



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

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**FEB 16 2018**

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Subject: U.S. Fish and Wildlife Service Biological Opinion for the *United States v. Oregon*  
Management Agreement for Non-Indian and Treaty Indian Fisheries in the  
Columbia River Basin for the Period 2018-2027 -- Concurrence  
In Reply Refer to: 01FLSR00-2018-I-0003

Dear Administrators:

This correspondence provides the U.S. Fish and Wildlife Service's (Service) Letter of Concurrence for species which may be affected by the subject action, but for which no adverse effects were likely to be realized. The action agencies, Federal parties to *United States v. Oregon*, including the National Marine Fisheries Service, the Bureau of Indian Affairs, and the U.S. Fish and Wildlife Service, have determined that the subject action is not likely to adversely affect the threatened marbled murrelet (*Brachyramphus marmoratus*), the threatened streaked horned lark (*Eremophila alpestris strigata*), the threatened northern spotted owl (*Strix occidentalis caurina*), the threatened Columbian white-tailed deer (*Odocoileus virginianus leucurus*), the threatened yellow-billed cuckoo (*Coccyzus americanus*), the endangered gray wolf (*Canis lupus*), the threatened Canada lynx (*Lynx canadensis*), the endangered Snake River physa snail (*Haitia (Physa) natricina*), or the threatened northern Idaho ground squirrel (*Spermophilus brunneus brunneus*). In addition, while not listed under the ESA, the action agencies have also determined that the proposed action is not likely to adversely affect the North American wolverine (*Gulo gulo luscus*), proposed as threatened. This document includes a discussion of the basis for our concurrence of the above determinations, under section 7 of the Endangered Species Act (ESA). For those species where critical habitat has been designated or proposed

(marbled murrelet, streaked horned lark, northern spotted owl, Canada lynx, and yellow-billed cuckoo), none were determined to be affected by the proposed action.

This document is based primarily on information provided in the June 21, 2017, *Biological Assessment of Incidental Impacts on Salmon Species Listed under the Endangered Species Act in the 2018-2027 United States v. Oregon Management Agreement*, prepared by the *United States v. Oregon* Technical Advisory Committee (TAC), the “2018-2027 *United States v. Oregon* Management Agreement,” and separate biological assessments and ESA response documents (Letters of Concurrence and Biological Opinions) on the production programs that are a part of the *United States v. Oregon* Management Agreement (Agreement). Additional information on listed species was obtained from published and unpublished scientific literature and Service file data. A complete decision record for this consultation is on file at the Service’s Columbia River Fisheries Program Office in Vancouver, Washington, the Lower Snake River Compensation Plan Office in Boise, Idaho, as well the respective Ecological Services Offices from where individual production program ESA compliance documents were prepared.

### **Proposed Action**

The proposed action considered in this consultation is for the Federal parties (National Marine Fisheries Service [NMFS], Bureau of Indian Affairs, and the Service) to sign the new 2018 Agreement, as negotiated by the parties to *United States v. Oregon*, and for NMFS and FWS to complete S7 consultation pursuant to the implementation of the new 2018 Agreement. This new management agreement would take effect after the current management agreement expires. The new management agreement accomplishes two primary objectives. First, it memorializes the harvest policies that the parties have agreed should govern the amount of harvest. Second, it formalizes hatchery program release expectations, addressed individually at site specific locations, which augment harvest and are important to the conservation of salmon or steelhead runs above Bonneville Dam.

The proposed 2018 Agreement specifies harvest policies for salmon and steelhead stocks bound for upriver areas, for which the BA describes both treaty Indian and non-treaty fisheries that adhere to each harvest policy. A list of hatchery programs with expected production levels in the Columbia River Basin is also included. The new management agreement thereby provides a framework to keep healthy stocks healthy, rebuild weak stocks, and fairly share the harvest of upper river runs between treaty Indian and non-treaty fisheries.

The proposed 2018 Agreement, including the non-treaty and treaty Indian fisheries components, extends from January 1, 2018 to December 31, 2027. The fisheries will operate primarily in the mainstem Columbia River from its mouth (Astoria, Oregon area) upstream to Priest Rapids Dam, and in the Snake River from its confluence with the Columbia River upstream to Lower Granite Dam. Although not directly specified, the 2018 Agreement states that it covers the mainstem Columbia and “certain tributary fisheries.” Fisheries included in the proposed action are described in detail in the biological assessment submitted to NMFS and the Service by the TAC

(TAC 2017), and are summarized below. Tributary fisheries were also identified in the TAC's biological assessment as part of the action and are therefore included in our analysis.

A complete project description can be found in the associated Biological Opinion (TAILS ref. # 01FLSR00-2018-F-0001), which together with this Letter of Concurrence, constitutes the complete record of the Service's ESA compliance needs associated with this proposed action.

## Listed Species and Critical Habitat in the Action Area

### No Effect Species in the Action Area

The following terrestrial ESA listed and candidate/proposed species (animals and plants), including any associated critical habitat, occur within the Columbia River Basin. While some of these species may occur adjacent to fishery or production/hatchery areas, we have determined they will not be affected by the proposed action because they are strictly terrestrial species and/or they do not occur in the immediate vicinity of the proposed fisheries or areas potentially affected by production program activities. Fish harvest or production program activities are not expected to have any physical impacts on terrestrial habitat. These activities are also not expected to result in noise or disturbances in adjacent habitats that would impact any of these species; these species will not be addressed further in any consultation document associated with this proposed action.

Fisher (*Pekania pennanti*)  
Washington Ground squirrel (*Spermophilus washingtoni*)  
Western snowy plover (*Charadrius alexandrinus nivosus*)  
Fender's blue butterfly (*Branchinecta lynchi*)  
Oregon silverspot butterfly (*Speyeria zerene hippolyta*)  
Golden paintbrush (*Castilleja levisecta*)  
Willamette daisy (*Erigeron decumbens* var. *decumbens*)  
Bradshaw's desert parsley (*Lomatium bradshawii*)  
Kincaid's lupine (*Lupinus sulphureus* ssp. *kincaidii*)  
MacFarlane's four o'clock (*Mirabilis macfarlanei*)  
Nelson's checkermallow (*Sidalcea nelsoniana*)  
Spalding's catchfly (*Silene spaldingii*)  
Howell's spectacular thelypody (*Thelypodium howellii* spp. *spectabilis*)  
Northern wormwood (*Artemisia campestris* var. *wormskioldii*)  
Mazama pocket gopher (*Thomomys mazama* ssp. *louiei*)  
Taylor's checkerspot (*Euphydryas editha taylori*)  
Mardon skipper (*Polites mardon*)  
Grizzly Bear (*Ursus arctos horribilis*)  
Ute ladies'-tresses (*Spiranthes diluvialis*)  
Pygmy rabbit (*Brachylagus idahoensis*)  
Southern Selkirk Mountains woodland caribou (*Rangifer tarandus caribou*)  
Water howellia (*Howellia aquatilis*)  
Slicksport peppergrass (*Lepidium papilliferum*)  
Whitebark pine (*Pinus albicaulis*)

The following aquatic ESA listed and candidate species from the Columbia River Basin (including the lower parts of the Snake River) have also been determined to not be affected by the proposed action as they occur outside the identified fishery or production/hatchery areas. Fish harvest or production program activities are not expected to have any physical or water quality impacts on aquatic habitat used by these species. These activities are also not expected to result in disturbances in adjacent habitats that would impact any of these species. These species do not occur in proximity to designated harvest areas. These species are not addressed further in this opinion.

Kootenai River White Sturgeon (*Acipenser transmontanus*)

Banbury springs lanx (*Lanx spp.*)

Bruneau hot springsnail (*Pygulopsis bruneauensis*)

Columbia spotted frog (*Rana luteiventris*)

Oregon spotted frog (*Rana pretiosa*)

Oregon chub (*Oregonichthys crameri*)

#### May Affect Species in the Action Area

The following listed species are likely to occur in the action area in proximity to fishery harvest or production/hatchery areas.

Bull trout (*Salvelinus confluentus*)

Marbled Murrelet (*Brachyramphus marmoratus*)

Columbian white-tailed deer (*Odocoileus virginianus leucurus*)

Streaked horned lark (*Eremophila alpestris strigata*)

Northern spotted owl (*Strix occidentalis caurina*)

Yellow-billed cuckoo (*Coccyzus americanus*)

Gray Wolf (*Canis lupus*)

Bliss Rapids snail (*Taylorconcha serpenticola*)

Snake River physa snail (*Physa (Haitia) natricina*)

Northern Idaho ground squirrel (*Spermophilus brunneus brunneus*)

Canada lynx (*Lynx canadensis*)

North American Wolverine (*Gulo gulo luscus*)

Biological Opinions addressing adverse effects to bull trout resulting from the continued implementation of individual production/hatchery programs have been completed separately. These opinions concluded that the individual programs will not jeopardize the continued existence of bull trout, and are incorporated here by reference. Aggregate effects to bull trout associated with implementation of the 2018 Agreement (both the fisheries/harvest and production/hatchery components) are addressed separately in the associated Biological Opinion (TAILS ref. # 01FLSR00-2018-F-0001).



## Critical Habitat in the Action Area

### *Bull Trout*

Critical habitat was designated on September 26, 2005 (70 FR 56212, Service 2005). Final revised critical habitat was designated on October 18, 2010, (75 FR 63898, Service 2010) and included critical habitat on the mainstem Columbia River and mainstem Snake River within the action area of the 2018 Agreement where most of the fishery effort occurs. Critical habitat was designated for core area populations in mainstem and tributary areas addressed by the 2018 Agreement. The Service has determined that production program facilities and activities are likely to adversely affect aquatic habitat and associated physical and biological features of critical habitat. No adverse effects to critical habitat are expected from fishery-related activities as the action is limited primarily to hook and line and net fishing; few impacts to physical and biological features of critical habitat are expected, and these would only result in insignificant effects.

Biological Opinions addressing adverse effects to bull trout critical habitat resulting from the continued implementation of individual production/hatchery programs have been completed separately. These opinions concluded that the programs will not destroy or adversely modify critical habitat, and are incorporated here by reference. Aggregate effects to bull trout critical habitat associated with implementation of the 2018 Agreement are addressed separately in the associated Biological Opinion (TAILS ref. # 01FLSR00-2018-F-0001).

*Marbeled murrelet, streaked horned lark, Columbian white-tailed deer, northern spotted owl, yellow-billed cuckoo, Gray wolf, Bliss Rapids snail, Snake River physa snail, northern Idaho ground squirrel, Canada lynx, and North American wolverine*

Other than marbeled murrelet, Canada lynx, streaked horned lark, northern spotted owl, and yellow-billed cuckoo (proposed), critical habitat has not been designated for these species, therefore, none will be affected by this action. Designated critical habitat for marbeled murrelet is found in only one of the hatchery facilities included in the Proposed Action, although a number of others are in close proximity. None of the activities included as part of the proposed action include elements, such as tree removal, that will have an effect on proposed Marbled Murrelet critical habitat.

Several hatchery facilities and other associated sites are located in close proximity to designated northern spotted owl critical habitat. This habitat is located in the upper portions of these watersheds and does not occur at or near the hatchery facilities. Thus, activities associated with production programs will have no effect on the designated critical habitat of the Northern Spotted Owl; no effects to critical habitat will occur relative to implementation of the fisheries/harvest component of the 2018 Agreement.

Designated critical habitat for lynx is found outside of the action area, and none will be affected by this action. Designated critical habitat for streaked horned lark and yellow-billed cuckoo do

not occur in close proximity to any of the activities addressed by the 2018 Agreement, and none will be affected by the action.

## **Not Likely to Adversely Affect Determinations**

### Marbled Murrelet

The primary cause of marbled murrelet population decline is the loss and modification of nesting habitat in old growth and mature forests through commercial timber harvests, human-induced fires, and land conversions, and to a lesser degree, through natural causes such as wild fires and wind storms.

Consultation regarding marbled murrelet and fisheries harvest agreed upon by the *U.S. v. Oregon* Parties in the lower Columbia River was conducted shortly after the marbled murrelet was listed as threatened on September 28, 1992 (Oregon Department of Fish and Wildlife and Washington Department of Fish and Wildlife 1994). This consultation found that the winter gill-net fishery in the lower Columbia River was not likely to adversely affect marbled murrelets. With the ESA listing of a number of Columbia River salmon and steelhead species since the previous marbled murrelet consultation, the current proposed action represents a decrease in fishing opportunity, which should further reduce opportunity for interaction. This reduced fishery opportunity should further minimize the potential for rare incidental handling.

The Service completed a status review for this species in 2004 (Service 2004). The information in the status review on gill net mortality was taken exclusively from ocean fisheries along the California, Oregon, and Washington coasts, including the San Juan Islands and Puget Sound. When murrelets dive underwater for foraging or escape purposes, they can be entangled and drown in gill-nets. The status review indicated that marbled murrelet and seabird bycatch mortality from coastal gillnetting has been considered a significant conservation issue in central California coast, northern Washington, British Columbia, and southern Alaska (Service 2004). The State of Washington has imposed harvest and gear restrictions to reduce the bycatch of marbled murrelets. In those areas where gill-net fishing has been prohibited (Oregon coast and northern California), by-catch mortality has been reduced significantly and is not a factor for decline. The status review did not indicate the interaction of marbled murrelets and gill nets that are set in the Columbia River estuary, likely due to the infrequent occurrence of these birds in the estuary.

NOAA observer records of ocean gill net fisheries also have not identified any incidents of marbled murrelet encounters in observations from 1992-2007 (NOAA 2008). Langness (2007) reviewed marine observer data for the lower Columbia River noting that 2,315 gill net drifts were observed from 1991-1993 and no ESA-listed seabirds, including marbled murrelets, were encountered. Current impacts associated with the in river gill net fisheries would be expected to be even lower since the gear is attended, gear is set for relatively brief periods, and the boat is always present and active. Carter et al. (1995) in their analysis of mortality in gill nets found that no marbled murrelets were killed during observer programs in 1991-1993 in the Columbia River and that no net-caused mortality of murrelets are known in Oregon. We also were not able to find

any records of marbled murrelet interactions associated with the recreational fisheries in the Columbia River.

We conclude that encounters with marbled murrelets associated with the proposed action are very unlikely to occur and there are no known occurrences of incidental impacts on murrelets associated with fisheries in the area even though fisheries in this region has been in place for many years. Because marbled murrelets are known to occur in the proposed fishery area near the mouth of the Columbia River, we believe the possibility of entanglement remains but conclude that the likelihood is so low as to be insignificant. Therefore, we have determined that the proposed action may affect but is not likely to adversely affect the marbled murrelet.

Several production programs may affect Marbled Murrelet from operations and maintenance activities. Most of the facilities that overlap with murrelet habitat operate year-round. The daily activities, including the general fish culture aspects and maintenance of the facility structures and grounds, may cause disturbances in the form of temporary noise levels, and startling from the presence and movements of personnel and vehicles as they do their daily work. The vast majority of the work that may affect any murrelet near the individual facilities occurs during the daylight hours (8:00-5:00), with only limited activities for facility security or emergency work occurring during the evening and nighttime hours.

Most of the facilities have been in place and operating for many decades. We anticipate that any Marbled Murrelet that may occur in, or migrate through, the areas adjacent to the facilities likely are accustomed to and are acclimated to the low-level noises and other disturbances related to hatchery operations and nearby human activity. For these reasons, effects from production program hatcheries and their associated activities, which operate in areas where Marbled Murrelet may be present, are not expected to measurably disrupt normal behaviors and are considered insignificant. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** the marbled murrelet.

#### Columbian White-tailed Deer

The Proposed Action may affect ESA-listed Columbia white-tailed deer from the operations at several of hatchery facilities in the Columbia River Estuary Area. These facilities are located in areas that represent potential compatible habitat for the deer's use. Where facilities overlap with potential deer use areas, they above operate year-round and may affect any Columbian white-tailed deer in their vicinity. Daily hatchery activities, including general fish culture and maintenance of the facility structures and grounds, may cause to any deer in the area in the form of noise level, startling and flushing, and barriers to the animal's free movement through the areas.

The majority of facilities in question have been in place and operating for 50 years or more. Given the seasonal timeframe and low levels of personnel working at these sites (the vast majority of activities takes place during daylight hours (8AM-5PM), we anticipate that any Columbia white-tailed deer that may occur in the areas adjacent to the facility likely are accustomed and acclimated to the low-level noises and other disturbances related to hatchery



operations and nearby human activity. For these reasons, production program effects which operate in areas where Columbia white-tailed deer may be present, are not expected to measurably disrupt normal deer behaviors and are considered insignificant. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** the Columbian white-tailed deer.

### Northern Spotted Owl

Production programs may affect ESA-listed northern spotted owl from the operations and maintenance at several hatchery facilities. The daily activities, including the general fish culture aspects of hatchery operations and maintenance of the facility structures and grounds, may cause disturbances to any northern spotted owl in the area, in the form of temporary noise levels, startling from the presence and movements of personnel and vehicles as they do their daily work. The vast majority of the work that may affect any northern spotted owl near the subject facilities occurs during the daylight hours (8:00-5:00), with only limited activities for facility security or emergency work occurring during the evening and nighttime hours.

Most of these hatchery facilities have been in place and operating for several decades. We anticipate that any northern spotted owls that may occur in, or migrate through, the areas adjacent to the facilities likely are accustomed to and acclimated to the low-level noises and other disturbances related to hatchery operations and nearby human activity. For these reasons, effects from production programs which operate in areas where northern spotted owls may be present, are not expected to measurably disrupt normal behaviors and are considered insignificant. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** Canada lynx.

### Streaked Horned Lark

Several production facilities may affect ESA-listed Streaked horned Lark associated with routine operations and maintenance activities. Most activities and associated operations occur year-round. Daily activities, including the general fish culture aspects and maintenance of the facility structures and grounds, may cause disturbances to any Streaked Horned Lark in the area, in the form of temporary noise levels, startling from the presence and movements of personnel and vehicles as they do their daily work. The vast majority of the work that may affect any streaked horned lark near the facility occurs during the daylight hours (8:00-5:00), with only limited activities for facility security or emergency work occurring during the evening and nighttime hours.

Most of the subject facilities and their associated activities have been in place and operating for several decades. We anticipate that any streaked horned lark that may occur in or migrate through the areas adjacent to the facilities likely are accustomed to and acclimated to the low-level noises and other disturbances related to hatchery operations and nearby human activity. For these reasons, effects production programs which operate in areas where Streaked Horned Lark may be present, are not expected to measurably disrupt normal behaviors and are considered insignificant. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** the streaked horned lark.



### Yellow-billed Cuckoo

Several production programs may affect ESA-listed yellow-billed cuckoo from operations and maintenance activities. Most activities and associated operations occur year-round. Daily activities, including the general fish culture aspects and maintenance of the facility structures and grounds, may cause disturbances to any yellow-billed cuckoo in the area, in the form of temporary noise levels, startling from the presence and movements of personnel and vehicles as they do their daily work. The vast majority of the work that may affect any yellow-billed cuckoo near the facility occurs during the daylight hours (8:00-5:00), with only limited activities for facility security or emergency work occurring during the evening and nighttime hours.

Most of the subject facilities and their associated activities have been in place and operating for several decades. We anticipate that any yellow-billed cuckoo that may occur in or migrate through the areas adjacent to the facilities likely are accustomed to and acclimated to the low-level noises and other disturbances related to hatchery operations and nearby human activity. For these reasons, effects production programs which operate in areas where yellow-billed cuckoo may be present, are not expected to measurably disrupt normal behaviors and are considered insignificant. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** the yellow-billed cuckoo.

### Gray Wolf

Physical habitat studies have not documented any detections of the gray wolf within 0.25 miles of any production program facility that overlaps areas where wolves are still listed. However, packs could potentially move through areas near some facilities given the wide range of the gray wolf. Given that most of the sites have some human disturbance for at least part of the year, any occurrence of gray wolf near production facilities is likely to be transient. Denning is not probable at any of the sites, as the sites are all located near roads, development, and human activity. There is the possibility that construction noise and disturbance could impact wolves travelling through these areas, potentially causing avoidance of the area or slight changes in foraging locations. The construction would be short term, approximately 60 days at each site. Human activity at individual sites (2 to 6 months annually) could also impact wolves travelling through the action area. Due to the small size and limited duration of this impact, these effects are considered to be insignificant. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** the gray wolf.

### Canada lynx

Limited suitable habitat for the Canada lynx is present in portions of the Action Area associated with hatchery programs. It is possible that an individual Canada lynx could traverse near existing hatchery facilities or near waterbodies proposed for juvenile hatchery smolt acclimation and release or research, monitoring and evaluation (RM&E) activities. If present near these locations, increased noise levels may be detected by individuals, which may result in a minor level of disturbance. Lynx and lynx habitat are not expected to be affected by harvest activities.

Although Canada lynx are especially unlikely to occur with any great frequency near existing hatchery facilities due to the presence of humans, the potential cannot be discounted that individuals could be disturbed during juvenile hauling to release sites, as well as acclimation and release and RM&E activities. Disturbance from vehicular noise near each release or RM&E site would be short term in nature and would not be elevated to levels that would harm Canada lynx. Although traffic could represent a hazard, the potential mortality to individuals from the truck traffic is discountable because: 1) fish hauling trucks or other vehicles used for RM&E activities would operate during daylight hours and an animal in the vicinity would be able to avoid a potential collision; and 2) traffic speeds associated with vehicles are expected to be low, particularly on more remote, unpaved roads that might be used to access release sites. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** Canada lynx.

### Snake River physa snail

The Snake River physa snail inhabits the mainstem of the Middle Snake River and potentially occurs in the vicinity of Hagerman National, Niagara Springs, and Magic Valley fish hatcheries. The species is rare and poorly documented, but in general, the locations of live, confirmed specimens have been most frequently recorded at depths of 0.3 – 1.9 feet, in free-flowing reaches of the Snake River where water velocities generally keep gravel and pebble beds free of fine sediments and subsequent macrophyte growth. No new construction or river alteration is proposed as part of the proposed action, and therefore, river substrate composition and channel characteristics would not be impacted.

The physa snail does not occur in the springs that provide water to the Hagerman National, Niagara Springs, and Magic Valley fish hatcheries and therefore will not be directly affected by water withdrawals or spring intake maintenance activities. However, spring inflows to the river would be reduced, which could limit the amount of cold water entering the river, thereby increasing temperature and reducing water quality. But, given the quantity of water diversions compared to Snake River flows, impacts to the snails are likely discountable.

Hatchery effluent entering the Snake River in the vicinity of the outlet facilities does have the potential to impact water quality in the mainstem and therefore potentially impact Snake River physa snails. However, the best available information indicates that the snails are not present near the hatcheries' discharge sites and would not be affected by hatchery effluent (Hopper 2017, pers. comm.). In addition, the hatcheries operate under National Pollutant Discharge Elimination System (NPDES) permits to minimize impacts to water quality in the Snake River. The Service, in a previous hatchery consultation, found that effluent from facilities regulated by NPDES permits is not noticeable or measurable over background conditions.

Although there is a low likelihood of presence in the action area, and most hatchery-related affects are considered discountable, Snake River physa snails may be affected by the nearby production programs. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** Snake River physa snails.

### North American wolverine

The project would not jeopardize the continued existence of North American wolverine. Suitable habitat for the North American wolverine is present in higher-elevation portions of the Action Area, including the Snake River, Salmon River, and Clearwater River Basins, associated with some hatchery programs. The potential for direct effects is low; effects would be limited to potential disturbance of individual wolverines during adult collection, juvenile release, and RM&E activities. Potential effects on wolverine would not be sufficient to preclude the survival and recovery of the population as a whole because potential impacts would be limited to temporary, minor, and infrequent disturbance related at remote sites. Further, there would be no permanent effects on the extent or connectivity of suitable habitat for the species. Wolverines or wolverine habitat are not expected to be affected by harvest activities.

In the event that North American wolverine becomes listed prior to completion of the project, a provisional effect determination is provided. The project may affect North American Wolverine because the suitable habitat may be provided at higher-elevation program facilities. However, the presence of the species in the vicinity of the proposed hatchery facilities is highly unlikely. Operational activities related to seasonal adult collection and juvenile acclimation, release, or RM&E activities would result in a minor, temporary increase in human presence for a brief period in relatively remote, high-elevation areas that could provide transitory habitat for wolverines. However, the potential for disturbance to wolverines from the project is discountable. Therefore, the project, **may affect**, but is **not likely to adversely affect** North American wolverine.

### Northern Idaho ground squirrel

Although none of the hatchery sites are located within the historic range of northern Idaho ground squirrel or near potential metapopulation sites, suitable habitat may be present in Idaho County. Therefore, it is possible that an individual ground squirrel could traverse or take up residence near existing hatchery facilities or near waterbodies subject to adult collection or juvenile acclimation and release. If present near these locations, on-going facility-associated noise may be detected by individuals, which may result in a minor level of disturbance. Ground squirrels and ground squirrel habitat are not expected to be affected by harvest activities.

Potential increases in noise levels associated with fish hauling, adult collection and acclimation, and release activities would be insignificant because they are short-term in nature and because noise would not be elevated to levels that would injure squirrels. Although fish hauling trucks or other vehicles used for RM&E activities could represent a hazard to terrestrial mammals, the potential mortality to individuals from truck traffic is discountable because: 1) fish hauling trucks and other vehicles would operate during daylight hours and an animal in the vicinity would be able to elude a potential collision; and 2) traffic speeds associated with vehicles are expected to be low, particularly on more remote, unpaved roads that might be used to access release or RM&E sites. Therefore, the proposed action **may affect**, but is **not likely to adversely affect** the northern Idaho ground squirrel.

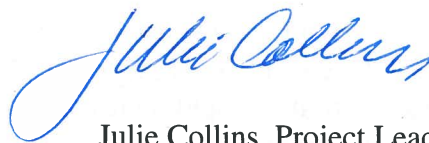


## Other Linkages to the 2018 Agreement Biological Opinion

A minor change to the Snake River fall Chinook salmon (SRFC) production program should be noted. The project description currently identified in the 2018 Agreement differs from that described in the completed consultation (TAILS ref. # 01EIFW00-2012-F-0448) for this program. The combined Hells Canyon release (below Hells Canyon Dam on the Snake River) of one million subyearlings is now proposed to take place on the Salmon River near the town of Whitebird. All other aspects of the SRFC program remain as currently described. While this change in release location occurs in a river reach not considered originally, it is similar in that it occurs in a mainstem river system used by bull trout for foraging, migration, and overwintering activities. As noted in the existing consultation, effects to bull trout on mainstem systems from juvenile production releases is not expected to cause adverse effects. Spatial and temporal overlap between the production releases and juvenile bull trout (those most susceptible to predation or competition impacts) is considered extremely limited, and larger bull trout that may have spatial and temporal overlap with the releases are not considered at risk. In addition, juvenile releases were considered beneficial to adult and sub-adult bull trout in that they likely increase foraging opportunities. Regardless of a release occurring into foraging, migration, or overwintering habitat in the Snake River or the Salmon River, the effects are expected to be the same, thus, we conclude that the effects of this change in release location were adequately addressed in the original May 2017 Biological Opinion (TAILS ref. # 01EIFW00-2012-F-0448), and no reinitiation triggers have been tripped. This narrative serves to document and update the revised project description. Aggregate effects to bull trout, inclusive of the changes to the SRFC program, will be addressed in the associated Biological Opinion for the 2018 Agreement (TAILS ref. # 01FLSR00-2018-F-0001).

Thank you for your continued interest in threatened and endangered species conservation; we look forward to continuing our cooperative working relationship with the Parties of *United States v. Oregon* as we implement the 2018 Agreement. If questions arise concerning this document, please call Ron Rhew of the Columbia River Fisheries Program Office at (360) 604-2500, or Mark Robertson of the Lower Snake River Compensation Plan office at (208) 378-5323.

Sincerely,



Julie Collins, Project Leader  
Lower Snake River Compensation Plan

cc: Allyson Purcell, NMFS (Portland)  
Jeromy Jording, NMFS (Portland)