



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
1201 NE Lloyd Boulevard, Suite 1100
PORTLAND, OREGON 97232-1274

January 26, 2017

Michele DeHart
Fish Passage Center
847 NE 19th Avenue
Suite 250
Portland, Or 97213

RE: Determination of Take for Research Purposes (04-17-FPC47)

Dear Ms. Dehart:

National Marine Fisheries Service (NMFS) Interior Columbia Basin Office's Columbia Hydropower branch has determined that take associated with the study, "Smolt Monitoring Program and Comparative Survival Study" is permitted in 2017 under the 2014 FCRPS Supplemental Biological Opinion (2014 Opinion). If this research continues beyond 2017, the take allowed under the determination process must be updated annually. The estimated numbers of listed salmonids needed to complete this study in 2017 are given in the attached project summary.

Project Justification, Description, and Methods

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

Description, Methodology, and Authorized take levels

See attached project summary

Terms, Conditions, and Requirements

Fish listed under the Endangered Species Act (ESA) must be handled with extreme care and kept in water to the maximum extent possible during sampling and processing. Adequate circulation and replenishment of water in holding units is required. When using gear that captures a mix of species, ESA-listed fish must be processed first, to the extent possible, to minimize the duration of handling stress. Endangered Species Act listed fish must be transferred using a sanctuary net (which holds water during transfer) whenever practical to prevent the added stress of being out of water. Should NMFS determine that a researcher's procedure is no longer acceptable; the researcher must immediately cease such activity until an acceptable alternative procedure can be developed with NMFS. To implement the Hydro research, monitoring &

evaluation (RM&E) reasonable and prudent alternatives (RPAs), the Applicant shall ensure that all of the following conditions are met:

1. Researchers must not intentionally kill or cause to be killed any listed species unless a specific monitoring or evaluation proposal, approved by NMFS, specifically allows intentional lethal take.
2. Each ESA-listed fish handled out of water must be anesthetized to prevent injury or mortality.
3. Anesthetized fish must be allowed to recover (e.g., in a recovery tank) before being released. Fish that are simply counted but not handled must remain in water, but do not have to be anesthetized. Whenever possible, unintentional or indirect mortalities of ESA-listed fish that occur during scientific research and monitoring activities shall be used in place of intentional lethal take, if applicable.
4. Each researcher must ensure that the ESA-listed species are taken only by the means, in the areas, and for the purposes set forth in the research proposal, as limited by the terms and conditions.
5. Each researcher, in effecting the take authorized by the incidental take statement (ITS) (Chapter 14, 2008 Opinion – incorporated into the 2014 Opinion) and through NMFS' Take Determination Letters, is considered to have accepted the terms and conditions of the ITS and any additional terms or conditions required by NMFS' Take Determination Letters, and must be prepared to comply with the provisions of these two documents, and the applicable NMFS' regulations and the ESA.
6. Each researcher is responsible for the actions of any individual operating under the authority of the researcher's designated take authorization within the ITS of the 2014 Opinion and NMFS' Take Determination Letters.
7. Each researcher, staff member, or designated agent acting on the researcher's behalf must possess a copy of the ITS in the 2014 Opinion and the NMFS authorizing Take Determination letter when conducting the activities for which a take of ESA-listed species or other exception to ESA prohibitions is authorized herein.
8. Researchers may not transfer or assign a take authorization included within this determination to any other person(s), as person is defined in Section 3(12) of the ESA. The take authorization ceases to be in force or effective if transferred or assigned to any other person without prior authorization from NMFS.
9. Each researcher must obtain any other Federal, State, and local permits or authorizations necessary to conduct the activities provided for in this ITS.
10. Each researcher must coordinate with other applicable co-managers and researchers to ensure that no unnecessary duplication or adverse cumulative effects occur as a result of the researcher's activities.

11. National Marine Fisheries Service reserves the right to inspect research activities as they occur. This may include observation or review of research activities, facilities, records, etc., pertaining to ESA-listed species covered by this determination.
12. Under the terms of NMFS' regulations, a violation of any of the terms and conditions of this ITS will subject the offending researcher and/or any individual who is operating under the authority of this ITS to penalties as provided for in the ESA for authorized take.
13. Each researcher is responsible for biological samples collected from ESA-listed species as long as they are useful for research purposes. The terms and conditions concerning any samples collected remain in effect as long as the researcher maintains authority over and responsibility for the material taken. A researcher may not transfer biological samples to anyone not listed in the research proposal without obtaining prior written approval from NMFS. Any such transfer will be subject to such conditions, as NMFS deems appropriate.
14. NMFS may amend a take authorization identified in this determination, or adjust specific take levels after reasonable notice to the applicable researcher.
15. NMFS may revoke a take authorization identified in this ITS if the activities for which it provides are not carried out. If the activities are not carried out in accordance with the conditions of this ITS and the purposes and requirements of the ESA, or if NMFS otherwise determines that the continuation of activities would operate to the disadvantage of ESA-listed species.

Annual Reporting and Authorization Requirements

The conduct of scientific research and monitoring activities each year is contingent on submission and approval of a report on each proceeding year's research and monitoring activities. Researchers are providing annual reports summarizing the take of ESA-listed salmon and steelhead associated with their activity. These annual reports are to be provided to NMFS' designated Take Determination Coordinator by December 1 of each year unless this date is otherwise modified by NMFS' authorizing Take Determination letter. The report must include the following:

1. A detailed description of scientific research and monitoring activities, including the total number of fish taken at each location, an estimate of the number of ESA-listed fish taken at each location, the manner of take, and the dates and locations of the take.
2. Measures taken to minimize disturbances to ESA-listed fish and the effectiveness of these measures, the condition of ESA-listed fish taken and used for research and monitoring, a description of the effects of research and monitoring activities on the subject species, the disposition of ESA-listed fish in the event of mortality, and a brief narrative of the circumstances surrounding fish injuries or mortalities to ESA-listed fish.
3. Any problems that arose during research and monitoring activities, and a statement as to whether the activities had any unforeseen effects.
4. Descriptions of how all take estimates were derived.

5. Steps that have been and will be taken to coordinate research and monitoring activities with those of other researchers.
6. Projects which employ blocking weirs must include a log of delay monitoring in their annual report. This log must include daily trap catches and numbers of fish observed below the weir (as per the methodology described in the projects weir operation plan). Any changes in weir operation or configuration will also be noted with the dates that they are in effect. Any periods when the weir was not in operation will also be noted.

Operational Reporting & Notification Requirements

1. Researchers must obtain NMFS' approval prior to implementing research protocols (e.g., changes in sampling locations or fish handling protocols) that differ from those considered in the Take Determination Letters, unless immediate deviation from these same protocols are necessary to reduce impacts to fish in hand. In this case, researchers must contact NMFS' designated Take Determination Coordinator or other designated staff as soon as possible to report on the situation (including reporting any resultant unexpected take), the actions taken by the research to minimize impacts to research fish, and coordination of additional actions that are necessary before the research can continue.
2. Each researcher must alert NMFS whenever the authorized level of take is exceeded, or if circumstances indicate that such an event is imminent. Notification should be made as soon as possible, but no later than 2 days after the authorized level of take is exceeded. The researcher must then submit a detailed written report to NMFS. Pending a review of the circumstances, NMFS may suspend the research and monitoring activities or implement reasonable measures and/or alternatives to allow research and monitoring activities to continue.
3. Each researcher must alert NMFS when a take of any ESA-listed species not included in the research proposal is killed, injured, or collected during the course of research and monitoring activities. Notification should be made as soon as possible, but no later than 2 days after the unauthorized take. The researcher must then submit a detailed written report to NMFS. Pending a review of the circumstances, NMFS may suspend research and monitoring activities or implement reasonable measures and/or alternatives to allow research and monitoring activities to continue.
4. In the case of ongoing studies, a report of actual take will be submitted to NMFS no less than 30 days before the request for take for the next year is submitted. For studies which only last 1 year, or upon termination of a multi-year study, a report of actual take will be submitted no less than 30 days after the activities described in the take determination letter cease. Take reports will include the numbers, life stage, species, and evolutionarily significant unit (ESU) of fish taken; the type of take (harass, handle, kill); and levels of incidental mortality. The reports will also include the location of the take (geographical names and Hydrologic Unit Code (HUC), and summarize take into blocks no larger than one month (i.e., take for April, May, etc.). Any of the incidents described in items 2 and 3 above (exceeded take limits, or

incidental mortality not covered by the take determination) will also be described in this report. The report will also include an evaluation if methodology can be improved to reduce take (especially incidental mortality).

Determinations by the FCRPS Branch for this research during the 2017 fish passage season and beyond will be made on an annual basis. The annual determination will depend upon information submitted in the research study's annual report, other new information, the annual anticipated status of fisheries stocks, and any subsequent review through regional review processes.

Please notify Blane Bellerud as soon as possible of any deviation from the terms and conditions in this determination. Please include the study's official title and the number (from the subject line) of the current Take Determination Letter in all communications regarding this study. Please provide the FCRPS Branch's Take Determination Coordinator, Blane Bellerud (503-231-2238, Blane.Bellerud@noaa.gov), with the annual report for this research study. Initial take authorization was granted electronically Via NMFS Authorizations and Permits for Protected Species (APPS) system. Initial take authorization was granted electronically Via NMFS Authorizations and Permits for Protected Species (APPS) system.

Sincerely,

A handwritten signature in blue ink, appearing to read "Ritchie J. Graves".

Ritchie J. Graves, Chief
Columbia Hydropower Branch
Interior Columbia Basin Office
NOAA Fisheries, West Coast Region

cc: Margaret Filardo



Authorizations and Permits for Protected Species (APPS)

File #: 21103

Title: Renew: Smolt Monitoring Program and Comparati

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: 21103
Project Number: FPC 47
Application Status: **Application Complete - Issued**
Project Title: Renew: Smolt Monitoring Program and Comparative Survival Study
Project Status: Renewal
Previous Federal or State Permit: [20128](#)
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: 01/26/2017 End: 12/31/2017
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:

- 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:	<p>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.</p> <p>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.</p>
Lethal Take:	Not Applicable
Anticipated Effects on Animals:	The 2017 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 2016, and the anticipated project operations for 2017.
Measures to Minimize Effects:	<p>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 (http://www.fpc.org/documents/metadata/FPC32net_2015Manual.pdf) 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.</p>
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
01/10/2017	Kyle Bratcher	The Willowa District supports this project
01/12/2017	Adam Storch	Columbia River program are supportive of this work for 2017.

Federal Information

No Federal funds, personnel or permits will be used.

Location/Take Information

Freshwater Location

Research Area: Pacific Ocean **State:** OR
Sub Basin (4th Field HUC): Lower Grande Ronde
Waterbody Name: Grande Ronde River
Sale in Oregon of species taken: None
Location Description: Grande Ronde Trap, Lower Grand Ronde River, GrT

Take Information

* **Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 900
Indirect Mortality: 16
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 100
Indirect Mortality: 4
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Salmon, Chinook

Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4300
Indirect Mortality: 66
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Incline Plane
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 280
Indirect Mortality: 6
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Incline Plane
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1120
Indirect Mortality: 22

Takes Per Animal:

Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Incline Plane
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 7000
Indirect Mortality: 140
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 5000
Indirect Mortality: 130
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A

Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 19000
Indirect Mortality: 350
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 60
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Incline Plane
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 11
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)

Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1200
Indirect Mortality: 24
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Incline Plane
Procedure: Tag, PIT
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** ID
Sub Basin (4th Field HUC): Lower Salmon
Waterbody Name: Salmon River
Sale in Oregon of species taken: None
Location Description: Salmon River Trap at Whitebird

Take Information

* **Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 13000
Indirect Mortality: 220
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 60
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 20000
Indirect Mortality: 400
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female

Expected Take: 800
Indirect Mortality: 16
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 27
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize

Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 150
Indirect Mortality: 3
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 80
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9

Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 20
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 250
Indirect Mortality: 5
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 11
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 8200

Indirect Mortality: 164
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 12
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 300
Indirect Mortality: 3
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 13
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1700
Indirect Mortality: 21
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Spring/Summer

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 14
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1400
Indirect Mortality: 28
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 15
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3400
Indirect Mortality: 68
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** WA

Sub Basin (4th Field HUC): Lower Snake River

Waterbody Name: Snake River

Sale in Oregon of species taken: None

Location Description: Lower Monumental Dam, Juvenile Bypass System, LMN

Take Information

* **Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 6000
Indirect Mortality: 120
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize

Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2500
Indirect Mortality: 50
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2500
Indirect Mortality: 50
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)

Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 10000
Indirect Mortality: 200
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 16000
Indirect Mortality: 300
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 9000

Indirect Mortality: 200
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** ID
Sub Basin (4th Field HUC): Lower Snake-Asotin
Waterbody Name: Snake River
Sale in Oregon of species taken: None
Location Description: Lewiston Trap, Snake River LeT

Take Information

* **Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)

Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 5000
Indirect Mortality: 100
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 5000
Indirect Mortality: 100
Takes Per Animal:

Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 60
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4000
Indirect Mortality: 80
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose

Lifestage: Juvenile
Sex: Male and Female
Expected Take: 5000
Indirect Mortality: 70
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 15
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Trap, Not listed here
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 700
Indirect Mortality: 14
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Trap, Not listed here

Procedure: Anesthetize

Run: N/A

Transport: N/A

Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 11
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4800
Indirect Mortality: 96
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 12
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 200
Indirect Mortality: 3
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 13
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1600
Indirect Mortality: 21
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 14
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1400
Indirect Mortality: 28
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 15
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile

Sex: Male and Female
Expected Take: 3600
Indirect Mortality: 72
Takes Per Animal:
Take Action: Capture/Mark, Tag, Sample Tissue/Release Live Animal
Observe/Collect Method: Trap, Not listed here
Procedure: Tag, PIT
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** WA
Sub Basin (4th Field HUC): Lower Snake-Tucannon
Waterbody Name: Snake River
Sale in Oregon of species taken: None
Location Description: Lower Granite Dam, Juvenile Bypass System, LGR

Take Information

*** Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 9000
Indirect Mortality: 180
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 2
Species: Salmon, Chinook

Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 6000
Indirect Mortality: 80
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female

Expected Take: 5700
Indirect Mortality: 114
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2500
Indirect Mortality: 50
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 7500
Indirect Mortality: 150
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 30000
Indirect Mortality: 500
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 40000
Indirect Mortality: 800
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 10000
Indirect Mortality: 200
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4500
Indirect Mortality: 90
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** WA

Sub Basin (4th Field HUC): Lower Snake-Tucannon

Waterbody Name: Snake River

Sal in Oregon of species taken: None

Location Description: Little Goose Dam, Juvenile Bypass System, LGS

Take Information

* **Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 7000
Indirect Mortality: 140
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize

Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4000
Indirect Mortality: 80
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4000
Indirect Mortality: 80
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 50
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 6000
Indirect Mortality: 100
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)

Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 30000
Indirect Mortality: 400
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 40000
Indirect Mortality: 800
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 10000

Indirect Mortality: 200
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3300
Indirect Mortality: 66
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** OR
Sub Basin (4th Field HUC): Middle Columbia-Hood
Waterbody Name: Middle Columbia River
Sale in Oregon of species taken: None
Location Description: John Day Dam Juvenile Bypass System, JDA

Take Information

* **Line Number:** 1
Species: Bass, Largemouth
Listing Unit/Stock: NA

Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Bass, Smallmouth
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 400
Indirect Mortality: 2
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Bluegill
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 300

Indirect Mortality: 5
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Bullhead (unknown)
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 25
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Carp, Common
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 25
Indirect Mortality: 2
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Catfish, Channel
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 32
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Crappie, Black
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 30
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Dace, Longnose
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Kilifish, Banded
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Male and Female
Expected Take: 10
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 10
Species: Kokanee
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 11
Species: Lamprey, Pacific
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Juvenile
Sex: Unknown
Expected Take: 15000
Indirect Mortality: 150
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 12
Species: Lamprey, Pacific
Listing Unit/Stock: NA
Production/Origin: Natural

Lifestage: Larvae
Sex: Unknown
Expected Take: 3000
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 13
Species: Lamprey, Pacific
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 50
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 14
Species: Mixed invertebrate
Listing Unit/Stock: NA
Production/Origin: N/A
Lifestage: Adult
Sex: Unknown
Expected Take: 10000
Indirect Mortality: 100

Takes Per Animal:

Take Action: Unknown
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure:
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 15
Species: Peamouth
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 16
Species: Perch, Yellow
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 400
Indirect Mortality: 50
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)

Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 17
Species: Pikeminnow, Northern
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 100
Indirect Mortality: 2
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 18
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 19
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4500
Indirect Mortality: 90
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 20
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 21
Species: Salmon, Chinook

Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1300
Indirect Mortality: 26
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 22
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 23
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female

Expected Take: 1500
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 24
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4000
Indirect Mortality: 80
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 25
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1800
Indirect Mortality: 36
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 26
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1800
Indirect Mortality: 36
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 27
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 28
Species: Sculpin (unknown)
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 200
Indirect Mortality: 5
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 29
Species: Shad, American
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Juvenile
Sex: Unknown
Expected Take: 400000
Indirect Mortality: 20000
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 30
Species: Shad, American
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 100
Indirect Mortality: 50
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 31
Species: Steelhead
Listing Unit/Stock: Middle Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 6000
Indirect Mortality: 120
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 32
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural

Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 60
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 33
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 34
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 30

Takes Per Animal:

Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 35
Species: Steelhead
Listing Unit/Stock: Unspecified
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Unknown
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 36
Species: Steelhead
Listing Unit/Stock: Unspecified
Production/Origin: Unlisted Hatchery
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)

Procedure: Anesthetize
Run: Unknown
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 37
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4500
Indirect Mortality: 90
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 38
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 39
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 4000
Indirect Mortality: 80
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 40
Species: Stickleback, Threespine
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 100
Indirect Mortality: 2
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 41
Species: Sucker (unknown)

Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 50
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 42
Species: Sucker, Bridgelip
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 50
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 43
Species: Walleye
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown

Expected Take: 300
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 44
Species: Whitefish, Mountain
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 150
Indirect Mortality: 5
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** WA
Sub Basin (4th Field HUC): Middle Columbia-Hood
Waterbody Name: Middle Columbia River
Sale in Oregon of species taken: None
Location Description: Bonneville Dam Juvenile Bypass System, BON

Take Information

* **Line Number:** 1
Species: Salmon, Chinook

Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 800
Indirect Mortality: 16
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female

Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 200
Indirect Mortality: 2
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 800
Indirect Mortality: 8
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 30
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 11
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1300
Indirect Mortality: 26
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 12
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Listed Hatchery Intact Adipose

Lifestage: Juvenile
Sex: Male and Female
Expected Take: 700
Indirect Mortality: 14
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 13
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1300
Indirect Mortality: 26
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 14
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1500
Indirect Mortality: 30

Takes Per Animal:

Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 15
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 300
Indirect Mortality: 7
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 16
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1200
Indirect Mortality: 23
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)

Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 17
Species: Steelhead
Listing Unit/Stock: Middle Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 5000
Indirect Mortality: 100
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Mixed
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 18
Species: Salmon, Chinook
Listing Unit/Stock: Lower Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 800
Indirect Mortality: 16
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Fall
Transport: N/A
Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 19
Species: Steelhead
Listing Unit/Stock: Lower Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Mixed
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 20
Species: Salmon, Chinook
Listing Unit/Stock: Lower Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 22000
Indirect Mortality: 440
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Tule Fall
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 21
Species: Salmon, coho

Listing Unit/Stock: Lower Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 22
Species: Salmon, chum
Listing Unit/Stock: Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Freshwater Location

Research Area: Pacific Ocean **State:** OR
Sub Basin (4th Field HUC): Middle Columbia-Lake Wallula
Waterbody Name: Snake River
Sale in Oregon of species taken: None
Location Description: McNary Dam, Juvenile Bypass System, MCN

Take Information

* **Line Number:** 1
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1100
Indirect Mortality: 22
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 2
Species: Salmon, Chinook
Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring/Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 3
Species: Salmon, Chinook

Listing Unit/Stock: Snake River spring/summer-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 4
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 5
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female

Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 6
Species: Steelhead
Listing Unit/Stock: Snake River Basin (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 7
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 8
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 9
Species: Salmon, Chinook
Listing Unit/Stock: Snake River fall-run (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 60
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 10
Species: Salmon, sockeye
Listing Unit/Stock: Snake River (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 500
Indirect Mortality: 10
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 11
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3320
Indirect Mortality: 66
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 12
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 13
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

*** Line Number:** 14
Species: Steelhead
Listing Unit/Stock: Upper Columbia River (NMFS Threatened)
Production/Origin: Listed Hatchery Adipose Clip

Lifestage: Juvenile
Sex: Male and Female
Expected Take: 3000
Indirect Mortality: 60
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 15
Species: Steelhead
Listing Unit/Stock: Middle Columbia River (NMFS Threatened)
Production/Origin: Natural
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 1000
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Summer
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 16
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Listed Hatchery Intact Adipose
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40

Takes Per Animal:

Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 17
Species: Salmon, Chinook
Listing Unit/Stock: Upper Columbia River spring-run (NMFS Endangered)
Production/Origin: Listed Hatchery Adipose Clip
Lifestage: Juvenile
Sex: Male and Female
Expected Take: 2000
Indirect Mortality: 40
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Spring
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 18
Species: Steelhead
Listing Unit/Stock: Unspecified
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)

Procedure: Anesthetize
Run: Unknown
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 19
Species: Steelhead
Listing Unit/Stock: Unspecified
Production/Origin: Unlisted Hatchery
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Unknown
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 20
Species: Bullhead (unknown)
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 20
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 21
Species: Bass, Largemouth
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 22
Species: Bass, Smallmouth
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 350
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 23
Species: Catfish, Channel

Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 20
Indirect Mortality: 5
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 24
Species: Chub, Chiselmouth
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 25
Species: Carp, Common
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown

Expected Take: 10
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 26
Species: Salmon, Chinook
Listing Unit/Stock: Unspecified
Production/Origin: Unlisted Hatchery
Lifestage: Subadult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Unknown
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 27
Species: Salmon, Chinook
Listing Unit/Stock: Unspecified
Production/Origin: Natural
Lifestage: Subadult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: Unknown
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 28
Species: Kokanee
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 29
Species: Dace, Longnose
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 100
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 30
Species: Whitefish, Mountain
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 100
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 31
Species: Perch, Yellow
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 50
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 32
Species: Peamouth
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 1000
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 33
Species: Shiner, Redside
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 34
Species: Shad, American
Listing Unit/Stock: NA
Production/Origin: Natural

Lifestage: Juvenile
Sex: Unknown
Expected Take: 400000
Indirect Mortality: 6000
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 35
Species: Stickleback, Threespine
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 300
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 36
Species: Pikeminnow, Northern
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0

Takes Per Animal:

Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 37
Species: Sandroller
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 5
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 38
Species: Sucker (unknown)
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 15
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)

Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 39
Species: Lamprey, Pacific
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Juvenile
Sex: Unknown
Expected Take: 5000
Indirect Mortality: 100
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 40
Species: Lamprey, Pacific
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Larvae
Sex: Unknown
Expected Take: 100
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017

End Date: 12/31/2017

* **Line Number:** 41
Species: Lamprey, Pacific
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 50
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 42
Species: Sculpin (unknown)
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 43
Species: Walleye

Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 20
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 44
Species: Bluegill
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 200
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 45
Species: Kilifish, Banded
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown

Expected Take: 25
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 46
Species: Shad, American
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Adult
Sex: Unknown
Expected Take: 10
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 47
Species: Unknown fish
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Unknown
Sex: Unknown
Expected Take: 20
Indirect Mortality: 0
Takes Per Animal:
Take Action: Capture/Handle/Release Fish

Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 48
Species: Crappie, Black
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Unknown
Sex: Unknown
Expected Take: 20
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure:
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 49
Species: Mixed invertebrate
Listing Unit/Stock: NA
Production/Origin: N/A
Lifestage: Adult
Sex: Unknown
Expected Take: 200
Indirect Mortality: 20
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A

Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

* **Line Number:** 50
Species: Walleye
Listing Unit/Stock: NA
Production/Origin: Natural
Lifestage: Unknown
Sex: Unknown
Expected Take: 10
Indirect Mortality: 1
Takes Per Animal:
Take Action: Capture/Handle/Release Fish
Observe/Collect Method: Dam bypass, gatewell, orifice, etc. (only if associated with fish handling)
Procedure: Anesthetize
Run: N/A
Transport: N/A
Begin Date: 01/26/2017
End Date: 12/31/2017

Project Contacts

Primary Contact: Margaret Filardo

Principal Investigator: Michele DeHart

Other Personnel:

Name	Role(s)
Rick Martinson	Co-Investigator
Charles F. Morrill	Co-Investigator

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

Attachments

Application Archive - P21103T14Issued.pdf (Added Jan 26, 2017)

Certification of Identity - P21103T112017permitsignature.pdf (Added Jan 4, 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, 2016)

Status

Application Status: Application Complete
Date Submitted: January 10, 2017
Last Date Archived: January 26, 2017

• **Determination of Take Authorization under a Biological Opinion**

Current Status: Issued **Status Date:** January 26, 2017

Expire Date: December 31, 2017

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: In Progress **Status Date:** January 26, 2017

Expire Date:

Analyst Information:

Blane Bellerud Phone: (503)231-2238
Email: blane.bellerud@noaa.gov

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	01/01/2017	12/31/2017	01/30/2018	N/A	