



Oregon

Kate Brown, Governor

Department of Fish and Wildlife

Fish Division

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2018 - SCIENTIFIC TAKING PERMIT - FISH

Permit Holder: Michele DeHart

Permit Number: 21904

Dates: 1/25/18-12/31/18



Project Title: Smolt Monitoring Program and Comparative Survival Study

Organization: Fish Passage Center

Address: 847 NE 19th Ave, Suite 250, Portland, OR 97213

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Federal Authorization: **NMFS Determination of Take under FCRPS 2008/2014 Biop, Issued 1/19/18, expires 12/31/18**

Principal Investigator: Michele DeHart

Co-Investigator(s): Charles Morrill, Rick Martinson

PI Signature: _____ CI Signature(s): _____

Location(s): **Sub Basin (4th Field HUC):** Lower Grande Ronde **Waterbody Name:** Grande Ronde River **Location Description:** Grande Ronde Trap, Lower Grand Ronde River, GrT

Sub Basin (4th Field HUC): Middle Columbia-Hood **Waterbody Name:** Middle Columbia River **Location Description:** John Day Dam Juvenile Bypass System, JDA

Sub Basin (4th Field HUC): Middle Columbia-Lake Wallula **Waterbody Name:** Snake River **Location Description:** McNary Dam, Juvenile Bypass System, MCN

CONDITIONS AND AUTHORIZATION OF THIS PERMIT:

1. The Permit Holder, Principal Investigator, Co-Investigator, and all people working under their supervision shall at all times observe and comply with all federal and state laws, including the Endangered Species Act of 1973, as amended, and lawful regulations issued thereunder, which relate to threatened or endangered plant or animal species while performing activities described in the permit application. ODFW's approval of this permit does not certify that Permittee's activities described in its application are lawful under the federal ESA. Permittee's compliance with permit conditions is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. General conditions of Oregon Revised Statutes and Oregon Administrative Rules apply to this permit that cannot be used in lieu of any permit required by federal law or regulation. Permission to sample in areas where federally protected fish may occur is contingent upon the permittee obtaining necessary authorization from the appropriate federal agency and acting in accordance with the conditions established by the federal government. If a condition on this permit conflicts with a condition on a federal permit or authorization, then the permittee must comply with the more restrictive condition.
2. This permit is not transferable and must be carried while collecting. The Principal Investigator and all Co-Investigators must sign their own copy of the permit.
3. Persons not named on the permit may assist in collecting only while accompanied by the Principal Investigator or Co-investigator(s) listed above.

4. Access to private property is contingent on landowner permission. This permit does not authorize trespassing.
5. This permit is not valid in any refuge, park, city, wildlife area, or area closed to collection without written approval of manager or administrator. When collecting from state parks, please contact Oregon Parks and Recreation Department to inquire about the need for a scientific research collection permit from them - <http://www.oregon.gov/oprd/NATRES/Pages/permitting.aspx>
6. Sampling must be coordinated with local District Biologists (contact list attached in permit) of Oregon Department of Fish and Wildlife must be notified prior to sampling. Oregon State Police must also be notified prior to sampling preferably by contacting local offices (http://www.oregon.gov/osp/Pages/contact_us.aspx) or else the Northern (503-375-3555) or Southern (541-776-6111) non-emergency dispatch after hours.
7. An annual activity/collection report associated with this permit must be submitted to ODFW by December 31, 2018 via <https://apps.nmfs.noaa.gov/>. Renewal of this permit will not be issued until ODFW reviews and approves the annual activity/collection report. All fish, crayfish, and mussel take must be recorded in the annual report. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, control, capture, or collect, or to attempt to engage in any such conduct.
8. May only conduct research and monitoring activities via methods as described in the attached APPS permit. Actual distribution of take among sites is authorized as described in the APPS permit application. All numbers of fish authorized in this permit and the attached APPS permit take table are annual totals.
9. Indirect mortality may not exceed 3% (electrofishing) or 1% (other methods). Mortality rates are calculated as a percentage of total catch, not to exceed the number as described in the take tables in the permit application. In the event that mortality for any species exceeds this rate, the permittee should contact ODFW ESA staff, (503-947-6254 or 541-464-2185) prior to any further activity.
10. If electrofishing, protocols must follow the guidelines established by the National Marine Fisheries Service (NMFS) in June 2000, including no shocking if water temperatures exceed 64.4°F. http://www.westcoast.fisheries.noaa.gov/publications/reference_documents/esa_refs/section4d/electro2000.pdf
11. If the water temperature exceeds 70°F at the capture site, all capturing and handling must stop in stream habitats that contain any salmon, steelhead, trout, or lamprey species.
12. Follow FDA approved protocols and use only FDA approved substances for anesthetizing fish.
 - a) **MS-222** may not be used where fish may be subject to sport harvest fisheries within 21 days;
 - b) **Clove oil** may not be used at all;
 - c) **AQUI-S®** may be used as an alternative to MS-222. To use AQUI-S® 20E as an immediate release sedative in freshwater fish for field-based activities, permit holder must sign up to participate in USFWS-AADAP INAD 11-741 and must comply with the requirements as set forth in the INAD Study Protocol for AQUI-S® 20E <https://www.fws.gov/fisheries/aadap/inads/AQUI-S20E-INAD-11-741.html>.
 - d) **Carbon dioxide** can be used as a fish anesthetic as per FDA rules and requires no withdrawal time;
 - e) **Electro-anesthesia** can be used as a fish anesthetic as an alternative to chemicals, and requires no withdrawal time.
13. If sampling in multiple sub-basins (4th field HUCs), we recommend that after each sampling event concludes, all gear is cleaned and/or allowed to completely dry to prevent the spread of invasive species.
14. If you approach your permitted take or percent indirect mortality at a location and still have sampling to conduct, or would like to revise your sampling methods or procedures; please contact the ODFW ESA staff as soon as possible to request a permit modification so that you can continue your project.

ISSUED BY:



Holly Huchko
Endangered Species Act Specialist

DATE: 1/25/18

Distribution: DeHart, Chockley-FPC; Fish Research, French, Seals, Duke, Bratcher, Yanke, Martin, Storch -ODFW

OREGON FISH BIOLOGISTS CONTACT DETAILS updated 1.25.18

ODFW District Biologist	Phone	E-mail	Watershed District	Office
Todd Alsbury	(971) 673-6011	Todd.Alsbury@state.or.us	North Willamette-Cascade Unit	Clackamas
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Cristen Don	(541) 867-7701 x228	Cristen.N.Don@state.or.us	Marine Reserves	Newport
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* = Assistant Fish Biologist



Authorizations and Permits for Protected Species (APPS)

File #: 21904

Title: Smolt Monitoring Program and Comparative Surv

Applicant Information

Name: Michele DeHart
Title: Fish Passage Center Manager
Affiliation: Fish Passage Center
Address: 847 NE 19th Ave, Suite 250
City,State,Zip: Portland, OR 97213
Phone Number: (503)833-3901
Email: mdehart@fpc.org

Project Information

File Number: 21904
Project Number: FPC 47
Application Status: **Application Complete - Issued**
Project Title: Smolt Monitoring Program and Comparative Survival Study
Project Status: New
Previous Federal or State Permit: 21103
Permits Requested:

- Determination of Take Authorization under a Biological Opinion
- Oregon Scientific Taking Permit for Fish and Marine and Freshwater Invertebrates

PLEASE NOTE: Oregon Scientific Taking Permits only cover take and transport in the state of Oregon. It is the applicant's responsibility to obtain the necessary permits from all other states that may be associated with this project.

Where will activities occur?	Idaho Oregon (including Columbia River and offshore waters) Washington (including Columbia River and offshore waters)
State department of fish and game/wildlife:	N/A
Research Timeframe:	Start: 01/25/2018 End: 12/31/2018
Sampling Season/Project Duration:	The sampling season for both the Smolt Monitoring Program and the Comparative Survival Study extend from March 1 through October 31. The Smolt Monitoring Program has been conducted annually since 1984. The Comparative Survival study has been conducted since 1996.
Project Type(1):	Management/Applied Research
Project Type(2):	Monitoring

Project Description

Purpose: The Smolt Monitoring program (SMP) monitors the juvenile salmonid migration in the Snake/Columbia river basins. The information is used by the state, tribal and federal salmon managers for the development of in-season recommendations and post-season analyses for fish passage management actions in the hydrosystem. The Comparative Survival Study (CSS) is a multi-year program for the purpose of monitoring and evaluating the impacts of the mitigation measures and actions (e.g., flow augmentation, spill, and transportation) under the NMFS Biological Opinion to recover listed stocks.

Description: The SMP data is significant to several regional programs. Historical SMP data has provided the basis for development and implementation of Biological Opinion measures and Northwest Power and Conservation Council (NPCC) Fish and Wildlife Program measures. Each year the SMP provides data for daily and weekly passage management decisions used in implementation of the National Marine Fisheries Service (NMFS) Biological Opinion measures. SMP sampling also recovers mark groups from various activities, providing recapture data to the originating entity. Gas bubble trauma (GBT) symptom monitoring through the SMP is a pre-requisite established by NMFS and the state water quality agencies for implementation of the NMFS Biological Opinion spill for fish passage measures.

The SMP provides daily data on movement of smolts out of major river drainages and past the dams on the Snake and Columbia Rivers. Indices of migration strength and migration timing result for the run-at-large at key monitoring sites. In addition, marked smolts from hatcheries, traps, and dams provide measures of smolt speed and in-river survival through key index reaches. Fish quality, descaling and GBT measures are taken on samples of fish collected at each monitoring site supplying indicators of the health of the run. The SMP affords real-time fish passage data to fishery management entities and the hydroelectric power system managers, which they utilize in day-to-day river operations decisions. The SMP provides a continuous long-term fish passage database which is utilized in year-to-year comparisons of smolt travel time, passage timing, passage duration, dissolved GBT signs, juvenile survival estimates, relative to annual fish passage conditions and hydrosystem operations. The SMP will furnish data useful in the development of future long-term mitigation measures. There are no other viable alternatives to accomplish the goals of this project.

The Fish Passage Center (FPC) also annually, together with the CSS oversight committee, designs and oversees the implementation of the Comparative Survival Study. The state and tribal fishery agencies and US Fish and Wildlife Service have developed the CSS as a multi-year program for the purpose of monitoring and evaluating the impacts of the mitigation measures and actions (e.g., flow augmentation, spill, and transportation) under the NMFS Biological Opinion to recover listed stocks. The CSS allows comparisons of survival over different life stages among fish with different experiences in the hydrosystem (e.g., transportation vs. in-river migrants and migration through various numbers of dams).

Biological Opinion

Biological Opinion:	2008/2014 FCRPS Biological Opinion
Objectives:	<ul style="list-style-type: none">• Smolt to Adult Returns• Environmental Stressors• Transportation• Delayed Mortality• Survival Monitoring
Justification:	The Smolt Monitoring Program is part of the Research Monitoring and Evaluation described in the Biological Opinion. The Smolt Monitoring Program activities are described in the updated proposed action under Research Monitoring and Evaluation sub strategy 1.3. The Comparative Survival Study objectives and products are described in the Research Monitoring and Evaluation section of the Biological Opinion in strategy 3, critical uncertainties research.
Review:	The project has undergone regional review and has been regionally approved as a high priority project. The scope, purpose and intent of the SMP is to provide a technical basis and justification for implementation of hydrosystem operations to enhance fish passage in the mainstem Columbia and Snake rivers. The SMP is reviewed annually relative to sampling constraints and sampling techniques with the objective of limiting fish handling and sampling as much as possible. The annual SMP is considered within the context of planned activities at mainstem dams, such as the Smolt Transportation Program. Dates of sampling at trap sites and mainstem sites are established to provide early indication of fish migration from major tributaries and through the mainstem including planned major hatchery releases. Consistency in sample dates is pursued to support year-to-year comparison of migration timing and duration relative to environmental factors, such as flow and temperature.

Supplemental Information

Methods:	The Smolt Monitoring Program (SMP) samples fish at several sites in the Columbia Basin including five traps and eight dams. Field work is carried out by various agencies, including the USFWS, WDFW, Nez Perce Tribe, ODFW, and PSMFC. Traps and dams operate to collect active migrant juvenile salmonids. A wide range of activities occur in association with monitoring including species-specific passage timing, mark information in migrants, external injury and disease information, mortality and descaling information, and finally PIT-tag marking is carried out at some SMP sites to aid in gathering longer-term data such as travel time, passage timing and survival for specific mark groups. The SMP tagging at the mainstem trap sites is augmented with additional tagging to estimate smolt to adult return rates as part of the CSS.
	Daily sample rates for the SMP are based on the previous days' sample, and are designed to sample the least number of fish, while providing a statistically significant sample.
Lethal Take:	Not Applicable
Anticipated Effects on Animals:	The 2018 take estimates of incidental mortality are based on data from the past five years conduct of the SMP, actual numbers intercepted by the Smolt Monitoring Program in 2017, and the anticipated project operations for 2018.

Measures to Minimize Effects:

Whether fish are captured at traps or at juvenile bypass systems, the overall goal is to minimize handling effects on fish and to do this wet capture, anesthetic before handling, and recovery before release is emphasized. The FPC data entry program manual (ftp://ftp.fpc.org/fpc32.net/Manuals/) provides detailed descriptions of data collected on individual fish and overall sample statistics, such as mortality rate. After fish are examined they are routed to a recovery tank. Typically, fish sampled at transportation sites are ultimately routed to a raceway for transportation. If fish are to be returned to river, a minimum of 1 hour recovery time prior to release is recommended.

Disposition of Tissues:

Not Applicable

Public Availability of Product/Publications:

All information is available through the Fish Passage Center website (www.fpc.org) on a daily basis and summarized in annual reports available via the website as well.

Biologist Comments

Date	From	Comments
12/29/2017	Kyle Bratcher	The Wallowa District supports this project.
01/02/2018	Adam Storch	protocols, expected take and rates of incidental mortality seem reasonable for the OR locations. OSCRП supports the application. -copied from email by M.Weaver
01/03/2018	Rod French	The ODFW Mid-Columbia Fishery District continues to support the project. copied from email by M.Weaver
01/04/2018	Bill Duke	The Umatilla District supports continuation of this project.

Federal Information

No Federal comments or authorizations.

Location/Take Information

Freshwater Location

Research Area: Pacific Ocean State: OR Sub Basin (4th Field HUC): Lower Grande Ronde Stream Name: Grande Ronde River

Sale in Oregon of species taken: None

Location Description: Grande Ronde Trap, Lower Grand Ronde River, GrT

Take Information

Line	Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Indirect Mort	Take Action	Observe /Collect Method	Procedure	Run	Transport Record	Begin Date	End Date
1		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Natural	Juvenile	Male and Female	3000	30	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

2		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	900	16	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
3		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	100	4	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
4		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Natural	Juvenile	Male and Female	4300	66	Capture/Mark, Tag, Sample Tissue/Release Live Animal	Trap, Incline Plane	Tag, PIT	Spring/Summer	N/A	1/25/2018	12/31/2018
5		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	280	6	Capture/Mark, Tag, Sample Tissue/Release Live Animal	Trap, Incline Plane	Tag, PIT	Spring/Summer	N/A	1/25/2018	12/31/2018
6		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	1120	22	Capture/Mark, Tag, Sample Tissue/Release Live Animal	Trap, Incline Plane	Tag, PIT	Spring/Summer	N/A	1/25/2018	12/31/2018
7		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Natural	Juvenile	Male and Female	7000	140	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018
8		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	5000	130	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018
9		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	19000	350	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018
10		Steelhead	Snake River Basin (NMFS Threatened)	Natural	Juvenile	Male and Female	3000	60	Capture/Handle/Release Fish	Trap, Incline Plane	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
11		Steelhead	Snake River Basin (NMFS Threatened)	Natural	Juvenile	Male and Female	1200	24	Capture/Mark, Tag, Sample Tissue/Release Live Animal	Trap, Incline Plane	Tag, PIT	Summer	N/A	1/25/2018	12/31/2018

Freshwater Location

Research Area: Pacific Ocean **State:** OR **Sub Basin (4th Field HUC):** Middle Columbia-Hood **Stream Name:** Middle Columbia River

Sale in Oregon of species taken: None

Location Description: John Day Dam Juvenile Bypass System, JDA

Take Information

Line	Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Indirect Mort	Take Action	Observe /Collect Method	Procedure	Run	Transport Record	Begin Date	End Date
1		Bass, Largemouth	NA	Natural	Adult	Unknown	10	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
2		Bass, Smallmouth	NA	Natural	Adult	Unknown	400	2	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
3		Bluegill	NA	Natural	Adult	Unknown	300	5	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
4		Bullhead (unknown)	NA	Natural	Adult	Unknown	25	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
5		Carp, Common	NA	Natural	Adult	Unknown	25	2	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

6		Catfish, Channel	NA	Natural	Adult	Unknown	32	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
7		Crappie, Black	NA	Natural	Adult	Unknown	30	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
8		Dace, Longnose	NA	Natural	Adult	Unknown	10	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
9		Kilifish, Banded	NA	Natural	Adult	Male and Female	10	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
10		Kokanee	NA	Natural	Adult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
11		Lamprey, Pacific	NA	Natural	Juvenile	Unknown	15000	150	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

										with fish handling)					
12		Lamprey, Pacific	NA	Natural	Larvae	Unknown	3000	30	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
13		Lamprey, Pacific	NA	Natural	Adult	Unknown	50	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
14		Mixed invertebrate	NA	N/A	Adult	Unknown	10000	100	Unknown	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)		N/A	N/A	1/25/2018	12/31/2018
15		Peamouth	NA	Natural	Adult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
16		Perch, Yellow	NA	Natural	Adult	Unknown	400	50	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

17		Pikeminnow, Northern	NA	Natural	Adult	Unknown	100	2	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
18		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Natural	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
19		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	4500	90	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
20		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
21		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Natural	Juvenile	Male and Female	1300	26	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018
22		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018

				Adipose						with fish handling)						
23		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	1500	30	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018	
24		Salmon, Chinook	Upper Columbia River spring-run (NMFS Endangered)	Natural	Juvenile	Male and Female	4000	80	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring	N/A	1/25/2018	12/31/2018	
25		Salmon, Chinook	Upper Columbia River spring-run (NMFS Endangered)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	1800	36	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring	N/A	1/25/2018	12/31/2018	
26		Salmon, Chinook	Upper Columbia River spring-run (NMFS Endangered)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	1800	36	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring	N/A	1/25/2018	12/31/2018	
27		Salmon, sockeye	Snake River (NMFS Endangered)	Natural	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018	

28		Sculpin (unknown)	NA	Natural	Adult	Unknown	200	5	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
29		Shad, American	NA	Natural	Juvenile	Unknown	400000	20000	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
30		Shad, American	NA	Natural	Adult	Unknown	100	50	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
31		Steelhead	Middle Columbia River (NMFS Threatened)	Natural	Juvenile	Male and Female	6000	120	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
32		Steelhead	Snake River Basin (NMFS Threatened)	Natural	Juvenile	Male and Female	3000	60	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
33		Steelhead	Snake River Basin (NMFS Threatened)	Listed Hatchery Intact Adaptive	Juvenile	Male and Female	1500	30	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	Summer	N/A	1/25/2018	12/31/2018

				Adipose						with fish handling)						
34		Steelhead	Snake River Basin (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	2000	30	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018	
35		Steelhead	Unspecified	Natural	Adult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018	
36		Steelhead	Unspecified	Unlisted Hatchery	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018	
37		Steelhead	Upper Columbia River (NMFS Threatened)	Natural	Juvenile	Male and Female	4500	90	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018	
38		Steelhead	Upper Columbia River (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	2000	40	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018	

39		Steelhead	Upper Columbia River (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	4000	80	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
40		Stickleback, Threespine	NA	Natural	Adult	Unknown	100	2	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
41		Sucker (unknown)	NA	Natural	Adult	Unknown	50	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
42		Sucker, Bridgelip	NA	Natural	Adult	Unknown	50	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
43		Walleye	NA	Natural	Adult	Unknown	300	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
44		Whitefish, Mountain	NA	Natural	Adult	Unknown	150	5	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

										with fish handling)					
45		Salmon, Chinook	Unspecified	Natural	Subadult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gateway, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018

Freshwater Location

Research Area: Pacific Ocean State: OR Sub Basin (4th Field HUC): Middle Columbia-Lake Wallula Stream Name: Snake River

Sale in Oregon of species taken: None

Location Description: McNary Dam, Juvenile Bypass System, MCN

Take Information

Line	Ver	Species	Listing Unit/Stock	Production /Origin	Life Stage	Sex	Expected Take	Indirect Mort	Take Action	Observe /Collect Method	Procedure	Run	Transport Record	Begin Date	End Date
1		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Natural	Juvenile	Male and Female	1100	22	Capture/Handle/Release Fish	Dam bypass, gateway, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018
2		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	1000	20	Capture/Handle/Release Fish	Dam bypass, gateway, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring/Summer	N/A	1/25/2018	12/31/2018
3		Salmon, Chinook	Snake River spring/summer-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	2000	40	Capture/Handle/Release Fish	Dam bypass, gateway, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018

4		Steelhead	Snake River Basin (NMFS Threatened)	Natural	Juvenile	Male and Female	1000	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
5		Steelhead	Snake River Basin (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
6		Steelhead	Snake River Basin (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	1000	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
7		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Natural	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
8		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	2000	40	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
9		Salmon, Chinook	Snake River fall-run (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	3000	60	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

				Clip						with fish handling)					
10		Salmon, sockeye	SNAKE RIVER (NMFS Endangered)	Natural	Juvenile	Male and Female	500	10	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
11		Salmon, Chinook	Upper Columbia River spring-run (NMFS Endangered)	Natural	Juvenile	Male and Female	3320	66	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring	N/A	1/25/2018	12/31/2018
12		Steelhead	Upper Columbia River (NMFS Threatened)	Natural	Juvenile	Male and Female	1000	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
13		Steelhead	Upper Columbia River (NMFS Threatened)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	1000	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
14		Steelhead	Upper Columbia River (NMFS Threatened)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	3000	60	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018

15		Steelhead	Middle Columbia River (NMFS Threatened)	Natural	Juvenile	Male and Female	1000	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Summer	N/A	1/25/2018	12/31/2018
16		Salmon, Chinook	Upper Columbia River spring-run (NMFS Endangered)	Listed Hatchery Intact Adipose	Juvenile	Male and Female	2000	40	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring	N/A	1/25/2018	12/31/2018
17		Salmon, Chinook	Upper Columbia River spring-run (NMFS Endangered)	Listed Hatchery Adipose Clip	Juvenile	Male and Female	2000	40	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Spring	N/A	1/25/2018	12/31/2018
18		Steelhead	Unspecified	Natural	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018
19		Steelhead	Unspecified	Unlisted Hatchery	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018
20		Bullhead (unknown)	NA	Natural	Adult	Unknown	20	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

										with fish handling)					
21		Bass, Largemouth	NA	Natural	Adult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
22		Bass, Smallmouth	NA	Natural	Adult	Unknown	350	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
23		Catfish, Channel	NA	Natural	Adult	Unknown	20	5	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
24		Chub, Chiselmouth	NA	Natural	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
25		Carp, Common	NA	Natural	Adult	Unknown	100	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

26		Salmon, Chinook	Unspecified	Unlisted Hatchery	Subadult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018
27		Salmon, Chinook	Unspecified	Natural	Subadult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	Unknown	N/A	1/25/2018	12/31/2018
28		Kokanee	NA	Natural	Adult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
29		Dace, Longnose	NA	Natural	Adult	Unknown	100	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
30		Whitefish, Mountain	NA	Natural	Adult	Unknown	100	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
31		Perch, Yellow	NA	Natural	Adult	Unknown	50	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

										with fish handling)					
32		Peamouth	NA	Natural	Adult	Unknown	1000	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
33		Shiner, Redside	NA	Natural	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
34		Shad, American	NA	Natural	Juvenile	Unknown	400000	6000	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
35		Stickleback, Threespine	NA	Natural	Adult	Unknown	300	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
36		Pikeminnow, Northern	NA	Natural	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

37		Sandroller	NA	Natural	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
38		Sucker (unknown)	NA	Natural	Adult	Unknown	15	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
39		Lamprey, Pacific	NA	Natural	Juvenile	Unknown	5000	100	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
40		Lamprey, Pacific	NA	Natural	Larvae	Unknown	100	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
41		Lamprey, Pacific	NA	Natural	Adult	Unknown	50	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
42		Sculpin (unknown)	NA	Natural	Adult	Unknown	10	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

										with fish handling)					
43		Walleye	NA	Natural	Adult	Unknown	20	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
44		Bluegill	NA	Natural	Adult	Unknown	200	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
45		Kilifish, Banded	NA	Natural	Adult	Unknown	100	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
46		Shad, American	NA	Natural	Adult	Unknown	10	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
47		Unknown fish	NA	Natural	Unknown	Unknown	20	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

48		Crappie, Black	NA	Natural	Unknown	Unknown	20	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)		N/A	N/A	1/25/2018	12/31/2018
49		Mixed invertebrate	NA	N/A	Adult	Unknown	200	20	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
50		Walleye	NA	Natural	Unknown	Unknown	10	1	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018
51		Tench	NA	Natural	Adult	Unknown	5	0	Capture/Handle/Release Fish	Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)	Anesthetize	N/A	N/A	1/25/2018	12/31/2018

Project Contacts

Primary Contact: Brandon R Chockley

Principal Investigator: Michele DeHart

Other Personnel:

Name	Role(s)
Rick Martinson	Co-Investigator

Collector Comments: SMP crews overseen by PSMFC, WDFW, ODFW and IDFG.

Attachments

- Application Archive - P21904T14Issued.pdf (Added Jan 25, 2018)
- Authorization Letter - P21904T22DeterminationofTake09-18-FPC-47.pdf (Added Jan 25, 2018)
- Certification of Identity - P21904T11SignaturePage_21904.pdf (Added Dec 29, 2017)
- Contact - Charles F. Morrill C197T5CMorrill_CV.doc (Added Oct 17, 2008)
- Contact - Michele DeHart C2373T5Michele DeHar cv 2015.docx (Added Jan 20, 2015)
- Contact - Rick Martinson C19383T5ResumeforRick2015.doc (Added Jan 8, 2016)
- Project Description - P20128T109_16_FPC-47Finaldeterminationoftakeletterissued2216.pdf (Added Dec 21, 2017)

Status

Application Status:Application Complete

Date Submitted:December 29, 2017

Date Completed:January 9, 2018

Last Date Archived:January 25, 2018

• Determination of Take Authorization under a Biological Opinion

Current Status: Issued Status Date: January 19, 2018

Expire Date: December 31, 2018

Analyst Information:

Blane Bellerud Phone: (503)231-2238

Email: blane.bellerud@noaa.gov

• Oregon Scientific Taking Permit for Fish and Marine and Freshwater

Invertebrates

Current Status: Issued Status Date: January 25, 2018

Date State Approved: January 25, 2018

Expire Date: December 31, 2018

Modification Requests

This section is currently empty.

Reports

Report Required						
Nbr	Report Type	Report Period		Date Due	Status	Date Received
		Start Date	End Date			
1	Annual	01/01/2018	12/31/2018	12/31/2018	N/A	