

**National Marine Fisheries Service
ESA Section 10(a)(1)(A) Permit for Take of
Endangered/Threatened Species**

Permit Number: 18036

Permit Type: Scientific Research/Enhancement

Program Name: Operation, monitoring, and evaluation of the Lostine River spring/summer Chinook salmon program in northeast Oregon and ongoing monitoring of natural populations of salmon and steelhead in the Lostine and Wallowa River basins.

Expiration Date: December 31, 2027

Permit Holders:

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Northern Idaho Agency
on behalf of the Nez Perce Tribe
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Authorization

The U.S. Bureau of Indian Affairs (BIA), the Oregon Department of Fish and Wildlife (ODFW), and U.S. Fish and Wildlife Service (USFWS), referred to as the Permit Holders, are hereby authorized to take threatened Snake River spring/summer Chinook salmon (*Oncorhynchus tshawytscha*) and Snake River Basin steelhead (*O. mykiss*) for scientific research/enhancement purposes. The activities are described in detail in the application submitted by the BIA.

Aspects of the program are funded by the USFWS through the Lower Snake River Compensation Plan (LSRCP) which was approved by the Water Resources Development Act of 1976, (Public Law 94-587, Section 102, 94th Congress) to mitigate losses caused by the construction and operation of the four lower Snake River dams and navigation lock projects. LSRCP funds are programmed for Operations and Maintenance needs at related/associated facilities, and numerous Research, Monitoring, and Evaluation activities, as identified in approved annual statements of work.

The Bonneville Power Administration (BPA) funds the program under the Pacific Northwest Power Planning and Conservation Act of 1980, 16 U.S.C. §§ 839 *et seq.* (Northwest Power Act), which directs BPA to protect, mitigate, and enhance fish and wildlife and their habitat affected by the development, operation, and management of federal hydroelectric facilities on the Columbia River and its tributaries. BPA particularly funds the operation and maintenance of the Lostine River Adult Trap and Juvenile Acclimation Facilities, certain spawning and rearing activities at Lookingglass Fish Hatchery, and certain M&E activities, including spawning ground surveys and life stage monitoring (i.e., operation of rotary screw traps)

The operators or program co-managers are ODFW and the Nez Perce Tribe (NPT). These activities are subject to the provisions of Section 10(a)(1)(A) of the Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531 *et seq.*), the National Marine Fisheries Service (NMFS) regulations governing ESA-listed species permits (50 CFR Part 222-226), and the conditions hereinafter set forth. The Hatchery and Genetics Management Plan (HGMP) describing the action was developed jointly by ODFW and the NPT (Nez Perce Tribe 2011).

Permit Description

The Permit Holders and their agents is/are authorized to take adult and juvenile, threatened Snake River spring/summer Chinook salmon to enhance the propagation and survival of the species. In addition, the Permit Holders and their agents are authorized to take adult and juvenile threatened Snake River Basin steelhead (*O. mykiss*) for monitoring potential effects of the Chinook salmon program on natural-origin steelhead. Many of the actions included in this permit were originally included in research programs managed by ODFW that were previously authorized under ESA section 4(d) (File # 16680).

As a key component of the program management, the HGMP submitted for consideration under section 10(a)(1)(A) of the ESA includes management of an integrated population using an abundance-based sliding scale that guides adult disposition at the Lostine weir. It allows a proportion of hatchery-origin fish to escape upstream and spawn naturally based on returns of natural-origin fish to the basin. It also specifies the proportion of natural-origin fish to be incorporated into hatchery broodstock. Both portions of the scale (broodstock use and escapement) are designed to guide hatchery genetic influence within the population, while balancing the demographic risk of extinction.

The Lostine River weir, although relatively new, has had some operational difficulties, which has complicated managing to the sliding scale standards. The intent is to operate the weir to allow management of returning adults and broodstock collection across the run. In addition to meeting natural-origin broodstock goals, the sliding scale is designed to manage the total proportion of hatchery-origin fish above the weir (Farman 2013). Estimates of natural-origin run size based on

preseason and in-season information will involve considerable annual uncertainty, and may involve in-season adjustments. The complexities of run forecasting and difficulties with weir management may also involve operating according to the best information available at the time, though it may not be perfect. Therefore, annual management of the broodstock composition and proportions of hatchery-origin fish above the weir may exceed or not meet specific targets with respect to the sliding scale. However, on average, NMFS expects the program to be managed according to the sliding scale described in the HGMP.

The Lostine River Snake River spring/summer Chinook salmon hatchery program will be operated continuously from the date of this permit through December 31, 2027; however, the coverage provided by this permit is contingent on compliance with the management commitments provided in the HGMP, as well as the provisions in the Take Description and Levels, Take Limits, Special Conditions, Permit Reporting and Reauthorization Requirements, and General Conditions described below.

Description of Proposed Action

The Lostine River spring/summer Chinook salmon hatchery program goal is to restore a viable natural population of spring Chinook salmon to the Lostine River, reestablish sport and tribal fisheries, minimize program impacts on indigenous fish species, and maximize the beneficial uses of fish returning to the basin. Through 2008-2017 *U.S. v. Oregon*, an agreement was made between the four Columbia River Treaty Tribes, States, and Federal agencies to release 250,000 yearlings at the acclimation facility on the Lostine River (*U.S. v. Oregon* 2009).

Artificial production of Snake River spring/summer Chinook salmon occurs through a single program managed and monitored using multiple sites and facilities: (1) The Lookingglass Fish Hatchery; (2) Lostine River Acclimation Facility; (3) Lostine River weir and trap; (4) Lostine River screw trap; and (5) at multiple sampling locations throughout the basin that vary annually to monitor adult returns and juvenile abundance. A new hatchery facility is also proposed on the Lostine River just upstream of the site of the current acclimation facility. Once the Northeast Oregon Hatchery facility proposed on the Lostine River is constructed, adult holding, spawning, rearing, and release of all Lostine River production may take place at this facility. The current hatchery design also includes a fish ladder and trap, which could be utilized to collect broodstock in the event of Lostine weir failure or otherwise determined necessary by the co-managers. The facility is also designed to hold adults, spawn, incubate, and rear Imnaha River spring/summer Chinook salmon. Activities occurring for the Lostine River spring/summer Chinook program at these facilities are covered under this permit. The program is highly coordinated through the LSRCP and between NPT and ODFW staff in operations, including broodstock collection, fish transfers between facilities, monitoring, and acclimation.

All adult spring/summer Chinook salmon needed for hatchery broodstock are collected at the Lostine River weir. Annually, this program produces up to 250,000 juveniles annually, which are released as smolts from an acclimation facility in the Lostine River. In the future, smolts may be released from the Lostine River Hatchery, which will be constructed upstream from the site of the current acclimation facility. A key component of the program is also the implementation of a sliding scale, which manages the proportions of hatchery-origin fish in the wild as well as in the broodstock in the Lostine River. The Lostine River spring/summer

Chinook salmon hatchery program has a long term goal of escaping 1,716 natural-origin and 1,625 hatchery-origin adult spring/summer Chinook to the Lostine River. The Lostine program also contributes to the LSRCF goal to return 5,720 total adult spring/summer Chinook above Ice Harbor for the Grande Ronde basin.

This permit covers several activities related to the production, monitoring, and evaluation of the Lostine River spring/summer Chinook salmon hatchery program as well as status monitoring of associated natural populations throughout the Lostine River basin. These activities include:

- The collection and sampling of adult natural and hatchery-origin spring/summer Chinook salmon trapped at the Lostine weir.
- Closely managing natural and hatchery-origin fish escapement in the natural spawning population above the weir.
- Closely managing natural and hatchery-origin fish composition in the broodstock as defined in the sliding scale.
- Transport of natural and hatchery-origin adults to Lookingglass Hatchery, and the future Lostine River Hatchery, for holding and spawning, and the transport of hatchery-origin adults (and jacks) to recycle through fishery or to outplant in underseeded Willowa River tributaries (no fisheries are included in this permit; outplanting of hatchery-origin fish is addressed below)
- All sampling, tagging, and monitoring of fish reared as part of the program.
- Incubation, rearing, marking, transport, acclimation, and release of juveniles.
- Research, monitoring, and evaluation (RM&E) activities associated with the Lostine River spring/summer Chinook Program and with assessing natural population status and trends.

RM&E activities include use of a weir, screw traps, beach seines, hand nets, and electroshockers. Fish may be anesthetized, tagged, measured, and biological samples taken (such as scales and fin clips) prior to release. Both juvenile and adult fish may also be observed during spawning ground and snorkel surveys.

A description of the research actions, methods, and locations is included in the description of research programs managed by ODFW that were previously authorized under ESA section 4(d) (File # 16680). Spawning surveys will also be conducted in the Lostine River to collect information on spawner abundance and natural/hatchery composition in the nature.

Take Description and Levels

This permit authorizes the Permit Holders, program operators, and their agents for annual take of ESA-listed species on an annual basis as described in the HGMPs submitted by the operators and further detailed below and further detailed below.

A. Take Limits

There are three general categories for direct take that is authorized by this permit:

- (1) Direct take of Snake River spring/summer Chinook salmon associated with fish culture activities, including: adult broodstock and juvenile collection, capture, handling, transport, and lethal spawning; lethal health exam sampling; tagging and biological sampling; and release of juveniles.
- (2) Direct take of Snake River spring/summer Chinook salmon associated with RM&E activities, including tagging and biological sampling, and monitoring of escapement of adult hatchery-origin spring Chinook salmon to natural spawning areas.
- (3) Direct take of Snake River steelhead which are sampled concurrently during spring/summer Chinook salmon RM&E activities.

The maximum take levels by various life stages, origin (natural or hatchery), facility, and activities associated with culture of Snake River spring/summer Chinook salmon are shown in Table 1. Take levels for collection of hatchery broodstock and for the escapement of adult fish to natural spawning areas will be consistent with the sliding scale identified in Table 5 (Section 1.11) in the HGMP. The take level from the release of hatchery-origin spring Chinook salmon will also vary annually based on the number of fish in the hatchery facility in any year based on the availability of broodstock and juvenile survival for hatchery production. The hatchery program release goal is 250,000 fish annually. The maximum take levels for concurrent RM&E of Snake River spring/summer Chinook and Snake River steelhead encountered, captured, handled, and tagged during RM&E activities are shown in Tables 2 and 3. If the take levels are exceeded in any given year, NMFS must be notified according to the reporting requirements in Section C. of this permit, and will evaluate program modification or the need to reinitiate consultation at that time.

In addition, spawning ground surveys will be conducted annually in the Lostine River basin to determine spawner abundance, spawning density, adult distribution, and proportion of hatchery-origin fish in the wild, which is critical to monitoring hatchery program compliance with this permit and performance. Because all fish encountered or handled during spawning ground surveys will be dead or moribund, NMFS does not apply a maximum level of fish that may be handled during those surveys. The permit holders may collect and possess tissue samples from unlimited salmon and steelhead carcasses collected during these surveys.

For purposes of this permit, “Adipose fin-clipped” refers to all fish that have their adipose fin intentionally removed for identification of fish produced in a hatchery setting. “Adipose fin-clipped” also refers to all fish, destined to have their adipose fin removed at a later date as part of the program prior to the action of clipping. “Adipose fin intact” salmon include both natural-origin fish, and hatchery-origin fish that have not been clipped.

Table 1. Permissible direct take of listed Snake River spring/summer Chinook salmon for fish culture purposes for the Lostine River program. NMFS must be notified within two days if the number handled, marked, or killed is exceeded.

Lostine River Hatchery-related Chinook Take					
Species and Lifestage	Take Activity	Capture Method and Location	Total Number Handled annually	Number of those handled that are marked/tagged annually (1% handling mortalities)	Total Number Killed or removed annually
SR spring/summer Chinook salmon Adult over 63 cm - Adipose fin intact	Capture, handle, tag, tissue sample. Remove for transport, use for broodstock, or release live animal (pass above weir)	Lostine River Adult Weir	1,000	Up to 840* (passed live with fin-clip or operculum punch)	Up to 160* broodstock Up to 10 adult trap mortalities
SR spring/summer Chinook salmon Non-juvenile ≤ 63 cm - Adipose fin intact	Capture, handle, tag, tissue sample. Remove for transport, use for broodstock, or release live animal (pass above weir)	Lostine River Adult Weir	50	Up to 50 (passed live with fin-clip or operculum punch)	Up to 5 broodstock Up to 2 trap mortalities
SR spring/summer Chinook salmon Adult over 63 cm - Adipose fin-clipped	Capture, handle, tag, tissue sample. Remove for transport, use for broodstock, remove for adult management or release live animal (pass above weir)	Lostine River Adult Weir	3,000	Up to 300* (passed live with fin-clip or operculum punch)	Up to 160* broodstock Up to 100% of total handled may be removed, killed, or transported for adult management as described in the HGMP
SR spring/summer Chinook salmon Non-juvenile ≤ 63 cm - Adipose fin-clipped	Capture, handle, tag, tissue sample. Remove for transport, use for broodstock, remove for adult management or release live animal (pass above weir)	Lostine River Adult Weir	2,000	Up to 15 (passed live with fin-clip or operculum punch)	Up to 8 used in broodstock Up to 100% of remainder may be removed or killed for adult management as described in the HGMP
SR spring/summer Chinook salmon Juvenile and egg - Adipose fin-clipped (or intended)	Capture, handle, tag, tissue sample, and release live animal (within hatchery sampling, and research use)	Lookingglass Hatchery or Northeast Oregon Hatchery	298,016	298,016	Up to 48,016 total rearing mortality (which may include sampling and research requirements related to program goals and management)

SR spring/summer Chinook salmon Juvenile - Adipose fin-clipped (or intended)	Capture, sample, kill (Fish health examinations)	Lookingglass Hatchery	170	170	170
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*The actual number taken annually will be subject to the sliding scale identified in Table 5 (Section 1.11) in the HGMP, and shall not exceed the totals of each origin identified there.

Table 2. Permissible direct take of Snake River spring/summer Chinook salmon for RM&E activities associated with the Lostine River Chinook salmon program not directly related to fish culture. NMFS must be notified within two days if the number handled, marked, or killed is exceeded.

Lostine River RM&E Chinook Take					
Species and Lifestage	Take Activity	Capture Method and Location	Total Number Handled annually (0.5% handling mortalities)	Number of those handled that are marked/tagged annually (1% handling mortalities)	Total Number Killed or removed annually
SR spring/summer Chinook salmon Juvenile - Adipose fin intact	Capture, handle, tag, tissue sample, and release live animal	Trapping operations that include screw traps, beach seines, cast nets, dip nets, and use of backpack electroshock equipment throughout Lostine River	46,850	6,650	Up to 268
SR spring/summer Chinook salmon Juvenile - Adipose fin-clipped	Capture, handle, tag, tissue sample, and release live animal	Trapping operations that include screw traps, beach seines, cast nets, dip nets, and use of backpack electroshock equipment throughout Lostine River	41,000	250	Up to 202
SR spring/summer Chinook salmon Non-juvenile - Adipose fin intact	Capture, handle, tag, tissue sample, and release live animal	Adult fall back at screw traps	5	5 (genetic fin-clip or operculum punch – release live)	Up to 2*
SR spring/summer Chinook salmon Non-juvenile - Adipose fin-clipped	Capture, handle, tag, tissue sample, and release live animal	Adult fall back at screw traps	10	10 (genetic fin-clip or operculum punch – release live)	Up to 2*

* In cases where total number killed is not likely to exceed one (1) mortality, NMFS rounds the total mortality up to two (2), so that operations are not halted completely at the first mortality

Table 3. Permissible direct take of Snake River steelhead for RM&E activities associated with the Lostine River spring/summer Chinook salmon program not directly related to fish culture. NMFS must be notified within one week if the number handled, marked, or killed is exceeded.

Lostine River RM&E Steelhead Take					
Species and Lifestage	Take Activity	Capture Method and Location	Total Number Handled annually (0.5% handling mortalities)	Number of those handled that are marked/tagged annually (1% handling mortalities)	Total Number Killed or removed annually
SR steelhead Juvenile - Adipose fin intact	Capture, handle, tag, tissue sample, and release live animal	Trapping operations that include screw traps, beach seines, cast nets, dip nets, and use of backpack electroshock equipment throughout the Lostine River	4,400	3,000	Up to 37
SR steelhead Adult - Adipose fin intact	Capture, handle, tag, tissue sample, and release live animal (includes handling of adult fall backs on at the weir)	Lostine River Adult weir	200	200	Up to 2
SR steelhead Adult - Adipose fin intact	Capture, handle, tag, tissue sample, and release live animal	Adult fall back at screw traps	10	10 (genetic fin-clip or operculum punch – release live)	Up to 2*

* In cases where total number killed is not likely to exceed one (1) mortality, NMFS rounds the total mortality up to two (2), so that operations are not halted completely at the first mortality

A. Special Conditions

Annual Planning

1. The Permit Holders must participate in a coordinated annual planning process to review the operation of and anticipated changes to the trapping and sampling program. The coordinated planning developed annually as part of LSRCP annual operating plans (AOP) will address:
 - a. Sampling protocols for each annual run that are designed to meet the goals identified in the sliding scale, permit conditions, and the production levels in the current version of the *U.S. v. Oregon* Management Agreement.
 - b. Annual requirements, collection, and distribution of Snake River spring/summer Chinook salmon taken for broodstock.
2. Coordination of data and sampling.
3. The Permit Holders will also coordinate during the adult run to review updated in-season run projections and revise weir management plans as necessary.
4. Once developed, annual plans will be shared with NMFS once completed.

Broodstock Collection (at the Lostine River trap)

5. The Permit Holders and/or their agents may collect Chinook salmon from the fish ladder and adult fish trap on the Lostine River, annually from approximately April 1 through October 15, provided that:
 - a. Proportions of hatchery- and natural-origin adults collected for broodstock is consistent with levels defined in the sliding scale, as measured by using post-season estimates, to confirm that in at least three of the previous five years the proportion of natural-origin Chinook salmon incorporated into the broodstock was consistent with the sliding scale. Data collection for this performance criterion will begin in 2016.
 - b. The post season estimate of proportions of hatchery-origin adults above the weir (total escaped and released), as measured by using post-season estimates, does not exceed the level defined in the sliding scale in at least three of the previous five years for the specified natural-origin returns. Data collection for this performance criterion will begin in 2016.
6. During operation of the weir and adult trap, the trap will be checked at least once every 24 hours.
 - a. Any captured fish will be either collected for transport or released at the time they are first handled.

- b. The co-managers will maintain a plan for sorting and passage to minimize or avoid trap crowding as well as passage delays of more than 24 hours. The plan will set daily trap capacity limits, and define trap operation schedules based on numbers of fish captured or held.
 - c. If mortality exceeds the levels identified in Table 1, the co-managers will review daily trap capacity limits, and trap operation schedules, and proposed modifications if necessary.
7. The Permit Holder shall determine when river flow conditions or bull trout passage concerns limit the ability to check fish at the weir within 24 hours and transport or release fish according to the conditions above. If fish cannot be passed using normal protocols, free passage will be provided to prevent fish from being entrapped or delayed for long periods at the weir.
8. The Permit Holders and/or their agents may capture, handle, and remove spring/summer Chinook salmon and handle steelhead as specified in HGMP, and in Table 1, Table 2, and Table 3 of this permit, and as described in the sliding scale identified in Table 5 (Section 1.11) in the HGMP.
9. The Permit Holders shall ensure that infrastructure and management are achieving adult management objectives for escapement above the weir using the adult sliding scale (Table 1 in section 1.11 of the HGMP), and the conservation objectives identified in section 1.9 of the HGMP.
 - a. Broodstock collection will occur throughout the entire adult return, with the intent of spawning adults that represent the entire run.
10. If ESA-listed salmon and steelhead are anesthetized to avoid injuring or killing them during handling, the fish must be allowed to recover before being released. Fish may be handled without anesthetization if handling and sampling can be done without injuring them (e.g., if they are only counted), and they must remain at all times in or above the water in which they are to be released.
11. ESA-listed salmon and steelhead must be handled with extreme care and kept in water to the maximum extent possible during sampling and processing procedures and during handling and passage upstream. Adequate circulation (as identified by dissolved oxygen content) and replenishment of water in holding units is required. When a mix of species is captured, ESA-listed species must be processed first, including passed upstream to spawn naturally.
12. The Permit Holders and/or their agents may capture, handle, measure, tag, and collect tissue samples (fin clips, opercular punches, scales, and blood) from live Snake River spring/summer Chinook salmon and Snake River Basin steelhead. Otoliths, head cartilage, or whole snouts may be taken from spring Chinook salmon and steelhead used for hatchery broodstock, carcasses collected on the spawning grounds, and mortalities from weir or screw-trap operation. Tissue samples and/or scales collected

during activities authorized above may be collected and/or transferred to the Oregon Department of Fish and Wildlife, Nez Perce Tribe, the Idaho Department of Fish and Game, the Columbia River Intertribal Fish Commission, NMFS laboratories, or state or Federal fish health laboratories for analysis and/or archive. Tissues of collected animals are the responsibility of the Permit Holders and remain so as long as they are useful for research purposes. Transfer of the tissues from the Permit Holders to researchers other than those listed above requires written approval from the Anadromous Production and Inland Fisheries Branch, Sustainable Fisheries Division, NMFS West Coast Region.

13. The ESA-listed salmon and steelhead used for research/enhancement activities may only be taken by the means, in the areas, and for the purposes set forth in the application and modification requests, as limited by the terms and conditions specified in this permit.

Fish Culture

14. Ensure that staff is trained and implement aversion measures identified in section 5.7 of the HGMP to minimize risk of catastrophic losses at the Lookingglass and Lostine facilities.
15. Fish culture, including collection, transport, holding and spawning of broodstock, incubation of eggs, ponding and rearing (including acclimation where specified), fish health examinations, clipping (marking) and tagging and necessary transportation shall be as described in the HGMP(s) and AOP. NMFS recognizes the need for management flexibility, so minor deviations consistent with best management practices, conforming to the intent of the program, and are consistent with effects already considered in this consultation, may be permitted upon request.
16. In addition to reporting required for exceeding overall take as described in the above tables, co-managers will notify NMFS within two working days of:
 - a. Any single event in which the handling of a minimum of 100 adults or 1,000 juveniles results in mortality that exceeds 10% of those handled.
 - b. Any single event not related to handling but resulting in the mortality of 100 juveniles or 10 adults, such as equipment failure, disease outbreaks, or other operational difficulties.

Juvenile Releases

17. The Permit Holders and/or their agents shall release juvenile Snake River spring/summer Chinook salmon consistent with the numbers, release stages, release locations, and marking described in Table 28 and sections 10.2 and 10.7 of the Lostine spring/summer Chinook HGMP. Releases may begin as early as February 21 and last through April 30 annually. Juvenile release levels will be dependent on obtaining adequate returns of broodstock, maintaining adequate facility rearing space, and

funding. NMFS recognizes the need for management flexibility, so minor annual deviations consistent with best management practices, conforming to the intent of the program, and are consistent with effects already considered in this consultation, may be permitted upon request. However:

- a. Co-managers will collect broodstock annually with the intent to produce 250,000 smolts for release, as identified in the program HGMP and *U.S. v. Oregon* Production Table B1.
 - b. Although the annual program goal is a release of 250,000 smolts annually, to allow for annual survival variability, production above program targets may be released provided that:
 - i. Fish will not be released at locations or at life stages other than those described in the HGMP, without the express approval of NMFS. Alternative locations will be approved only if the impact is deemed to not exceed that determined in the effects analysis in the biological opinion.
 - ii. The smolt number released will not exceed 110% of the proposed release levels in any year.
 - c. Annual operational adjustments, to maintain consistency with the proposed production levels identified in the HGMP and *U.S. v. Oregon* Production Table B1, and should be addressed during the development of the annual operation plan(s).
18. Up to 48,016 eggs, parr, or fry determined to be in excess of needs of production targets may be outplanted under the following conditions:
- a. Outplanting may occur only in Bear Creek, Hayes Fork Prairie Creek, Wallowa River, and Lostine River. Additional streams and stream reaches may be approved by NMFS upon request.
 - b. The Permit Holders will provide the date, number of fish, and location (GPS coordinates or RM) of each outplanting event.

Adult Releases

19. Hatchery-origin adults determined to be in excess of needs due to adult management guidelines may be outplanted under the following conditions:
 - a. The Permit Holders will coordinate through the AOP to obtain co-manager agreement, and share any co-manager agreements for outplant disposition of adults with NMFS prior to collection or transport of adults to outplant areas.
 - b. All outplanted fish will be individually marked or tagged in a way that they can be differentiated identified as “outplants” and differentiated from any other hatchery-origin fish in the area to facilitate accurate monitoring.
 - c. Outplanting may occur in Bear Creek, Wallowa River, upper Lostine River, and Hurricane Creek. Additional streams and stream reaches may be approved by NMFS upon request.
 - d. The Permit Holders will provide additional monitoring of any areas receiving adult outplants to include:
 - i. The date, number of fish, and location (GPS coordinates or RM) of each outplanting event.
 - ii. Redd counts and carcass surveys that can be used to estimate total population as well as outplant contribution to that population.
 - iii. Estimates of the proportion of outplanted fish that remain in the area in which they were planted, and the proportion of outplants that return to the Lostine River weir, or recovered in monitoring spawning areas.
 - e. Monitoring from outplant areas should be reported in the annual Lostine River report.

Facility Operations

20. Water withdrawals at all facilities shall be via structures that meet or exceed NMFS water intake screening criteria.
 - a. For facilities not meeting current screening criteria (Lookingglass Hatchery intake), a review will be performed before the end of 2016 to determine the criteria that are out of compliance.
 - b. Before the end of 2016, co-managers will coordinate with NMFS environmental services branch to develop a plan to bring the Lookingglass Hatchery into compliance with current passage and screening criteria. The plan will include a schedule for securing funding and an implementation timeline.

21. Water withdrawals shall not exceed levels permitted by the Water Use Permits issued to each of the acclimation facilities.

Research, Monitoring, and Evaluation

22. The Permit Holders shall continue existing evaluations identified in section 11.1.1 for the duration of the permitted program. These research programs evaluate the abundance, productivity, spatial structure, and diversity of Snake River spring/summer Chinook salmon and steelhead.
23. The Permit Holders shall apply the conservation measures identified in section 11.2 of the HGMP to minimize effects of monitoring and evaluation activities on listed anadromous salmonids.
24. The Permit Holders shall follow the performance standards identified in section 1.9 of the HGMP.
25. Smolt screw traps will only be operated when staff and funding are available to actively check traps and work through fish and avoid overcrowding the trap box.
 - a. Smolt trap operators downstream of the release site will maintain contact with hatchery staff to remain informed on the type and timing of smolt releases. Prior to and during releases, trap operators will consider appropriate modifications to minimize excessive trapping of smolts.
 - b. Screw traps will be monitored and checked with additional frequency if operated during hatchery smolt releases (including night checks when needed). Sub samples will be taken to confirm the risk of overcrowding the trap box is minimal.
 - c. If monitoring or sub sampling indicates that fish are being captured at a rate higher than the trap box can handle, one or more of the following measures will be implemented:
 - i. Decrease trap efficiency through trap modifications (pulling the cone, using deflectors, moving out of thalweg, etc.), and increase the frequency of trap checks consistent with the new trap efficiency to avoid overcrowding the trap box.
 - ii. Stop the trap from operating during smolt releases until sub sampling at the trap suggests that the number of smolts captured has decreased to a level that would not lead to overcrowding the trap box with the combination of trap efficiency and trap check frequency that will be implemented.
 - d. If 10% of the total annual take (in any category) occurs on a single day of operation, NMFS will be notified, and trap operations will cease until NMFS and all co-managers agree that new protocols are sufficient to avoid the risk of another mortality event of similar size.

26. Continue monitoring for strays from the program into the Minam and Wenaha Rivers. For hatchery-origin adults in the Minam and Wenaha Rivers:
- a. Gather and track information (such as PIT tags, CWT, or genetic samples) that can allow identification of fish by release location brood year.
 - b. Report the total proportion of hatchery-origin strays in the Minam and Wenaha Rivers, the hatcheries of origin (if known), and the proportion known from the Lostine program.
 - c. If the Lostine program is responsible for contributing more than 5% of the total spawners to either the Minam or Wenaha River, co-managers will contact NMFS to discuss whether program changes are needed to reduce the influence of the program on these natural-origin populations. The proportion will be calculated based on a 3-year running average starting in 2016; however, if it is apparent that the 3-year running average will exceed 5% prior to the third year, co-managers will contact NMFS in the year in which the likely exceedance is discovered.

Recognizing the need for flexibility and the ability to respond to new developments, modifications to specific RM&E measures may be proposed during the term of the permit. Changes to the measures listed above require NMFS concurrence to ensure they are consistent with the effects analysis in the biological opinion.

B. Permit Reporting and Reauthorization Requirements

NMFS contact for all reports and notifications:

Brett Farman
Sustainable Fisheries Division
National Marine Fisheries Service, West Coast Region
1201 N.E. Lloyd Boulevard, Suite 1100
Portland, OR 97232
(503) 230-5412
(503) 872-2737 (fax)

1. If the authorized level of take, including mortalities, is exceeded, or if circumstances indicate that such an event is imminent, the Permit Holders must notify the above contact as soon as possible, but no later than two days after the authorized level of take is exceeded. The Permit Holders must then submit a written report to the above contact describing the circumstances of the unauthorized take, within two weeks of take exceedance. Pending review of these circumstances, NMFS may suspend program activities or amend this permit in order to allow activities to continue.
2. The Permit Holders must submit to NMFS for approval, in writing, changes in any aspect of program implementation and operations, including broodstock collection protocols or numbers, juvenile release numbers, and marking, that potentially would result in increased take or the manner or effect of take of ESA-listed species.

3. The Permit Holders must submit, upon request, the identities and qualifications of all personnel designated to act under the authority of this permit.
4. NMFS must be notified within 48 hours of any take of an ESA-listed species not authorized under this permit. The level of take, the circumstances leading to the take, and any other relevant information, must be provided to NMFS, in writing, within one week of knowledge that the take occurred.
5. For the duration of this permit, broodstock collection, hatchery fish releases, and RM&E activities are contingent upon submission of the Annual Operating Plan (AOP) to the funding agency by March 31st of each year and to NMFS for review.
 - a. Reporting on each preceding year's annual production and RM&E will occur based on the funding agency reporting timelines.
 - b. Comprehensive multi-year analysis will occur on the LSRCP review timeline (typically every five years), and may be submitted to NMFS directly, though they are typically already available at the LSRCP (<http://www.fws.gov/snakecomplan/>) and/or Bonneville Power Administration websites (<http://www.bpa.gov/Pages/home.aspx>).
 - c. An annual summary or report to BPA or LSRCP of program operations and/or multi-year analysis must include an assessment of the compliance with each of the provisions included in this permit. The annual summary can be provided to NMFS in a tabular or electronic spreadsheet format. Information and analysis requirements include, but are not limited to:
 - (i) Annual escapement estimates and estimated proportion of hatchery-origin spring/summer Chinook salmon spawning in nature above the weir, below the weir, and the total for the Lostine River Basin.
 - (ii) A summary of all hatchery- and natural-origin spring/summer Chinook salmon encountered at the Lostine River adult trap, and their disposition (passed, retained for broodstock, culled, or outplanted) as well the number of any known strays and their disposition.
 - (iii) Redd counts for Snake River spring/summer Chinook salmon in natural spawning areas both above and below the weir.
 - (iv) Summary of outplant monitoring, as described in section B.18 and 19 above.
 - (v) Carcass recovery data, including numbers, sex ratios, fish stock origin, mark observations, tributary location, and age class.

- (vi) Number and species of any ESA-listed Chinook salmon and steelhead captured, anesthetized, tagged, and any mortalities observed annually during RM&E activities related to this permit.
 - (vii) Unintentional injuries or mortalities of listed Chinook salmon and steelhead that result from all operational activities to include the cause, if known, and disposition.
 - (viii) Any other information deemed necessary by the applicants for assessing the program such as results from biological sampling, population trends, disease trends, etc.
- d. A description of any measures in addition to those listed in 11.2 of the HGMP taken to minimize impacts on ESA-listed salmon and steelhead both in the hatchery and during RM&E activities, and the effectiveness of those measures, the disposition of ESA-listed salmon and steelhead in the event of mortality, and a brief narrative of the circumstances surrounding injuries or mortalities of ESA-listed salmon and steelhead.
 - e. Steps that the Permit Holders took to coordinate adult trap operation actions, associated data collection and reporting activities, and responses to any problems arising in the hatchery program, with any appropriate resource managers.

C. General Conditions

1. The Permit Holders must ensure that all ESA-listed species are handled carefully. Should NMFS determine that a procedure provided for under this permit is no longer acceptable, it will so inform the Permit Holders.
2. The Permit Holders, in implementing the hatchery program authorized by this Permit, has/have accepted the terms and conditions of this permit and must ensure compliance by itself and its agents with the provisions of this permit, the applicable regulations, and the ESA.
3. The Permit Holders is/are responsible for the actions of any individual operating under the authority of this permit. Such actions include operation of the adult trap for broodstock collection and capturing, handling, releasing, maintaining, and caring for any ESA-listed species authorized to be taken by this permit.
4. The Permit Holders and/or their agents must possess a copy of this permit when conducting the activities for which a take of ESA-listed species or other exception to ESA prohibitions is authorized herein.
5. The Permit Holders may not transfer or assign this permit without NMFS's approval to any other person(s), as person is defined in Section 3(12) of the ESA. This permit

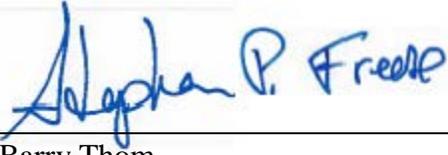
ceases to be in force or effective if transferred or assigned to any other person without prior authorization from NMFS.

6. The Permit Holders must obtain any other Federal, state, and local permits/authorizations necessary for the conduct of the activities provided for in this permit.
7. Permit Holders and/or their agents carrying out any of the permit conditions or weir program actions requiring Federal or state licenses to practice their profession must be duly licensed under the appropriate law.
8. The Permit Holders must coordinate with other co-managers and/or researchers to minimize duplication and/or adverse cumulative effects occur as a result of the Permit Holders activities.
9. The Permit Holders and/or their agents must allow any NMFS employee(s) or any other person(s) designated by NMFS to accompany field personnel during the activities provided for in this permit. The Permit Holders must allow such person(s) to inspect the records and facilities of the Permit Holders and their agents if such records and facilities pertain to ESA-listed species covered by this permit or NMFS's responsibilities under the ESA.
10. Under the terms of the regulations, a violation of any of the terms and conditions of this permit will subject the Permit Holders, and/or any individual who is operating under the authority of this permit, to penalties as provided for in the ESA.
11. The Permit Holder is responsible for maintaining biological samples collected from ESA-listed species as long as they are useful for research purposes. The terms and conditions concerning any samples collected under this authorization remain in effect as long as the Permit Holders have authority and responsibility for the material taken. The Permit Holders may not transfer biological samples to anyone not listed in the application without obtaining prior written approval from NMFS. Any such transfer will be subject to such conditions as NMFS deems appropriate.
12. NMFS may amend the provisions of this permit after reasonable notice to the Permit Holders.
13. 50 CFR Section 222.23(d)(8) allows NMFS to charge a reasonable fee to cover the costs of issuing permits under the ESA. NMFS has waived the fee for this permit.
14. NMFS may revoke this permit if the activities are not carried out in accordance with the description provided in the HGMP, conditions of the permit or the ESA and its regulations, or if NMFS otherwise determines that the findings made under section 10(d) of the ESA no longer hold.
15. Any falsification of annual reports or records pertaining to this permit is a violation of this permit.

D. Penalties and Permit Sanctions

1. Any person who violates any provision of this permit is subject to civil and criminal penalties, permit sanctions, and forfeiture as authorized under the ESA and 15 CFR Part 904 [Civil Procedures].
2. All permits are subject to suspension, revocation, modification, and denial in accordance with the provisions of subpart D [Permit Sanctions and Denials] of 15 CFR Part 904.

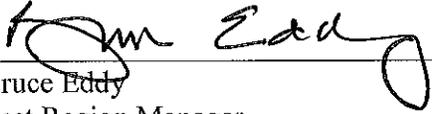
E. Signatures



Barry Thom
Regional Administrator
NMFS West Coast Region

9/12/2016

Date



Bruce Eddy
East Region Manager
Oregon Department of Fish and Wildlife



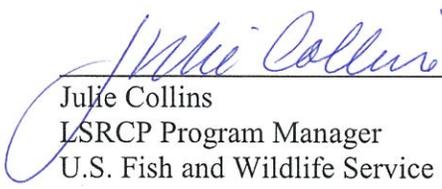
Date

Michael Morigeau

Michael Morigeau
Acting Superintendent
Bureau of Indian Affairs

9/13/16

Date


Julie Collins
LSRCP Program Manager
U.S. Fish and Wildlife Service


Date

F. References

- Farman, B. 2013. Email to Becky Johnson re: Imnaha scale and escapement. December 24, 2013. 2p.
- Nez Perce Tribe. 2011. Grande Ronde Endemic spring Chinook salmon Supplementation Program (GRESOSP) Snake River spring/summer Chinook salmon – Willowa/Lostine population Hatchery and Genetics Management Plan (HGMP). May 31, 2011. 153p.
- U.S. v. Oregon*. 2009. 2008-2017 *U.S. v. Oregon* Management Agreement (modified January 23, 2009). Portland, Oregon.