

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

Permit Number: 16615 – 2R
Permit Type: Scientific Research/Enhancement
Program Name: Operation, monitoring and evaluation of the Nez Perce Tribal Hatchery (NPTH) fall Chinook salmon program
Expiration Date: December 31, 2027

Permit Holder:
Bureau of Indian Affairs (BIA)
Northern Idaho Agency
On behalf of the Nez Perce Tribe
P.O Box 365
Lapwai, ID 83540

Contacts:
Daniel Largo, Superintendent
Phone: 208 ~~843-9440~~ 621-4831
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Becky Johnson, Nez Perce Tribe
Production Division Director
Phone: 208 621-4629
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Authorization

The Bureau of Indian Affairs (BIA), referred to as the Permit Holder, is hereby authorized to take threatened Snake River fall Chinook salmon (*Oncorhynchus tshawytscha*) for scientific research/enhancement purposes. The activities are described in detail in the application submitted by the BIA and NPT, jointly, and 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.

Permit Description

The Permit Holder(s) and their agents is/are authorized to take adult and juvenile, threatened Snake River fall Chinook salmon for scientific purposes or to enhance the propagation or survival of the affected species. The take of threatened Snake River spring/summer Chinook salmon and Snake River steelhead and endangered Snake River sockeye salmon, incidental to the operation, monitoring, and evaluation of the Nez Perce Tribal Hatchery and its satellite facilities is also authorized.

These Snake River fall Chinook salmon hatchery programs will be operated continuously from the date of this permit through December 31, 2027.

Description of Proposed Action

Artificial production of Snake River fall Chinook salmon occurs through four hatchery programs: (1) the Lower Snake River Compensation Plan (LSRCP), which involves the Lyons Ferry Hatchery (LFH) program and (2) the Fall Chinook Acclimation Program (FCAP), (3) the Idaho Power Company (IPC) Program; and (4) the Nez Perce Tribal Hatchery (NPTH). Activities occurring specifically for the non-NPTH programs are covered under sister permit #16607 – 2R. The four programs are highly coordinated in their operations, including broodstock collection and fish transfers between facilities.

Adult fall Chinook salmon are collected at Lower Granite Dam (LGR) for broodstock and for run reconstruction estimates for all programs. Broodstock may also be collected at LFH and NPTH if necessary. In the past, and for brood year (BY) 2017 releases, these programs produced up to 5,500,000 juveniles released as yearling (900,000) and subyearling (4,600,000). The updated FCAP program will cease yearling production and will release 1.9 million subyearling beginning with BY 2018. FCAP O&M will be funded by the LSRCP beginning in 2019.

This permit covers program activities involving collection and sampling of adult and jack fall Chinook salmon for broodstock and run reconstruction at LGR, LFH, and NPTH. This permit also covers all other artificial production activities and all research, monitoring, and evaluation (RM&E) activities associated with the Nez Perce Tribal Hatchery program. Artificial production activities and RM&E occurring specifically for the LFH, FCAP, and IPC programs are covered under sister permit #16607 – 2R.

The Nez Perce Tribal Hatchery (NPTH) program is funded by the Bonneville Power Administration. The interim total return target based on current program production levels is 3,206 adults, with a long-term return goal of 3,750 adults.

Take Description and Levels

This permit authorizes the Permit Holder(s) and their agents for annual take of ESA-listed species, as outlined below. Take will include one or more of the following: capture, handling, collection, transport, lethal spawning, biological sampling, tagging, and live release of unmarked Chinook salmon, and of natural-origin steelhead and sockeye salmon, if encountered. General and special conditions and limits on direct and incidental take are enumerated below. Take exceeding the specified levels must be reported as described in section C of this permit.

A. Take Limits

There are two general ways in which direct take would occur under this permit: (1) direct take of Snake River fall Chinook salmon associated with fish cultural activities, and (2) direct take of Snake River fall Chinook salmon associated with RM&E activities.

Table 1. Permissible direct take of listed Snake River fall Chinook salmon for fish cultural purposes for the NPTH program. NMFS must be notified within two days if take is exceeded by 1% or more. Numbers in grey cells are combined totals for WDFW and NPT operations.

Type of Take	Mark ^a	Annual Take of Listed Fish By Life Stage			
		Egg/Fry	Juvenile or Smolt	Adult or Jack _b	Carcass
Capture, handle, tag/mark/tissue sample, and release ^c	No fin clip	0	1,111,111	1,820 ^d	0
	Ad clip	0	444,444	780 ^g	0
Intentional lethal take ^d	No fin clip	0	500 (Health Sampling)	Up to 3,800 ^e	0
	Ad clip	0	0	Up to 2,200 ^h	0
Unintentional lethal take ^f	No fin clip	15%	15%	Trapping – 1%	0
				Holding - 15%	
	Ad clip	15%	15%	Trapping – 1%	0
				Holding - 15%	

- a. “No fin clip” salmon include hatchery-origin and natural-origin fish. The majority (~66%) of the unclipped fish are hatchery-origin.
- b. For purposes of this permit, adults and jacks include fall Chinook salmon that include fall Chinook salmon that have spent at least 1 year in the ocean. Post-season reporting will be based on estimated ocean age. Adult take limits are based on programmatic needs - broodstock numbers and run-reconstruction numbers- and limits to the overall sampling rate, of the run at large.
- c. Take of juveniles due to tagging/mark/PIT tagging prior to release from NPTH. . Note, 444,444 unclipped juvenile estimate includes fish PIT tagged.
- d. Intentional mortality of listed fish as broodstock only. Values represent total need for all program components (LFH, FCAP, NPTH, and IPC). The number shown assumes full production through priority 3 *U.S. v. Oregon* agreement [2018]) does not include fish released by LSRCP and LSRCP-FCAP). . This number could vary depending on annual egg takes and survival in the hatchery and includes a 10% buffer for hatchery flexibility. Priority collection occurs at the LGR trap, alternative collection at LFH and NPTH and South Fork Clearwater River.
- e. Take goal for natural-origin fish for broodstock is 1,500 adults. Jacks can compose up to 10% of total broodstock collection, and are included in this take limit. Based on run predictions and attempt to maximize pNOB. 4,010 total brood are needed for full production, but may include a variation of clipped and unclipped to meet pNOB and brood targets. Note that proportions change based on run composition and the new US v Oregon tagging table changes that go into effect for BY 2018.
- f. Unintentional mortality of listed fish from operation of adult traps, including loss of fish during trapping, transport, and holding prior to spawning or release back into the wild following broodstock sorting. Also provided are estimates of in-hatchery incubation and rearing mortality rates, by life-stage. Adult mortality estimates are based on a 15% prespawning mortality, including adult trapping, holding, and transport.
- g. Adult fish in excess to broodstock needs that are returned to the river from the LFH and the NPTH. These fish are typically marked for re-capture identification.

Table 2. Permissible direct take of Snake River fall Chinook salmon for RM&E activities associated with the NPTH fall Chinook salmon program not directly related to fish culture. NMFS must be notified within one week if take is exceeded by more than 1%.

Type of Take	Origin	Annual Take of Listed Fish By Life Stage (Number of Fish)			
		Egg/Fry	Juvenile or Smolt	Adult or Jack	Carcass
Observe or harass ^a	No fin clip	0	0	Unlimited	0
	Ad clip	0	0	Unlimited	0
Collect for transport ^b	No fin clip	0	0	0	0
	Ad clip	0	0	0	0
Capture, handle, and release ^c	No fin clip	0	5,000	70	0
	Ad clip	0	0	0	0
Capture, handle, tag/mark/tissue sample, and release ^d	No fin clip	0	6,000	Up to 8,500 ⁱ	1,500
	Ad clip	0	0	Up to 5,000 ⁱ	
Removal (e.g. broodstock) ^e	No fin clip	0	0	0	0
	Ad clip	0	0	0	0
Intentional lethal take ^f	No fin clip	0	0	1,000	0
	Ad clip	0	0	Up to 2,000	0
Unintentional lethal take ^g	No fin clip	0	100	10	0
	Ad clip	0	0		0
Other Take (specify)	No fin clip	0	0	0	0
	Ad clip	0	0	0	0

- a. Contact with live, ESA-listed fish through juvenile and adult spawning surveys.
- b. Take of listed fish for transportation only.
- c. Take associated with smolt trapping operations where listed fish are captured, handled, and released. Adult numbers represent adults captured, handled, and released from juvenile trapping operations.
- d. Take associated with adult and juvenile sampling and monitoring projects. These include: adult fall Chinook salmon trapped, handled, sampled, tagged, and released from adult trapping facilities and weirs, and juvenile fall Chinook salmon captured, handled, sampled, tagged, and released from juvenile trapping, netting, and electro-fishing projects.
- e. RM&E activities do not include broodstock collection.
- f. Intentional mortality of hatchery fish as a result of run reconstruction needs. These are coded-wire tagged hatchery fish.
- g. Unintentional mortality of listed fish, including loss of fish during smolt trapping.
- h. Adults and jacks used for run reconstruction at LGR trap.

B. Special Conditions

Annual Planning

As stipulated in the *U.S. v. Oregon* Management Agreement (2018):

1. Annually, the Permit Holder(s) will, prior to August 18, develop broodstock collection protocols needed to implement the pertinent terms of this permit.
2. Annual plans for the respective fall Chinook salmon brood year will be provided to the *U.S. v. Oregon* Production Advisory Committee by October 1 of each year.

Broodstock Collection (at LGR, NPTH and South Fork Clearwater Weir)

3. The Permit Holder(s) and/or their agents may collect Chinook salmon from the fish trap in the LGR dam trap and at the NPTH facility, and from the SF Clearwater River weir, annually from early August 18 through mid-December .
4. The Permit Holder(s) and/or their agents may capture, handle and remove (as specified in HGMP addendums, and the proposed new program) collectively in cooperation with the Permit Holder(s) and agents of permit #16607 – 2R as specified in Table 1 and 2 of this permit.
5. Each ESA-listed fish handled out-of-water for the purpose of recording biological data or for tissue collection must be anesthetized. Fish that are simply counted must remain in water and do not need to be anesthetized.
6. ESA-listed fish must be handled with extreme care and kept in water to the maximum extent possible during sampling and processing procedures. Adequate circulation and replenishment of water in holding units is required. When a mix of species is captured, ESA-listed fish must be processed first.
7. The LGR trap must be operated in accordance with the current version of "Protocols for Adult Fish Trapping Operations at Lower Granite Dam," Currently, Appendix G in the 2018 U.S. Army Corps of Engineers Fish Passage Plan (USACE 2018).
8. The Permit Holder(s) and/or their agents may measure and collect tissue samples (fin clips, opercular punches, scales, otoliths) from listed fall Chinook salmon. Tissue samples and/or scales collected during activities authorized above may be transferred to the Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, Idaho Department of Fish and Game, Washington Department of Fish and Game, Columbia River Intertribal Fish Commission, University of Idaho, or NMFS 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 Holder(s) to other researchers requires written approval

from the Branch Chief, Anadromous Production and Inland Fisheries, Sustainable Fisheries Division, NMFS, West Coast Region.

9. The Permit Holder(s) 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 the LFH and NPTH annual operating plans, will address:
 - a. Sampling protocols for each annual run, including PBT sampling
 - b. Annual requirements, collection, and distribution of fall Chinook salmon taken for broodstock,
 - c. Coordination of data and sampling
10. The ESA-listed fish 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

11. Fish culture, including collection, transport, holding and spawning of broodstock, incubation of eggs, ponding and rearing (including acclimation where specified), clipping (marking) and tagging and necessary transportation shall be as described in the HGMP(s) and annual operation plans. NMFS recognizes the need for management flexibility, so minor deviations consistent with best management practices, conforming to the intent of the program, and having no substantial change in the effects on the listed species already considered in the associated ESA consultation, may be permitted upon request.
12. In addition to reporting required for exceeding overall take as described in the above tables, any single event in which mortality exceeds 10% must be reported to NMFS within two working days. An event is defined as the handling of a minimum of 100 adults or 1,000 juveniles.

Juvenile Releases

13. The Permit Holder(s) and/or their agents shall release juvenile fall Chinook salmon consistent with the numbers, release stages, release locations, and marking described in Table 4 of the U.S. v. Oregon Production Tables. 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 having no substantial change in the effects on the listed species already considered in the associated ESA consultation, may be permitted upon request. Releases should not be in locations other than those proposed and the number released, by life-

stage, should not exceed 110% of the proposed production levels in any individual year. This additional production buffer should be used in the minority of situations and annual operational adjustments, to maintain consistency with the proposed production levels and life stages, should be addressed during the development of the annual operation plan(s).

Facility Operations

14. Water withdrawals at all facilities shall be via structures that meet or exceed NMFS water intake screening criteria.
 - a. A review will be performed before the end of 2019 to determine whether facilities meet screening criteria,
 - b. For facilities not meeting current screening criteria, co-managers will coordinate with NMFS environmental services branch to develop a plan to correct or otherwise address the criteria that are out of compliance.
15. Water withdrawals shall not exceed levels permitted by the Water Use Permits issued to each of the acclimation facilities.

Research, Monitoring, and Evaluation

16. The Permit Holder(s) shall continue existing hatchery/program related evaluations for their planned duration of the effects of the permitted programs on Snake River fall Chinook salmon abundance, productivity, spatial structure, and diversity, and the magnitude or relative impact of the current production program on other actions that influence Snake River fall Chinook salmon.
17. Research, monitoring, and evaluation (RM&E) measures designed to provide additional information the effects of the hatchery programs on productivity and diversity of the Snake River fall Chinook salmon ESU shall be implemented as follows:
 - a) Annual reports on all RM&E measures shall be made available to the Fall Chinook Coordinating Committee by March 31 each year, or other date specified by consensus of committee members.
 - b) Parental-based tagging (PBT) evaluations, which began sampling in 2011, shall continue to collect tissue samples of all returning adults and jacks taken for broodstock and a representative subsample of adults handled for run reconstruction. These evaluations shall continue throughout the permit period as a means of identifying natural-origin fish (Addendum Reference 6.1.5 – 1). Longer-term funding for these activities will be determined within two years from issuance of this permit, via discussion among BPA, the LSRCP, and IPC.
 - c) Ongoing analysis of run reconstruction using updated methods, will be applied annually (as per prior permit #16615).

- d) Continue working with NMFS on the study modeling juvenile life histories to improve estimates of natural productivity and capacity (as per prior permit #16615).
- e) If determined to be technically feasible, carcass samples will be collected during spawning ground surveys (as described in the Biological Opinion) and PBT will be done for all samples in the mainstem Snake River and for a representative subsample for all other areas.

Recognizing the need for flexibility and the ability to respond to new developments, oversight of the implementation of the RM&E measures will be guided by agreement from the Fall Chinook Coordination Committee, including the Permit Holder(s) of this permit and permit 16607 – 2R and their agents, and the funding entities. The committee will make recommendations by consensus wherever possible. If consensus is not achievable, majority and minority recommendations will be prepared and submitted to NMFS. The team will initially approve all experimental designs and protocols and modifications thereof. During the term of the permit, the team may recommend termination or change in duration of one or more of the expanded measures listed above, and may recommend modification or substitution of new measures; such recommendations shall be consistent with the intent of the original RM&E measures..

C. Permit Reporting and Reauthorization Requirements

NMFS contact for all reports and notifications:

Natasha Preston
Sustainable Fisheries Division
National Marine Fisheries Service, West Coast Region
1201 N.E. Lloyd Boulevard, Suite 1100
Portland, OR 97232
(503) 231-2178
(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 Holder(s) 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 Holder(s) 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 Holder(s) 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 beyond that already evaluated.

3. The Permit Holder(s) must submit, upon request, the identities and qualifications of all personnel designated to act under the authority of this permit.
4. The Permit Holder(s) must report the take of any ESA-listed species not included in this permit when it is killed, injured, or collected during the course of activities authorized under this permit. Notification to NMFS should be made as soon as possible, but no later than two days after the unauthorized take. The Permit Holder(s) must then submit a detailed written report of the non-permitted take within two weeks of take exceedance.
5. For the duration of this permit, work in each succeeding year is contingent upon submission and approval of a report on each preceding year's production and monitoring, evaluation, and research activities. The Permit Holder(s) must submit final annual reports of take identified in this permit to NMFS by March 31st of each year. The annual report must include:
 - a. A description of activities conducted under this permit, and information necessary to understand the effects of permitted actions on Snake River fall Chinook salmon populations as described in the HGMP, Addendum, 2018 Proposed Action, and 2018 Biological Opinion, and progress in meeting the stated objectives of the program, including:
 - (i) Annual adult return estimates for all ESA-listed salmonids encountered at the Lower Granite Dam adult trap;
 - (ii) Fall Chinook salmon escapement to Lyons Ferry Hatchery, Nez Perce Tribal Hatchery and the South Fork Clearwater Weir (once in operation) by origin (marked, tagged, unknown and unmarked adults);
 - (iii) Annual estimates of fall Chinook salmon escapement, and fall Chinook salmon redd counts, in natural spawning areas;
 - (iv) Carcass recovery data, including numbers, sex ratios, fish stock origin, mark observations, tributary location, and age class;
 - (v) Number and origin of all fall Chinook salmon retained during broodstock collection and their final disposition;
 - (vi) Results of biological sampling conducted on natural-origin and hatchery-origin fall Chinook salmon adults;
 - (vii) Trends in the relative, total annual abundances of natural- and hatchery-origin fall Chinook salmon escaping to the Snake River Basin upstream of Lower Granite Dam, and observations of any apparent effects of the hatchery program on fall Chinook salmon escapement and spawning distributions in the Snake River Basin;
 - (viii) Unintentional injuries or mortalities of listed spring/summer, and fall Chinook salmon steelhead, and sockeye that result from all operational activities;

- (ix) Any other information deemed necessary by the applicants for assessing the program;
- b. A schedule of proposed collection and sampling methods for NMFS's approval for the following year. The schedule shall include pre-season estimates of expected natural- and hatchery- origin fall Chinook salmon returns and the proposed collection protocols for the upcoming year
- c. Measures taken to minimize impacts on ESA-listed fish and the effectiveness of those measures, the disposition of ESA-listed fish in the event of mortality, and a brief narrative of the circumstances surrounding injuries or mortalities of ESA-listed fish
- d. Steps that the Permit Holder(s) 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

D. General Conditions

1. The Permit Holder(s) 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 Holder(s).
2. The Permit Holder(s), 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 Holder(s) 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 Holder(s) 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 Holder(s) 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 Holder(s) must obtain any other Federal, state, and local permits/authorizations necessary for the conduct of the activities provided for in this permit.
7. Permit Holder(s) 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 Holder(s) 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 Holder(s) 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 Holder(s) must allow such person(s) to inspect the records and facilities of the Permit Holder(s) 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 Holder(s), 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(s) 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 Holder(s) have authority and responsibility for the material taken. The Permit Holder(s) 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 Holder(s).
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 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.

E. Penalties and Permit Sanctions

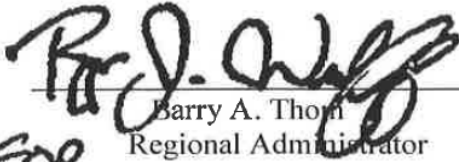
1. Any person who violates any provision of this permit is subject to civil and criminal penalties, permit sanctions, and forfeiture as authorized under the ESA and 15 CFR part 904 [Civil Procedures].
2. All permits are subject to suspension, revocation, modification, and denial in accordance with the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

F. References

USACE (U.S. Army Corps of Engineers). 2018. US Army Corps of Engineers, Northwestern Division: Fish Passage Plan, Corps of Engineers Projects. CENWD-PDW-R. March 2018. <http://pweb.crohms.org/tmt/documents/fpp/>

U.S. v. Oregon. 2018. 2018-2028 *U.S. v. Oregon* Management Agreement. Portland, Oregon.

G. Signatures



Barry A. Thorn
Regional Administrator
FOR

8/13/2018

Date



Daniel Largo
Superintendent



Date