National Fish Hatchery
- After 5 years, collect chinook broodstock from DAT (May – June)
- In Spring, release up to 250,000 chinook smolts in the mainstem Touchet River at the DAP, the North Fork Touchet River (Wolf Fork Road Bridge), and in the Wolf Fork of the Touchet River upstream from its confluence with the North Fork.
- Twice from mid-August to mid-September, conduct smolt trapping and spawning ground surveys in the Touchet River.

### **Conservation Measures**

Conservation measures minimize effects and/or benefit or promote the recovery of listed species and are included by the federal agency. These actions will be taken by the program operators as an integral part of the proposed action. Conservation measures described in the 2017 Opinion remain in effect and are incorporated here by reference.

### **Action Area**

The action area is defined as all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action (50 CFR 402.02). In delineating the action area, we evaluated the farthest reaching physical, chemical, and biotic effects of the action on the environment.

The action area is nearly the same as was included in the 2017 Opinion; this section is incorporated by reference. The revised action area in the Reinitiation BA includes the Carson National Fish Hatchery in the Wind River drainage. While eggs will be collected for 5 years in this drainage, bull trout do not occur here, and therefore there will be no additional effects.

The following sections of the 2017 Opinion remain the same, and are therefore incorporated by reference:

- **Analytical Framework for the Jeopardy and Adverse Modification Determinations**
- **Status of the Species: Bull Trout**
- **Status of Critical Habitat: Bull Trout**
- **Environmental Baseline: Bull Trout and designated Bull Trout Critical Habitat**
- **Current Condition of Critical Habitat for Bull Trout in the Action Area**
- **Conservation Role of the Action Area**
- **Consultations and Conservation Efforts in the Action Area**
- **Climate Change**

## **EFFECTS OF THE ACTION: BULL TROUT AND DESIGNATED BULL TROUT CRITICAL HABITAT**

The effects of the action refers to the direct and indirect effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline (50 CFR 402.02). Indirect effects are those that are caused by the proposed action and are later in time, but still are reasonably certain to occur. The effects of the action section in the 2017 Opinion remains valid and below we add information relevant to the Chinook Program, and/or note where there are differences.

### **Exposure Analysis**

The facilities, release sites, and M&E actions for the Chinook Program are dispersed throughout SE Washington, but mostly contained within the Touchet River. Bull trout in the Touchet River will be exposed to activities at the adult trap, near the acclimation pond, during capture within the rotary screw trap, during spawning ground surveys, and where released steelhead and chinook overwinter and/or migrate to the ocean.

As with the steelhead programs in the 2017 Opinion, the only action occurring in bull trout spawning/rearing areas is chinook spawning ground surveys during the late summer (August and September), with expected encounters with bull trout. The effects to Foraging, Migration and Overwintering (FMO) habitats will be generally localized near facility locations and extend out into FMO habitat during release of spring chinook, and eventually during trapping of adult broodstock spring chinook in the Touchet River. M&E activities generally are located in FMO habitat but may overlap with spawning/rearing habitat in some areas.

As discussed in the 2017 Opinion in more detail, and incorporated here by reference, disturbance of bull trout may occur from hatchery operation activities (adult trapping, acclimation and release of juveniles within Touchet River basin), M&E (smolt trapping, electrofishing (suspended), and spawning ground surveys), water withdrawals, discharge of effluent, and routine and non-routine maintenance actions that occur. The Chinook Program is not targeting bull trout for any activity, however, as discussed in the 2017 Opinion, there is potential to adversely affect bull trout during the course of implementing the hatchery programs and their associated M&E activities. Of note, however, is with the exception of chinook redd surveys, potential effects to bull trout have been evaluated and are commensurate with those already examined in the 2017 Opinion.

## **Effects to Bull Trout and Critical Habitat in the Touchet River**

### ***Adult Collection***

In the long term, all aspects of broodstock collection remain similar to that described and evaluated originally in 2017 Opinion. However, until adequate Chinook Program adult returns to the DAT occur, it is anticipated that green eggs will be collected at the Carson National Fish Hatchery for the first 5 years of program implementation. Bull trout do not occur in the Wind River drainage of Washington, therefore broodstock collection will have no effect on the species or its designated critical habitat. Broodstock collection at the DAT for the Chinook Program will occur from May to June; broodstock collection for the steelhead programs was evaluated for the time period of January through October, which fully encompasses the time that Chinook will be trapped. Moreover, Chinook were already caught as a monitoring effort in the Steelhead Programs, and thus potential effects to bull trout and its designated critical habitat due to the addition of the Chinook capture has already been evaluated in the 2017 Opinion. Effects to the bull trout and its designated critical habitat do not differ from the 2017 Opinion from both a temporal and spatial perspective, and therefore that analysis is incorporated here by reference.

### ***Facilities Operation***

As no operational changes are proposed, impacts to the bull trout and its designated critical habitat associated with water withdrawals, hatchery effluent, fish disease, and maintenance activities have been adequately addressed in the 2017 Opinion, and are incorporated here by reference.

### ***Acclimation and Release***

With the addition of the Chinook Program, an additional 250,000 smolts will be released into the Touchet River compared to the current 150,000 smolts released for the steelhead programs. Chinook smolts will be direct-released at a time when flows and physiology promote rapid emigration from the Touchet River basin. Chinook smolts are also less prone to residualization, thus competitive interaction with bull trout should be less than that expected from steelhead smolts. Spring Chinook smolt releases are planned for mid-March to mid-April, while volitional steelhead releases (after acclimating at the DAP) was evaluated during the month of April, thus temporal overlap exists between the programs relative to release timing. Other effects of the spring Chinook releases are expected to be positive for bull trout, as additional prey will be available, and increased primary productivity from marine derived nutrients (returning adults) will likely improve conditions in the basin. Overall, the 250,000 juvenile increase in production

numbers in the Touchet River does not fundamentally change effects to the bull trout or its designated critical habitat relative to that assessed in the 2017 Opinion. Effects from the addition of the Chinook Program fall well within the effects evaluated originally.

### ***Monitoring and Evaluation***

Off-site (i.e., non-hatchery) RM&E for the Chinook Program that may affect bull trout is limited to smolt trapping at the screw trap in the Touchet River downstream of Dayton, and spawning ground surveys in the upper Touchet River. All other aspects of RM&E for the Chinook program will result in similar effects as those already described in the 2017 Opinion.

As noted in the 2017 Opinion, WDFW moved their smolt trap to the lower Touchet River in 2015. Since that time bull trout captures have been minimal, with no mortality. The smolt trap will operate during the same October through July time frame, thus spatial and temporal overlap of screw trap operations occurs between the programs. The addition of the Chinook Program will not materially change the likelihood for affecting bull trout relative to that evaluated in the 2017 Opinion. Effects from the addition of the Chinook Program fall well within the effects evaluated originally.

Spawning ground surveys in the 2017 Opinion were evaluated for the March through May time frame to assess the steelhead programs. Spawning ground surveys for the Chinook Program would occur during mid-August to mid-September, with two survey events planned. *The effects due to this time frame for spawning ground surveys were not evaluated in the 2017 Opinion.* Bull trout spawning ground surveys in the North Fork and Wolf Fork of the Touchet River have been conducted in the past (Reinitiation BA, Tables 1 and 2) in somewhat the same areas and at nearly the same time as those that would occur for the Chinook Program; these bull trout specific surveys have been conducted annually by WDFW under their existing Endangered Species Act Section 6 Agreement with the Service, however, due to funding cuts, these surveys may not occur in the future. However, Chinook salmon spawning areas are generally lower in the system than the primary bull trout spawning areas, and Chinook spawning will occur slightly earlier in the season relative to bull trout due to the earlier spawn timing of the Carson stock Spring Chinook used for the Chinook Program. Further, while there can be some overlap in adult size, Chinook are typically larger than bull trout, and likely occupy different portions of the river for spawning purposes (larger gravels, and in areas of more depth near the middle of the river) as compared to bull trout (smaller gravels, and near the margins of the river or in side channels). Redd superimposition between the two species is considered very unlikely, and if it were to occur, it is likely that bull trout would spawn on top of Chinook redds due to the difference in spawn timing.

While direct empirical data is not available, based on past spawning ground surveys for both bull trout and Chinook (adult outplants into the Touchet River associated with CTUIR spring Chinook programs; Table 3, Reinitiation BA), WDFW biologists determined that minimal overlap exists between spawning areas in the Touchet River for these species (J. Trump, WDFW, pers. comm., as referenced in Reinitiation BA). WDFW biologists have assessed the potential percent impact based on survey sections to both the North and Wolf Forks of the Touchet River.

North Fork: The upper most spring Chinook surveys on the North Fork Touchet River would begin in Section D (Reinitiation BA, Table 1), most likely at Spangler Creek, which is near the downstream end. Based on WDFW staff experience, very few of the bull trout redds within Section D occur below Spangler Creek (J. Trump, WDFW, pers. comm., as referenced in Reinitiation BA). Based on the relatively low number of redds typically observed in both Sections C and D of the North Fork Touchet River, WDFW staff expect that less than 5% of the total bull trout redds would ever occur below Spangler Creek.

Wolf Fork: The upper most spring Chinook surveys on the Wolf Fork Touchet River would begin in Section E (Reinitiation BA, Table 2), at the Old Cabin (RKM 16.3). Based on the recorded number of bull trout redds from surveys between 1998 and 2014, <25% of the total bull trout redds occur within or below this section.

Given the limited spatial and temporal overlap between the species' expected spawning ground use areas, and because any encounters are likely to be of short duration and of limited extent, impacts to the bull trout and its designated critical habitat are expected to be small. Spawning ground surveys are conducted by trained biologists and technicians, experienced in identifying redds (of all species) and having a history and knowledge of the Touchet River, therefore impacts to bull trout redds are not expected to occur (Reinitiation BA). Regardless, because spring Chinook spawning surveys overlap to a limited degree both spatially and temporally within bull trout spawning areas, disturbance of spawning, migratory, or rearing bull trout, or newly formed bull trout redds, cannot be discounted. Similar to the estimate of impacts considered in the 2017 Opinion (applying electrofishing survey impacts), we expect up to an additional 100 bull trout will be disturbed by spawning ground surveys in the Touchet River associated with the Chinook Program during the mid-August through mid-September time frame; no mortality of adults or juveniles or disturbance of redds is anticipated.

## **CUMULATIVE EFFECTS: BULL TROUT AND DESIGNATED BULL TROUT CRITICAL HABITAT**

Cumulative effects include the effects of future state, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this Opinion. Future federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Current on-going, non-Federal actions are expected to continue to affect bull trout in the action area at similar levels of intensity, and will not differ from those conditions described in the 2017 Opinion, incorporated here by reference.

## **INTEGRATION AND SYNTHESIS OF EFFECTS: BULL TROUT AND DESIGNATED BULL TROUT CRITICAL HABITAT**

As discussed in the 2017 Opinion, the action area provides FMO and spawning/rearing habitat for bull trout from multiple local populations and core areas throughout the Mid-Columbia Recovery Unit. The habitat is important for maintaining diversity of life history and for providing access to productive foraging and spawning areas.

The majority of activities associated with the addition of the Chinook Program are consistent with the effects described and evaluated within the 2017 Opinion. Chinook salmon spawning ground surveys are the single aspect of the RM&E that has been identified as an effect not considered originally, and while they take place spatially in the same general areas as steelhead, they are at a different time of the year. Nonetheless, we do anticipate disturbance of up to 100 bull trout, due to the spawning ground surveys. For all other actions associated with the Chinook Program, effects to bull trout and its designated critical habitat are within the range of effects analyzed in the original 2017 Opinion, and do not materially change the effects analyses, the non-Jeopardy conclusion, or the intent of the Incidental Take Statement and its Terms and Conditions. The additional effects for this component of the Chinook Program (and any subsequent additional take) does not alter the rationales in the 2017 Opinion the Service used to conclude that the action will not jeopardize the bull trout or cause the destruction or adverse modification of its designated critical habitat.

## **CONCLUSION: BULL TROUT OR DESIGNATED BULL TROUT CRITICAL HABITAT**

After reviewing the current status of bull trout and bull trout critical habitat, the environmental baseline for the action area, the effects of the original and revised proposed action and the cumulative effects, it is the Service's Biological Opinion that the action, as proposed, is not likely to jeopardize the continued existence of the bull trout, and is not likely to destroy or adversely modify designated critical habitat.

## **INCIDENTAL TAKE STATEMENT**

Section 9 of the Act and federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. *Harm* is defined by the Service as an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavior patterns, including breeding, feeding, or sheltering (50 CFR 17.3). *Harass* is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR 17.3). Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise

lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are non-discretionary, and must be undertaken by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in section 7(o)(2) to apply. The agency has a continuing duty to regulate the activity covered by this Incidental Take Statement. If the agency 1) fails to assume and implement the terms and conditions or 2) fails to require the applicant to adhere to the terms and conditions of the Incidental Take Statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the agency or applicant must report the progress of the action and its impact on the species to the Service as specified in this Incidental Take Statement [50 CFR 402.14(i)(3)].

## **AMOUNT OR EXTENT OF TAKE**

The Service anticipates bull trout will be taken as a result of this proposed action. The incidental take is expected to be in the form of harm, harass, or kill. The following reflects combined take associated with the original 2017 Opinion and the added Chinook Program.

The following incidental take is anticipated due to the proposed action:

1. Incidental take of bull trout in the form of ***harm*** (physical injury or mortality) and ***harassment*** (significant disruption of normal behaviors that creates a likelihood of injury) resulting from handling during operation of the adult trap.
  - Two adult and/or subadult bull trout will be harmed as a result of trap operation, fish handling, tagging (if necessary) and release operations conducted annually.
  - Two hundred adult and/or subadult bull trout will be harassed as a result of trap operation, fish handling, tagging (if necessary) and release operations conducted annually.
2. Incidental take of bull trout in the form of ***harm*** (physical injury or mortality) and ***harassment*** (significant disruption of normal behaviors that creates a likelihood of injury) resulting from maintenance activities in and around the DAT and DAP (including from salvage and handling).
  - One adult and/or subadult bull trout will be harmed as a result of maintenance activities conducted up to twice annually.
  - Fifty adult and/or subadult bull trout will be harassed as a result of maintenance activities conducted up to twice annually.

3. Incidental take of bull trout in the form of *harm* (physical injury or mortality) and *harassment* (significant disruption of normal behaviors, captured, or handled that creates a likelihood of injury) resulting from annual monitoring and evaluation activities, including on average: steelhead spawning ground surveys (100 bull trout); spring chinook spawning ground surveys (100 bull trout); smolt trapping (10 bull trout); and potential future electrofishing activities (90 bull trout per year).
  - In any 5-year period, no more than 1,500 adult and subadult bull trout may be harassed during steelhead and spring chinook monitoring and evaluation activities in the Touchet River.
  - No more than 10 bull trout will be harmed over a 5 year period during or as a result of steelhead and spring chinook monitoring and evaluation activities in the Touchet River.

The Service expects that incidental take of bull trout will be difficult to detect or quantify for the following reasons: 1) the low likelihood of finding dead or injured adults or sub-adults; 2) delayed mortality; and, 3) losses may be masked by seasonal fluctuations in numbers.

### **EFFECT OF THE TAKE**

In the accompanying Opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

### **REASONABLE AND PRUDENT MEASURES**

The Service believes the following reasonable and prudent measures are necessary and appropriate to minimize impacts of incidental take of bull trout:

1. Minimize the impacts to bull trout from adult/brood-stock collection.
2. Minimize the potential for incidental take from construction activities in or near the river during semi-routine maintenance.
3. Minimize the potential for incidental take from in-water disturbance of bull trout during monitoring and evaluation activities.
4. Report incidental take of bull trout through annual reporting of project activities.

## TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the LSRCP must comply with the following terms and conditions, which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

1. The following terms and conditions are necessary for the implementation of Reasonable and Prudent Measures (RPM) 1:
  - a. Captured bull trout shall be released as soon as possible and time spent in the trap box or other holding facility shall not exceed 48 hours at any time.
  - b. LSRCP and/or WDFW shall notify the Eastern Washington Field Office as soon as possible when they find evidence, or are told about evidence, of bull trout mortality or passage difficulties at the DAT.
2. The following terms and conditions are necessary for the implementation of RPM 2:
  - a. All work within the active channel will be completed within the WDFW approved in-water work window. Any adjustments to the in-water work period will first be approved by, and coordinated with the Service, and WDFW.
3. The following terms and conditions are necessary for the implementation of RPM 3:
  - a. Purposeful take of bull trout which are actively spawning or are near bull trout spawning sites is prohibited. Incidental take of spawning bull trout or redds shall be reduced by minimizing RM&E activities in known spawning habitat and in critical habitat designated for spawning/rearing uses during critical time frames. Redd sites (both "pit" and "mound") shall not be physically disturbed during instream activities. Because some bull trout redds may be small and difficult to see, take precautions to avoid stepping in areas that may be potential redd locations for bull trout (i.e. small gravel deposits behind boulders; under overhanging vegetation; near woody debris or logs; or areas of hydraulic influence such as confluences of tributaries, springs, seeps, pool tail crests, or edges of pools).
  - b. For RM&E electrofishing activities, the following measures must be adhered to:
    - i. Electrofishing methods shall use the minimum voltage, pulse width, and rate settings necessary to immobilize fish. Water conductivity shall be measured in the field before electrofishing to determine appropriate settings. Electrofishing equipment and methods shall comply with the electrofishing guidelines outlined by the National Marine Fisheries Service (NMFS 2000) or current equivalent.

- ii. If electrofishing is utilized to capture salmonids in bull trout habitat, conduct fish capture when stream temperatures are at or below 15 degrees C (59 degrees F), to the extent practicable. Recommend work be conducted early and late in the day when water temperatures are cooler to minimize stress to bull trout and other salmonids.
- iii. Electrofishing activities shall be minimized where larger, fluvial bull trout might be captured and in spawning areas where redds are present.
- iv. Fish capture and removal operations must be conducted by a qualified biologist and all staff participating in the operation have the necessary knowledge, skills, and abilities to ensure safe handling of fish. Fish capture and removal operations shall take all appropriate steps to minimize the amount and duration of handling. The operations shall maintain captured fish in water to the maximum extent possible during seining/netting, handling, and transfer for release, to prevent and minimize stress.
- v. Water quality conditions must be adequate in the buckets or tanks used to hold and transport captured fish. The operations shall use aerators to provide for the circulation of clean, cold, well-oxygenated water, and/or shall stage fish capture, temporary holding, and release, to minimize the risks associated with prolonged holding.

4. The following term and condition is necessary for the implementation of RPM 4:

- a. Annual reports submitted by LSRCP in coordination with the program operators, due March 1 of each year, shall be provided to the Service's Eastern Washington Field Office (Spokane, WA). The report shall briefly summarize bull trout collections at the facilities, and bull trout sampled during monitoring and evaluation activities, monitoring results, and any modifications or improvements that have been implemented to avoid or minimize impacts to bull trout.

The Service believes that no more than the number of bull trout described above be incidentally taken as a result of the proposed action. The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize the impact of incidental take that might otherwise result from the proposed action. If, during the course of the action, this level of incidental take is exceeded, such incidental take represents new information requiring reinitiation of consultation and review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

The Service is to be notified within three working days upon locating a dead, injured or sick endangered or threatened species specimen. Initial notification must be made to the nearest U.S. Fish and Wildlife Service Law Enforcement Office. Notification must include the date, time, precise location of the injured animal or carcass, and any other pertinent information. Care should be taken in handling sick or injured specimens to preserve biological materials in the best possible state for later analysis of cause of death, if that occurs. In conjunction with the care of

sick or injured endangered or threatened species or preservation of biological materials from a dead animal, the finder has the responsibility to ensure that evidence associated with the specimen is not unnecessarily disturbed. Contact the U.S. Fish and Wildlife Service Law Enforcement Office at (425) 883-8122, or the Service's Washington Fish and Wildlife Office at (360) 753-9440.

### **CONSERVATION RECOMMENDATIONS**

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

The Service has not identified any conservation recommendations for the action agency associated with this project.

### **REINITIATION NOTICE**

This concludes formal consultation on the actions outlined in the request for reinitiation of formal consultation. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: 1) the amount or extent of incidental take is exceeded; 2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this Opinion; 3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this Opinion; or 4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

### **LITERATURE CITED**

The Literature Cited section from the 2017 Opinion is incorporated here by reference.