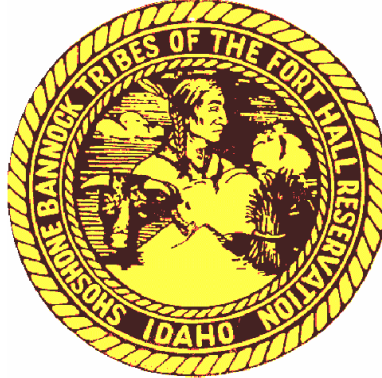


# Supplementation, Monitoring, and Evaluation Program (SMEP) Federal Fiscal Year 2020 Annual/Final Progress Report



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The Lower Snake River Compensation Plan Program (LSRCP) began with congressional authorization in 1976 and was designed to mitigate for the loss of steelhead and Chinook Salmon resulting from the construction of the hydroelectric dams on the lower Snake River. LSRCP involves numerous cooperating agencies with the Shoshone-Bannock Tribes' involvement beginning in 2003.

The Shoshone-Bannock Tribes (SBT) work with LSRCP and other cooperating agencies to achieve the following goals:

- (1) Increase harvest opportunity for Chinook Salmon and steelhead via traditional methods for tribal members in the Snake River basin,
- (2) Assist LSRCP in attaining project area adult Chinook Salmon and steelhead return goals,
- (3) Work with LSRCP to further the tenets of the Tribes' Snake River Policy.

Specifically, the Shoshone-Bannock Tribes' Supplementation, Monitoring, and Evaluation Program works on the following deliverables to move towards the above goals:

- (1) Participate in LSRCP coordination and production planning,
- (2) Implement the Yankee Fork Chinook Salmon Project,
- (3) Implement the Yankee Fork Steelhead Project,
- (4) Implement South Fork Chinook Salmon Eggbox Project,
- (5) Implement East Fork Natural Steelhead Project, and
- (6) Synthesize project results in the form of annual reports and publications.

### **Objective 1: Participate in LSRCP coordination and production planning**

Participation in LSRCP coordination and production planning is critical to a well-functioning multi-agency management strategy that meets the needs of all co-managers and advances our understanding and implementation of hatchery and supplementation reforms. Coordination occurs at many levels in many forums and includes the annual operations of the hatchery system, environmental compliance issues, harvest totals, and monitoring and evaluation planning.

In Fiscal Year 2019, the Shoshone-Bannock Tribes' SMEP participated in the following LSRCP and regional coordination activities.

**Task 1.1      Participate in LSRCP program activities including, but not limited to the LSRCP Annual Meeting or Program Reviews, fish marking and tagging, fish health, harvest, production planning (e.g., Salmon River AOP), M&E planning, FINS database use and ESA permitting (e.g., HGMP). Provide updates and technical recommendations to meet SBT production and harvest goals and objectives.**

*Completed - Numerous meetings were attended.*

**Task 1.2**      **Participate in regional fishery management activities including, but not limited to U.S. vs. Oregon Production Advisory Committee, U.S. vs. Oregon Technical Advisory Committee, Snake Basin Coordination Meetings, Idaho Department of Fish and Game (IDFG) Coordination Meetings, NOAA-Fisheries Coordination Meetings, United States Fish and Wildlife Service (USFWS) Coordination Meetings, FINS technical meetings and trainings and United States Forest Service (USFS) Coordination Meetings. Provide updates and technical recommendations to meet SBT production and harvest goals/objectives.**

*Completed - Numerous meetings were attended.*

**Task 1.3**      **Participate in the 2020 Snake River Steelhead and Chinook Status Reviews.**

*Completed - Numerous meetings were attended and data from the Tribes was provided to assist with the review.*

## **Objective 2: Yankee Fork Chinook Salmon Project**

The overarching goal of the Yankee Fork Chinook Salmon Project is to return 2,000 adult Chinook Salmon to help meet Tribal harvest needs in the Snake River basin. The project involves releasing hatchery smolts and adults and monitoring and evaluating the performance of these two production initiatives. Below we outline our progress on specific tasks within these two production objectives.

### **Task 2.1**      **Environmental Compliance Requirements**

**Activity 2.1.1**      **Provide a project specific ESA take report and provide to NOAA-Fisheries and LSRCF, in accordance with the terms and conditions of the Biological Opinion.**

*Completed - ESA take reports were submitted for all project activities.*

**Activity 2.1.2**      **Maintain compliance with project permits; work with USFS to renew special use permits for Yankee Fork rotary screw trap, array, weir, and campsite; prepare plan for new rotary screw trap anchors.**

*Completed - We continued to collaborate with the USFS to renew the Yankee Fork special use permit. They want the Tribes to bundle our projects into one special use permit, but we are waiting on further guidance on which activities to include in this bundle..*

**Activity 2.1.3**      **Develop plans and submit permits to install permanent anchors and a cable/pulley system for the Yankee Fork rotary screw trap.**

*Completed - We plan to install semi-permanent anchors for our rotary screw trap once our special use permit is approved.*

## **Task 2.2      Produce Plan – Salmon/Snake AOP and SOP Reports**

### **Activity 2.2.1      Review and edit draft Salmon/Snake AOP and SOP Reports regarding the project and provide comments to agency cooperators.**

*Completed - We provided edits to both AOP and SOP documents and attended the annual meeting.*

### **Activity 2.2.2      Review and address comments from Salmon/Snake AOP and SOP meetings regarding the project and provide comments to agency cooperators.**

*Completed - L. Denny attended the 2020 Salmon River Annual Operating Plan and Standard Operational Procedures meeting in Nampa, ID on February 19, 2020.*

## **Task 2.3      Produce Plan – Feasibility Study**

### **Activity 2.3.1      Conduct a targeted literature review on artificial propagation and homing of hatchery fish.**

*Complete - We've conducted a literature review and compiled these articles into a database. This information was used to develop a feasibility study.*

### **Activity 2.3.2      Complete a feasibility study aimed at increasing the homing of adults to the Yankee Fork Salmon River.**

*Complete - We completed a feasibility study aimed at increasing the homing of adults to the Yankee Fork Salmon River with the release of broodyear 2018 smolts. The results of this study will be included in our 2020 Technical Report.*

## **Task 2.4      Produce Hatchery Fish – Broodyear 2018 Production Activities**

### **Activity 2.4.1      Coordinate hatchery smolt outplanting activities, including the dates of outplanting, release location(s), and truck logistics.**

*Completed - We coordinated with IDFG-Sawtooth Fish Hatchery to determine release dates and other logistics, which included PIT tagging some additional fish for a feasibility study.*

### **Activity 2.4.2      Prepare smolt release site(s); snow removal, pipe installation, and pipe removal.**

*Completed - Snow and ice were removed and sites were fully prepared before the scheduled release dates.*

### **Activity 2.4.3      Help IDFG release smolts at desired release location(s).**

*Completed - We helped release fish into Yankee Fork in March and April. The releases were successful and no issues were reported.*

**Task 2.5 Produce Hatchery Fish – Broodyear 2019 Production Activities**

**Activity 2.5.1 Coordinate with IDFG to determine BY 2019 mark plan.**

*Completed - We coordinated with IDFG to PIT tag more BY 2019 Chinook salmon than were previously identified in the mark plan. More fish were PIT tagged as part of our effort to research, monitor, and evaluate the disposition of adult returns.*

**Task 2.6 Produce Hatchery Fish – Broodyear 2020 Production Activities**

**Activity 2.6.1 Coordinate with IDFG to develop broodyear collection and spawn schedule.**

*Completed - We did not collect any adult Chinook Salmon for broodstock because our return was so low. All adult Chinook were released above Pole Flat Weir for natural spawning.*

**Activity 2.6.2 Install Yankee Fork weir and trap in mid-June and remove in mid-September.**

*Completed - Pole Flat Weir was installed on June 25 and removed on September 22, 2020.*

**Activity 2.6.3 Operate and maintain weirs/traps on a daily basis. Clean and remove debris, collect carcasses, and identify incidental take.**

*Completed - Pole Flat Weir was operated on a daily basis. A bull trout take report will be provided to Mark Robertson in March of 2021.*

**Activity 2.6.4 Enumerate adult Chinook salmon and all other species trapped at Yankee Fork on a daily basis. Mark adult Chinook salmon released above the traps with a right operculum punch for genetic and mark-recapture analysis. Collect biological information from all trapped adult Chinook salmon (e.g., length, weight, sex, origin, tissue, scale) and identify pre-existing marks or tags. Collect similar data for other species and mark adult bull trout with right operculum punch and PIT tag.**

*Completed - We trapped and released 37 Chinook salmon (27 natural and 10 hatchery). Twelve adults were transferred upstream of Eight-mile Creek in late August / early September, due to the lack of flow in mainstem Yankee Fork as a result of the Bonanza Project Habitat Project. We also trapped and released eight Bull Trout.*

**Activity 2.6.5**      **Collect broodstock according to HGMP, Salmon River AOP/SOP, and in-season management decisions through Snake Basin Coordination Meetings.**

*Not Completed - Of what few fish returned to Yankee Fork (n=37), all were released upstream of Pole Flat Weir for natural spawning.*

**Task 2.7      Produce Natural Fish - Hatchery adult outplants**

**Activity 2.7.1**      **Coordinate adult Chinook salmon outplanting activities including the numbers to be outplanted, dates of outplanting, release locations, truck logistics, and sampling requirements.**

*Completed – We coordinated weekly with IDFG through the Snake Basin Coordination Meetings but insufficient returns to Sawtooth Fish Hatchery precluded live adult releases in the Yankee Fork.*

**Activity 2.7.2**      **During each adult outplanting event, record date fork length, sex, and collect a tissue sample from the left operculum of each fish; store sample in 95% ethanol. The operculum punch will also be used to verify whether a carcass recovered during spawning ground surveys was a Sawtooth adult outplant.**

*Not completed – There were no surplus fish available at Sawtooth Fish Hatchery for outplanting in Yankee Fork.*

**Activity 2.7.3**      **Outplant hatchery adult Chinook salmon in agreed to locations; record date, transfer time, release location, number of mortalities, and total fish outplanted.**

*Not completed – There were no surplus fish available at Sawtooth Fish Hatchery for outplanting in Yankee Fork.*

**Task 2.8      Improve Natural Production - Hatchery carcass outplants**

**Activity 2.8.1**      **Coordinate carcass outplanting activities including the numbers to be outplanted, dates of outplanting, release locations, truck logistics, and sampling requirements.**

*Completed - We developed a carcass distribution SOP with IDFG-Sawtooth Fish Hatchery. In August and September, we acquired carcasses from Sawtooth Fish Hatchery and outplant them throughout the Yankee Fork.*

**Activity 2.8.2**      **During each carcass outplanting event, record date, fork length, sex, whether the fish was spawned, and remove the caudal fin.**

*Completed - This information was collected during each outplanting event. All of the caudal fins were removed prior to being outplanted into Yankee Fork.*

**Activity 2.8.3      Outplant salmon carcasses in agreed to locations; record date, release location, and total carcasses outplanted.**

*Completed - We outplanted carcasses throughout Yankee Fork and recorded the necessary information for all outplanting events.*

**Task 2.9      Operate and maintain the instream PIT tag arrays**

**Activity 2.9.1      Check on the site periodically, snorkel the array panels, check for damages, and maintain infrastructure and equipment.**

*Completed - No repairs were needed for the PIT tag array in 2020.*

**Activity 2.9.2      Download and manage PIT tag detection files daily; upload PIT tag detection files to PTAGIS.**

*Completed - Daily PIT tag detection files were uploaded to PTAGIS.*

**Task 2.10      Produce Hatchery Fish - Broodyear 2018 Monitoring and Evaluation Activities**

**Activity 2.10.1      Use PIT tags to estimate broodyear 2018 hatchery Chinook salmon smolt survival, travel time, and passage at Lower Granite Dam.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Task 2.11      Natural-origin Juveniles - Estimate calendar year migrants at the Yankee Fork rotary screw trap**

**Activity 2.11.1      Continue to operate rotary screw trap through the 2019 field season (October 1 – November 15, 2019) to estimate BY 2018 pre-smolt production. Quantify out-migrating juvenile salmonids daily and identify all fish to species. Sample juvenile Chinook salmon daily and collect length (mm), weight ( $\pm 0.01g$ ), and tissue sample. PIT tag all juvenile Chinook salmon  $\geq 70$  mm fork length and bismarck brown stain fish smaller  $< 70$  mm fork length. PIT tag bull trout and other species, as necessary. Calibrate rotary screw trap to accurately estimate juvenile migrants using PIT tagged fish and/or bismarck brown stain fish. Remove, clean, and winterize the rotary screw trap in November 2019.**

*Completed - The rotary screw trap was operated on a daily basis from October 1 - November 15, 2019.*

**Activity 2.11.2**    **Install and operate the rotary screw trap from June 1 – September 30, 2020 to estimate BY 19 parr and pre-smolt production. Quantify out-migrating juvenile salmonids daily and identify all fish to species. Sample juvenile Chinook salmon daily and collect length (mm), weight (g), and tissue sample. PIT tag all juvenile Chinook salmon  $\geq 70$  mm fork length and bismarck brown stain fish smaller  $< 70$  mm fork length. PIT tag bull trout and other species, as necessary. Calibrate rotary screw trap to accurately estimate juvenile migrants using PIT tagged fish and/or bismarck brown stain fish.**

*Completed - The rotary screw trap was operated on a daily basis from June 10 - September 30, 2020. The trap could not be installed on June 1, 2020 due to high flows. Trap operations continued past September 30, but this work is associated with the FY 2021 Cooperative Agreement.*

**Activity 2.11.3**    **Archive tissue samples in Fort Hall.**

*Completed - All tissue samples were brought to Fort Hall and archived.*

**Activity 2.11.4**    **Compile daily mark-recapture data and estimate broodyear 2018 and 2019 production by life stage; determine length, weight and condition.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.11.5**    **Using PIT tagged juveniles, estimate survival, travel time, and passage date from the rotary screw trap to Lower Granite Dam.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Task 2.12**        **Conduct bi-weekly spawning ground surveys in Yankee Fork**

**Activity 2.12.1**    **Attend annual redd count training.**

*Not Completed - There was no annual redd count training this year due to COVID-19 restrictions.*

**Activity 2.12.2**    **Walk survey sections bi-weekly and GPS, ribbon-mark, and record the location and number of Chinook salmon redds within each section.**



*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.12.3 Collect spawned-out carcasses for mark-recapture estimate, to determine percent spawned, and acquire biological information.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.12.4 Develop a fish/redd estimate for the area upstream of Pole Flat weir.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.12.5 Determine the number of redds observed below Pole Flat weir.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Task 2.13 Estimate total hatchery and natural adult Chinook salmon escapement to Yankee Fork in 2020**

**Activity 2.13.1 Use mark-recapture data to estimate adult Chinook salmon escapement above Pole Flat weir. Estimate the natural and hatchery contributions from carcasses recovered above Pole Flat weir. If insufficient carcasses are obtained, use the hatchery and natural fraction observed at Pole Flat weir to estimate contributions by origin.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.13.2 Use fish/redd expansion factor to estimate the number of adult Chinook salmon escaping to the area below Pole Flat weir. Estimate the natural and hatchery contributions from carcasses recovered below Pole Flat weir. If insufficient carcasses are obtained, use the hatchery and natural fraction observed at Pole Flat weir to estimate contributions by origin.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.13.3 Query Yankee Fork instream PIT tag detection system for hatchery and natural-origin adult PIT detections in the summer of 2020.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 2.13.4 Estimate the number of hatchery (by broodyear) and natural-origin adults that return to Yankee Fork using the instream PIT tag detection system.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Task 2.14 Reproductive success of Chinook salmon in Yankee Fork**

**Activity 2.14.1 Develop and manage Independent Contractor Agreement with IDFG's Eagle Fish Genetics Laboratory.**

*Completed - The Tribes developed an Independent Contractor Agreement with IDFG to genotype 3,516 tissue samples.*

**Activity 2.14.2 Provide tissue samples to IDFGs Eagle Fish Genetics Laboratory.**

*Completed - We shipped 3,516 tissue sampled to IDFG.*

**Objective 3: Yankee Fork Steelhead Project**

The primary goal of the Yankee Fork Steelhead Project is to provide fishing opportunities in the upper Salmon River for B-run steelhead for tribal members and sportsman. The project shifted from Sawtooth A-run stock to Upper Salmon River B-run stock in 2012 and contributes to the LSRCP mandate to return 25,000 steelhead to the project area upstream from Lower Granite Dam.

**Task 3.1 Environmental Compliance Requirements**

**Activity 3.1.1 Provide a project specific ESA take report and provide to NOAA-Fisheries and LSRCP, in accordance with the terms and conditions of the Biological Opinion.**

*Completed - An ESA take report was developed and submitted.*

**Activity 3.1.2**      **Maintain compliance with project permits; work with USFS to renew special use permits for Yankee Fork rotary screw trap, array, weirs, and campsite; prepare plan for new rotary screw trap anchors.**

*Completed - We continued to collaborate with the USFS to renew the Yankee Fork special use permit. They want the Tribes to bundle our projects into one special use permit, but we are waiting on further guidance on which activities to include in this bundle.*

**Task 3.2**      **Produce Plan – Salmon/Snake AOP and SOP Reports**

**Activity 3.2.1**      **Review and edit draft Salmon/Snake AOP and SOP Reports regarding the project and provide comments to agency cooperators.**

*Completed - We provided edits to both AOP and SOP documents and attended the annual meeting.*

**Activity 3.2.2**      **Review and address comments from Salmon/Snake AOP and SOP meetings regarding the project and provide comments to agency cooperators.**

*Completed - L. Denny attended the 2020 Salmon River Annual Operating Plan and Standard Operational Procedures meeting in Nampa, ID on February 19, 2020.*

**Task 3.3**      **Produce Plan – Feasibility Study**

**Activity 3.3.1**      **Conduct a targeted literature review on artificial propagation and homing of hatchery fish.**

*Complete - We've conducted a literature review and compiled these articles into a database. This information was used to develop a feasibility study.*

**Activity 3.3.2**      **Complete a feasibility study aimed at increasing the homing of adults to the Yankee Fork Salmon River.**

*Complete - We completed a feasibility study aimed at increasing the homing of adults to the Yankee Fork Salmon River with the release of broodyear 2019 Chinook salmon smolts. The results of this study will be included in our 2020 Technical Report. Although this work is focused on Chinook, we anticipate any recommendations for Chinook will apply to steelhead.*

**Task 3.4**      **Produce Hatchery Fish – Broodyear 2019 Production Activities**

**Activity 3.4.1**      **Coordinate hatchery smolt outplanting activities, including the dates of outplanting, release location(s), and truck logistics.**

*Completed - The SMEP coordinated with IDFG to outplant Chinook Salmon smolts in the Yankee Fork Salmon River in April and May, 2020.*

**Activity 3.4.2 Prepare smolt release site(s); snow removal, pipe installation, and pipe removal.**

*Completed - Snow and ice were removed and sites were fully prepared before the scheduled release dates.*

**Activity 3.4.3 Help IDFG release smolts at desired release location(s).**

*Completed - We helped release fish into Yankee Fork in April. The releases were successful and no issues were reported.*

**Task 3.5 Produce Hatchery Fish – Broodyear 2020 Production Activities**

**Activity 3.5.1 Collaborate with IDFG to develop broodyear collection and spawn schedule.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 3.5.2 Monitor the movements of hatchery-origin steelhead returning to the Yankee Fork Salmon River using the instream PIT tag detection system.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 3.5.3 Periodically inspect the Yankee Fork ponds and visually determine if adult steelhead are available for tangle-net collection.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 3.5.4 Use tangle-nets to collect broodstock according to HGMP, Salmon River AOP/SOP, and in-season management decisions through Snake Basin Coordination Meetings.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 3.5.5 Transfer broodstock to Sawtooth Fish Hatchery and assist with adult spawning.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 3.5.6 Assist IDFG with transferring eyed-eggs from Sawtooth Fish Hatchery to Magic Valley Fish Hatchery.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Task 3.6 Produce Hatchery Fish - Broodyear 2020 Monitoring and Evaluation Activities**

**Activity 3.6.1 Use PIT tags to estimate broodyear 2018 hatchery steelhead smolt survival, travel time, and passage at Lower Granite Dam.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Task 3.7 Natural-origin Juveniles - Estimate calendar year migrants at the Yankee Fork rotary screw trap**

**Activity 3.7.1 Continue to operate rotary screw trap through the 2019 field season (October 1 – November 15, 2019) to estimate juvenile migrants. Quantify out-migrating juvenile salmonids daily and identify all fish to species. Sample juvenile steelhead daily and collect length (mm), weight ( $\pm 0.01$ g), and tissue sample. PIT tag all juvenile steelhead  $>70$  mm fork length and bismarck brown stain fish smaller  $<70$  mm fork length. Calibrate rotary screw trap to accurately estimate juvenile migrants using PIT tagged fish and/or bismarck brown stain fish. Remove, clean, and winterize the rotary screw trap in November 2019.**

*Completed - The rotary screw trap was operated on a daily basis from October 1 - November 15, 2019.*

**Activity 3.7.2 Install and operate the rotary screw trap from June 1 – September 30, 2020 to estimate juvenile migrants. Quantify out-migrating juvenile salmonids daily and identify all fish to species. Sample juvenile steelhead daily and collect length (mm), weight (g), and scale sample. PIT tag all juvenile steelhead  $>70$  mm fork length and bismarck brown stain fish smaller  $<70$  mm fork length. Calibrate rotary screw trap to accurately estimate juvenile migrants using PIT tagged fish and/or bismarck brown stain fish.**

*Completed - The rotary screw trap was operated on a daily basis from June 10 - September 30, 2020. The trap could not be installed on June 1, 2020 due to high flows. Trap operations continued past September 30, but this work is associated with the FY 2021 Cooperative Agreement.*

**Activity 3.7.3      Send scale samples to IDFG Scale Aging Laboratory for age determination.**

*Not Completed - Scale samples will be sent to the IDFG Scale Aging laboratory for age determination in January 2021.*

**Activity 3.7.4      Compile daily mark-recapture data, age data, and estimate calendar year migrants; determine length, weight, and condition. If possible, estimate natural-origin production by broodyear.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 3.7.5      Using PIT tagged juveniles, estimate survival, travel time, and passage date from the rotary screw trap to Lower Granite Dam.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Task 3.8          Estimate total hatchery and natural-origin adult steelhead escapement to Yankee Fork in 2020**

**Activity 3.8.1      Query Yankee Fork instream PIT tag detection system for hatchery and natural-origin adult PIT detections in the spring of 2020.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 3.8.2      Estimate the number of hatchery (by broodyear) and natural-origin adults that return to Yankee Fork using the instream PIT tag detection system.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

**Activity 3.8.3      Determine hatchery and natural-origin adult run-timing to Yankee Fork instream PIT tag detection system.**

*Completed - All of the necessary data was collected during the performance period. These metrics will be reported in the technical annual report produced during the next performance period.*

#### **Objective 4: South Fork Chinook Salmon Eggbox Project**

##### **Task 4.1 Environmental Compliance Requirements**

**Activity 4.1.1 Provide a project specific ESA take report and provide to NOAA-Fisheries and LSRCF, in accordance with the terms and conditions of the Biological Opinion.**

*Completed - An ESA take report was developed and submitted.*

##### **Task 4.2 Produce Plan – Salmon/Snake AOP and SOP Reports**

**Activity 4.2.1 Review and edit draft Salmon/Snake AOP and SOP Reports regarding the project and provide comments to agency cooperators.**

*Completed - We provided edits to both AOP and SOP documents and attended the annual meeting.*

**Activity 4.2.2 Review and address comments from Salmon/Snake AOP and SOP meetings regarding the project and provide comments to agency cooperators.**

*Completed - L. Denny attended the 2020 Salmon River Annual Operating Plan and Standard Operational Procedures meeting in Nampa, ID on February 19, 2020.*

##### **Task 4.3 Produce Hatchery Fish – Broodyear 2019 Production Activities**

**Activity 4.3.1 Coordinate with IDFG to obtain 300,000 broodyear 2019 eyed-eggs from McCall Fish Hatchery.**

*Complete - We coordinated with IDFG to determine egg transfer dates.*

**Activity 4.3.2 Outplant eyed-eggs in artificial redds in Curtis and Cabin creeks.**

*Completed - BY 2019 eyed-eggs were outplanted into 22 artificial redds in Curtis Creek on October 7, 2019 and 13 artificial redds in Cabin Creek on October 8, 2019.*

##### **Task 4.4 Produce Hatchery Fish – Broodyear 2019 Monitoring and Evaluation Activities**

**Activity 4.4.1 Collect habitat measurements in stream reaches where artificial redds are placed.**

*Completed - We completed habitat measurements in areas where artificial redds were placed.*

**Activity 4.4.2 Obtain juvenile Chinook salmon density estimates in stream reaches where artificial redds were placed and acquire tissue sample from juvenile Chinook salmon.**

*Completed - We conducted electrofishing surveys in Curtis and Cabin creeks.*

**Task 4.5 Produce Hatchery Fish – Broodyear 2017 Monitoring and Evaluation Activities**

**Activity 4.5.1 Coordinate with IDFG/McCall Fish Hatchery to ensure that natural-origin Chinook salmon (1-ocean) that are trapped at the South Fork weir are tissue sampled for genetic analyses.**

*Completed - IDFG collected tissue samples from un-marked Chinook salmon at the South Fork Satellite Facility weir and trap.*

**Objective 5: East Fork Natural Steelhead Project**

**Task 5.1 Environmental Compliance Documentation**

**Activity 5.1.1 Review applicable environmental documents pertaining to the project.**

*Completed - We reviewed all the documents provided by the LSRCF for this facility. We will continue to collect what literature is available for this project.*

**Activity 5.1.2 Review applicable management plans, annual reports, ESA take reports, hatchery reviews, and ESA recovery documents.**

*Completed - We reviewed all the documents pertaining to this project, but will continue to collect any additional literature for this project.*

**Task 5.2 Produce Plan – Salmon/Snake AOP and SOP Reports**

**Activity 5.2.1 Review and edit draft Salmon/Snake AOP and SOP Reports regarding the project and provide comments to agency cooperators.**

*Completed - We reviewed both the AOP and SOP documents regarding this project.*

**Activity 5.2.2 Review and address comments from Salmon/Snake AOP and SOP meetings regarding the project and provide comments to agency cooperators.**



*Completed - L. Denny attended the 2020 Salmon River Annual Operating Plan and Standard Operational Procedures meeting in Nampa, ID on February 19, 2020.*

**Task 5.3 Produce Hatchery Fish – Broodyear 2019 Production Activities**

**Activity 5.3.1 Assist IDFG with hatchery smolt outplanting activities including loading, transport, and release.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Task 5.4 Produce Hatchery Fish – Broodyear 2020 Production Activities**

**Activity 5.4.1 Assist IDFG with developing broodyear collection and spawn schedule.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.2 Assist IDFG in preparing the East Fork Satellite Facility for spring operations.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.3 Assist IDFG with setting up East Fork weir, trap, and adult holding ponds.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.4 Assist IDFG with operating and maintaining the East Fork weir, trap, and holding ponds.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.5 Assist IDFG with collecting, holding, and spawning broodstock in East Fork.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.6 Assist IDFG with transferring fertilized eggs from East Fork Satellite Facility to Sawtooth Fish Hatchery; assist with egg incubation at Sawtooth Fish Hatchery.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.7 Assist IDFG with dismantling East Fork weir, trap, and adult holding ponds.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Activity 5.4.8 Assist IDFG with transferring eyed-eggs from Sawtooth Fish Hatchery to Hagerman National Fish Hatchery.**

*Not Completed - We were unable to travel to the field from late March to the end of April due to COVID-19 restrictions.*

**Task 5.5 Produce Plan - review and compile past monitoring and evaluation activities for the project and identify future monitoring and evaluation needs**

**Activity 5.5.1 Review reports containing data from the East Fork Naturals Project and compile data into singular tables.**

*Completed - We reviewed all the documents pertaining to this project.*

**Activity 5.5.2 Review environmental compliance documents to identify necessary monitoring.**

*Completed - We reviewed all the documents pertaining to this project.*

**Activity 5.5.3 Identify past monitoring/evaluation and produce draft plan on monitoring needs for the project.**

*Not Completed - We did not feel comfortable completing a monitoring and evaluation plan for this project without first having some field experience. A framework has been established but a plan will not be completed until we gain first-hand experience implementing the existing project footprint.*

## **Objective 6: Synthesize project results in the form of annual reports**

**Task 6.1 Provide Non-Technical Annual Progress Report**

**Activity 6.1.1 Develop and submit a final 2019 Non-Technical Annual Progress Report by December 31, 2019.**

*Completed - the Final 2019 Non-Technical Annual Progress Report was completed and submitted.*

**Task 6.2 Provide Technical Annual Progress Reports**

**Activity 6.2.1 Develop and submit draft 2008-2018 Monitoring and Evaluation Review of Yankee Fork Salmon River Chinook Salmon and Steelhead Projects to LSRCP for review and comment by November 30, 2019.**

*Completed - The ten-year draft report was completed and provided to the LSRCP.*

**Activity 6.2.2 Develop and submit final 2008-2018 Monitoring and Evaluation Review of Yankee Fork Salmon River Chinook Salmon and Steelhead Projects to LSRCP by December 31, 2019.**

*Completed - The ten-year final report was completed and provided to the LSRCP.*

**Activity 6.2.3 Develop and submit draft 2019 Yankee Fork Salmon River Chinook Salmon and Steelhead Projects Annual Report to LSRCP for review and comment by March 1, 2020.**

*Not completed - The draft 2019 Technical Report is still in development.*

**Activity 6.2.4 Develop and submit final 2019 Yankee Fork Salmon River Chinook Salmon and Steelhead Projects Annual Report to LSRCP by March 31, 2020.**

*Not completed - The draft 2019 Technical Report is still in development.*

**Task 6.3 Produce Journal Article – Stress, physiology, acute mortality, and long-term survival of Chinook salmon reared under different water chemistries and released in the Yankee Fork Salmon River, Idaho.**

**Activity 6.3.1 Prepare draft manuscript; collaborate with IDFG, LSRCP, and NOAA-Fisheries.**

*Completed - The draft manuscript was completed in collaboration with IDFG and NOAA-Fisheries.*

**Activity 6.3.2 Distribute draft manuscript for internal and external technical review and address comments.**

*Completed - The draft manuscript was distributed for internal review and was finalized after comments were received.*

**Activity 6.3.3 Submit final draft manuscript to a journal for peer review and address comments.**

*Completed - The final manuscript was submitted to the North American Journal of Fisheries Management. At this time, the manuscript is still under peer-review.*

**Activity 6.3.4 Request for copyright release.**

*Not Completed - The manuscript is still under peer-review and we are waiting to see if it was accepted.*

**Task 6.4 Participation and Use of FINS Database**

**Activity 6.4.1 Attend FINS introduction/training session by PFMFC staff and other FINS group participants (location to be determined) and provide input on implementation of SBT data on LSRCP program into FINS.**

*Completed - On December 6, 2019, L. Denny, J. Snapp, and J. Jackson participated in a Steelhead Adult Accounting Upload to FINS – Demo conference call.*

**Activity 6.4.2 Continue transitioning LSRCP funded program data into FINS.**

*Completed - We uploaded all Chinook salmon and Steelhead adult data into FINS.*

**Task 6.5 Manage and Administer Projects**

**Activity 6.5.1 Submit modified FY 2020 contract renewal package (i.e., SOW and excel budget) to LSRCP.**

*Completed*

**Activity 6.5.2 Draft FY 2021 contract renewal documents and conduct internal review as needed.**

*Completed*

**Activity 6.5.3 Submit draft FY 2021 contract renewal package (i.e., SOW, excel budget, and capital equipment list) to LSRCP.**

*Completed*

**Activity 6.5.4 Address LSRCP comments and revise FY 2021 SOW, excel budget, and capital equipment list as needed to get LSRCP manager approval.**

*Completed*

**Activity 6.5.5 Return signed contract to LSRCP Contracting Officer.**

*Completed*

**Activity 6.5.6 Hire, train, and manage program personnel.**

*Completed - On February 14, 2020, J. Snapp and J. Jackson hosted a training with program staff on use of AQUIS and micropipettes for anesthetizing juvenile fishes.*

**Activity 6.5.7 Attend trainings and conferences as deemed necessary.**

*Completed - Several trainings, workshops, and conferences were attended.*

**Activity 6.5.8 Manage Cooperative Agreement spending.**

*Completed*

**Activity 6.5.9 Produce monthly reporting including program reports, vehicle inspections, and p-card purchases.**

*Completed*

**Activity 6.5.10 Attend mandatory Shoshone-Bannock Tribes meetings (i.e., Supervisors, Travel Training, CPR, Fisherman, etc.).**

*Completed - Several mandatory meetings were attended.*

**Activity 6.5.11 Administer BIA-ESP funding for construction of incubators in collaboration with Shoshone-Bannock Jr./ Sr. High School.**

*Completed - Several meetings were conducted and we developed a partnership with Independent Contractor to build custom eggboxes. The custom eggboxes were completed in September, but unfortunately, there were no eggs available for the South Fork Chinook Salmon Eggbox Project.*