Restoration Partnership

Accomplishments Report 2020

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Restoration Partnership

The Restoration Partnership (Partnership) is a collaborative effort comprising the Coeur d'Alene Basin Natural Resource Trustees which are the U.S. Department of the Interior, represented by the U.S. Fish and Wildlife Service (USFWS) and Bureau of Land Management (BLM); the Coeur d'Alene Tribe (Tribe); the U.S. Department of Agriculture, represented by the U.S. Forest Service (USFS); and the State of Idaho, represented by the Idaho Department of Fish and Game (IDFG) and Idaho Department of Environmental Quality (DEQ). The Partnership's primary mission is to develop and implement a restoration plan to help restore the health, productivity, and diversity of injured natural resources from releases of mine waste contamination and the services they provide in the Coeur d'Alene Basin for present and future generations. This includes compensation for lost human use services of those resources by developing and implementing projects under the framework of a Restoration Plan for the Coeur d'Alene Basin. The following Partnership activities occurred throughout fiscal year 2020 (FY20):

- The Trustees completed the application review process and approved funding for six new projects in January 2020: 1) Trapper Creek Bridge and Fish Passage with Shoshone County, 2) Cougar Gulch Wetland Enhancement (Johnson), 3) Lake Creek stream and watershed restoration, 4) Red Ives Creek Restoration and Dam Removal Design, 5) Castle Rock Ranch North Fork Coeur d'Alene River Riparian Restoration, and 6) Prichard Creek Phase 1: Conservation Easement and Restoration Planning.

- The Partnership continued support for ongoing operations and maintenance by U.S. Fish and Wildlife Service, Ducks Unlimited, and private landowners for wetlands at the Schlepp Agriculture to Wetlands Conversion Project. The construction and implementation of this restoration project has been completed. For more information visit: http://restorationpartnership.org/wetland_restoration_project.html.

- The Trustees continued to test and refine their administrative processes for implementing the natural resource restoration projects that have been underway since FY18 and coordinated quarterly reporting and site visits with the Project Sponsors and Project Leads as appropriate.

- Implementation of the following 21 projects continued in FY20 with the exception of some work being delayed due to the COVID-19 pandemic. The amounts expended in FY20 are noted with a brief narrative of work that was completed.

- Wetland and stream enhancement at Cougar Bay on Coeur d'Alene Lake (BLM and USFWS sponsors).
  -Funds Allocated: $282,000
  -Amount Expended in FY20: $243,064.14
  -FY20 Activities: A conceptual plan for the wetland improvements, including the new channel, as well as pond excavation and mound areas. While working with USFWS and Ducks Unlimited: mowed the reed canary grass and prepared site for additional treatment. Construction is planned for FY21.

- Cougar Gulch Wetland Enhancement (Johnson parcel) (BLM and USFWS sponsors.
  -Funds Allocated: $125,000
  -Amount Expended in FY20: $0
  -FY20 Activities: Site survey and conceptual plan for wetlands improvements completed.

- Development of a native riparian plant nursery adjacent to Hepton Lake and the St. Joe River (Tribe sponsor).
  -Funds Allocated: $205,462
  -Amount Expended in FY20: $57,820.78
  -FY20 Activities: 2 acres reed canary grass treated and site was prepped for FY21 plantings.

- Cultural Harvest opportunities in the Hangman Creek Watershed (Tribe sponsor).
  -Funds Allocated: $97,335
  -Amount Expended in FY20: $4,774.09
  -FY20 Activiteis: Secured 75 adult Chinook salmon from the Leavenworth National Fish Hatchery and released them into Hangman Creek for Tribal members to utilize traditional fishing techniques in this portion of Hangman for the first time in over a century.

- Culturally Significant Plants in the Hangman Creek (Tribe sponsor).
  -Funds Allocated: $187,770
  -Amount Expended in FY20: $25,985.85
  -FY20 Activities: 4 acres with of native camas seed broadcasted, purchased 1,900 culturally significant tall-one planting stock, and 400 western red cedar tall ones to be planted in FY21.

- Coeur d'Alene Lake Monitoring and Modeling (Tribe sponsor).
  -Funds Allocated: $268,668
  -Amount Expended in FY20: $77,234
  -FY20 Activities: collected and analyzed water quality samples from 4 sites, 6 times throughout the year, and completed the time-series trend analysis for metals and nutrients.

- Coeur d'Alene Lake Education and outreach (Tribe sponsor).
  -Funds Allocated: $81,008
  -Amount Expended in FY20: $36,382.26
  -FY20 Activities: Due to the COVID-19 pandemic no in-classroom instruction, however, converted all curriculum into a virtual database for the teachers in the Panhandle, re-printed the Our Gem Coeur d'Alene Lake map, and submitted monthly factual based Our Gem Collaborative articles to the Coeur d'Alene Press.

- Hepton Lake (*Gu̱ł Hnch'mchinmsh)* Wetland Restoration Planning (Tribe sponsor).
  -Funds Allocated: $ 210,900
  -Amount Expended in FY20: $98,601.86
  -FY20 Activities: 1) Biological Evaluation/Assessment to USFWS for Section 7 of ESA Compliance, 2) Clean Water Act Section 401 Water Quality certification was approved, 3) Cultural Resources Inventory and Assessment was completed to comply with the National Historic Preservation Act, and 4) US Army Corps of Engineers (USACOE) 404 application was submitted in March 2020 and is being reviewed by USACOE.

- Wetlands restoration planning at Gray's Meadow (IDFG sponsor).
  -Funds Allocated: $ 250,000
  -Amount Expended in FY20: $30,849
  -FY20 Activities: The 30% design documents were released for stakeholder review and comment, surface and groundwater monitoring, soil characterization and geotechnical borings, coordination with EPA remedial efforts, and public stakeholder involvement.

- Gene Day Pond Fishing Access (IDFG sponsor)
  -Funds Allocated: $25,000
  -Amount Expended in FY20: $0
  -FY20 Activities: Administrative lease agreements underway and plans for construction being developed.

- Black Rock Slough Wetland enhancement (IDFG sponsor)
  -Funds Allocated: $75,000
  -Amount Expended in FY20: $24,100
  -FY20 Activities: Phase I of project is ongoing and construction of water control structure has been installed.

- St. Joe River Streambank Stabilization and Vegetation Project (DEQ sponsor with Benewah Soil and Water Conservation District)
  -Funds Allocated: $3,500
  -Amount Expended in FY20: $3,500
  -FY20 Activities: The project is now complete. Streambank and riparian restoration including rock, willow bundles, and cottonwood trees was

implemented on ten private properties on the St Joe River. The project treated a total of 1,450 ft of streambank and approximately 0.5 acres of riparian zone.

- Wolf Lodge Creek Reach 3 Stream Restoration and Habitat Enhancement Project (DEQ sponsor with Kootenai-Shoshone Soil and Water Conservation District)
  -Funds Allocated: $195,814
  -Amount Expended in FY20: $26,054
  -FY20 Activities: Engineering designs were completed, permits obtained and construction is underway with large woody debris installation and native willow plantings. The project includes stream restoration along 2,000 feet of Wolf Lodge Creek on two private properties. The project will be completed in FY21.

- Conservation of Agricultural to Wetlands Conversion Properties within Canyon Marsh (USFWS sponsor with the Inland Northwest Land Conservancy).
  -Funds Allocated: $801,480
  -Amount Expended in FY20: $12,774.55
  -FY20 Activities:: 420 acres and 80 acres planted for soil stabilization total acres secured in a Conservation Easement.

- Conservation of Agricultural to Wetlands Conversion Property Gleason's Marsh (USFWS sponsor with the Inland Northwest Land Conservancy).
  -Funds Allocated: $656,140
  -Amount Expended in FY20: $505.71
  -FY20 Activities: 255 acres total acres secured.

- Lake Creek Watershed Restoration (CDA Tribe sponsor)
  -Funds Allocated: $615,951
  -Amount Expended in FY20: $13,194.32
  -FY20 Activities: Data collection, preliminary designs on fish passage features, road grading, and plantings.

- Castle Rock Ranch North Fork Coeur d'Alene River Riparian Restoration Project (DEQ sponsor with Kootenai-Shoshone Soil and Water Conservation District)
  -Funds Allocated: $12,265
  -Amount Expended in FY20: $0
  -FY20 Activities: Riparian restoration plans completed riparian plantings to be completed in FY21. The project includes approximately 8 acres of riparian plantings along the North Fork Coeur d'Alene River on a privately-owned working cattle ranch.

- Prichard Creek Phase I: Conservation Easement and Restoration Planning (DEQ sponsor with Idaho Forest Group)
  -Funds Allocated: $1,908,450
  -Amount Expended in FY20: $4,983
  -FY20 Activities: Idaho Forest Group (IFG) pursuing conservation easement for approximately 1,900 acres of property along Prichard Creek and nearby forested

uplands. IFG, DEQ, and IDFG completed a memorandum of agreement with Trout Unlimited for cooperative work on the project, metals characterization was conducted for soil and water on the property, and restoration plans are being developed.

- Trapper Creek Bridge and Fish Passage Enhancement (IDFG sponsor with BLM and Shoshone County
  -Funds Allocated: $135,000
  -Amount Expended in FY20: $0
  -FY20 Activities: completed topographic site survey, geotechnical evaluation, and design alternatives considered.

- LiDAR Acquisition in Priority Restoration Areas (USFS sponsor)
  -Funds Allocated: $50,000
  -Amount Expended in FY20: $50,000
  -FY20 Activities: 105,000 acres of data were collected in the CDA Basin and processing of the raw data has been completed.

- Red Ives Phase I Dam Removal (USFS sponsor)
  -Funds Allocated: $30,000
  -Amount Expended in FY20: $0
  -FY20 Activities: Planning was underway and the IPNF has received additional grant funding from ICL to assist in the Red Ives Creek Restoration project.

Summary: Habitat assessed or restored in FY20:
- 675 acres of wetlands secured through Conservation Easements
- 3,500 linear feet of stream/riverbank
- 86 acres of native plants
- 105,000 acres of LiDAR data for restoration prioritization collected

Total Funds Allocated (FY18-20): $6,216,743.00
Total Funds Expended in FY20: $709,823.50

For more detailed information on the above projects, please find the Annual Reports for each individual project attached.

Hepton Native Willow Nursery (goal of 19 acres of planted area with a variety of species).

Community Salmon Celebration, Coeur d'Alene Indian Reservation, Hangman Creek.

Project Title: Cougar Gulch Wetland Enhancement (Johnson Parcel)

Project Approval Date: Jan 11,2020
Trustee Council Resolution #: 52

Reporting Quarter/FY: Q4/FY20

Partnership Funds Expenditures
Total Amount Awarded: $125,000
Partnership Funds Spent this Quarter: $ 0
Partnership Funds Spent this Fiscal Year: $ 0

A. GENERAL INFORMATION

Project Proponent Name: Mike Stevenson, BLM
Primary Telephone Number: (208)769-5024
Email: cstevenson@blm.gov

Project Sponsors: Mike Stevenson, BLM and Tim Kiser, USFWS
Primary Telephone Numbers: (208) 772-3521 and (208) 819-1462
Email: cstevenson@blm.gov tim_kiser@fws.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

   For efficiency, a site survey and 1-foot contour topographical map of the Johnson project area was lumped under same contract as Cougar Bay (directly across Hwy 95). Through the cooperative agreement between the Ducks Unlimited (D.U.) and USFWS, D.U. has completed a conceptual plan for the wetland improvements.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

   Due to the health issues with some of the older members of the Johnson family, coordination on proposed restoration measures took longer than anticipated. This was ultimately worked out and the conceptual plan drafted up by D.U. was accepted by the landowners and the Inland Northwest Land Conservation. Some areas proposed for excavation will be sprayed in the spring of 2021 when site conditions are right. We will also contract out for cultural survey work needed to clear the excavation areas in the conceptual plan.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.
None

2) Please describe other cost share or contributing funds..
None.

Project Expenditures: **FY20 October 1, 2019-September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$0	$0	$0	$0	$0
Travel	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0
Contractual (Honorarium)	$0	$0	$0	$0	$0
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$0	$0	$0
Total Direct Costs	$0	$0	$0	$0	$0
Indirect Costs	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

None

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

   Once implemented, enhancements to the existing site hydrology (i.e., a new properly functioning stream channel and an enlarged pond, in place of the existing highway ditch) will provide water quality improvements through the filtering of nutrients. Hydrologic modifications will also help in the establishment of a well-vegetated riparian corridor, providing habitat and cover for waterfowl and migratory birds. Waterfowl counts will be conducted for five years.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

   Monitoring of stream function and channel response will include direct observation, as well as geomorphic surveys (cross-sections, profiles), flow measurements and water quality sampling. Vegetation survival will also be measured, with multi-year plantings adapted to account for observed species survival rates. Water quality sampling, geomorphic measurements and vegetative monitoring will be conducted for five years.

Restoration Partnership

Quarter 4/ Annual Project Update Form

Project Title: ***Guł Hnch'mchinmsh - Native Willow Nursery for Support of Restoration Actions throughout the Restoration Partnership Project Area***

Project Approval Date: August 9, 2018
Trustee Council Resolution #: 44

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Funds Allocated: $205,462
Funds Spent this Quarter: $3,096.65
Funds Spent this Fiscal Year: $57,820.78

A. GENERAL INFORMATION

Project Proponent Name: *Thomas Biladeau*
Primary Telephone Number: *(208)686-6307*
Email: *tbiladeau@cdatribe-nsn.gov*

Project Sponsor: *Coeur d'Alene Tribe*
Primary Telephone Number: *(208)686-1800*
Email:

B. PROGRESS DESCRIPTION

- Control of noxious weeds and reed canary grass via mechanical removal (mowing) was completed during this quarter.
- The preparation of an additional 2 acres of nursery was completed during this reporting period. Reed canary grass was scalped from this area to allow for the installation of shade fabric and planting of additional species of native deciduous shrubs and trees. Planting of this area is planned for Q2 of FY 2021.

C. EXPENDITURES

1) No unforeseen expenditures have occurred throughout this reporting period.

2) In-kind Tribal dollars were contributed to the project this year via the use of the tribal-owned tractor and deck mower. Additionally, approximately 80 hours of salaries to cover the administration of the project was provided by the Coeur d'Alene Tribe Fisheries, Bonneville Power Administration budget.

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$13,246.94	$0	$750.74	$1,962.68	$15,960.36
Travel	$0	$0	$0	$0	$0
Supplies	$12,581.84	$12,000	$0	$104.27	$24,686.11
Equipment	$0	$0	$1,957.36	$0	$1,957.36
Contractual (Honorarium)	$0	$0	$8,250.00	$0	$8,250.00
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$1,448.79	$0	$1,448.79
Total Direct Costs	$25,828.78	$12,000	$12,406.89	$2,066.95	$52,302.62
Indirect Costs	$4,488.46	$0	$0	$1,029.70	$5,518.16
Total	$30,317.24	$12,000.00	$12,406.89	$3,096.65	$57,820.78

D. PROJECT PARTNERS

1) **Project partners were hosted for a tour of the Hepton Willow Nursery in the early summer of 2020.**

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

- **The goal for this project is to establish a stooling bed for native willows in order to support riparian and floodplain restoration projects. During FY 2020, 3 additional species of willow were planted with an estimated overall survival rate of 80%. The highest survival rates were observed in Geyer and sandbar willow, estimated to be 85%. The lowest survival rate was observed in Bebb willow, estimated to be 70%. The entire established nursery (100%) has been mowed in order to maintain access.**

- **The ability to harvest willow poles from the nursery to support restoration actions this coming winter will be limited to Pacific and Drummond willow. These 2 species, particularly the Pacific willow, have shown the highest growth rates thus far.**

Prior to entering the nursery with the intent to harvest willow poles, please contact the Coeur d'Alene Tribe to make arrangements and to acquire a key for access.

Picture 1. Aerial view of the Hepton Willow Nursery. Photo by Cameron Heusser, October 21, 2020.

Restoration Partnership

Quarter 4/ Annual Project Update Form

Project Title: ***Smłich Cultural Harvest Opportunities within the Coeur d'Alene Reservation***

Project Approval Date: August 9, 2018
Trustee Council Resolution #: 44

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Funds Allocated: $97,335.00
Funds Spent this Quarter: $4,208.34
Funds Spent this Fiscal Year: $4,774.09

A. GENERAL INFORMATION

Project Proponent Name: *Thomas Biladeau*
Primary Telephone Number: *(208)686-6307*
Email: *tbiladeau@cdatribe-nsn.gov*

Project Sponsor: *Coeur d'Alene Tribe*
Primary Telephone Number: *(208)686-1800*

B. PROGRESS DESCRIPTION

1) Washington Department of Fish and Wildlife was paid for pathogen testing this quarter associated with the cultural release of Chinook salmon within Hangman Creek that occurred in Q3.
2) A new parking area for access to future releases has been identified and surveyed for elevations. The Coeur d'Alene Tribe Fisheries Program Project Engineer will begin construction design for this parking area in Q1 and Q2 of FY21.

C. EXPENDITURES

No unforeseen expenditures occurred during this reporting period

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$0	$0	$0	$0	$0
Travel	$0	$0	$0	$0	$0
Supplies	$0	$0	$565.75	$56.00	$621.75
Equipment	$0	$0	$0	$0	$0
Contractual (Honorarium)	$0	$0	$0	$4,152.34	$4,152.34
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$0	$0	$0
Total Direct Costs	$0	$0	$565.75	$4,208.34	$4,774.09
Indirect Costs	$0	$0	$0	$0	$0
Total	$0	$0	$565.75	$4,208.34	$4,774.09

D. PROJECT PARTNERS

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

- **An objective for this project is to provide Tribal members with harvest opportunities for salmonids within Tribally-managed waters. Anadromous salmon were successfully planted and harvested by the Tribal community in July, 2020 in Hangman Creek. The location of the captive harvest, although not originally outlined in the proposal for this project, proved to provide the necessary conditions for a successful harvest opportunity. This revised location is currently proposed for salmon releases in the future.**

Restoration Partnership

Quarter 4/ Annual Project Update Form

Project Title:
***uł qhesu'lumkhw* (land is good again): Cultural Significant Plant Restoration**

Project Approval Date: August 9, 2018
Trustee Council Resolution #: 44

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Funds Allocated: $187,770.00
Funds Spent this Quarter: $16,559.99
Funds Spent this Fiscal Year: $25,985.85

A. GENERAL INFORMATION

Project Proponent Name: Gerald I. Green, Coeur d'Alene Tribe Wildlife Management Program
Primary Telephone Number: 208-686-0312
Email: ggreen@cdatribe-nsn.gov

Project Sponsor: Coeur d'Alene Tribe
Primary Telephone Number: 208-667-5772
Email: rstevens@cdatribe-nsn.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

The two expenditures from this reporting period were for staff salary for gathering camas seed and the purchase of culturally significant plants that well be planted in the late winter / early spring of 2021.

Camas seed from on or near Project Sites within the Coeur d'Alene Reservation is needed because it contains the genetics of local populations. It has been the Project's intent to use youth from the Tribe's Education Program's Intern for this work as it exposes the youth of the local community to the importance of camas in the history of the Coeur d'Alene Tribe. This year, however, due to the COVID19 emergency, the Tribe's Educational Department handled the Summer Intern Program on-line and the youth were largely not available for fieldwork. Due to the lack of Summer Interns, Project Field Staff expended efforts to gather camas seed between their myriad of other scheduled tasks. This

increased the costs of camas seed gathering. This year, the limited time available netted only five pounds of camas seed at a cost of $160 per pound in salary expenditures. An additional 15 pounds of camas seed was purchased from a local nursery at a cost of $120 per pound, which added $1,800 to the Supplies expenditure.

Purchasing the tall-ones the year before they are needed allows the Hangman Restoration Project to select the species. If tall-one planting stock is purchased at the time of planting, the species and numbers available are greatly reduced. In the 4th quarter, this project purchased 475 serviceberry, 475 mock orange, 475 choke cherry, 475 bitter cherry, and 400 western red cedar tall-ones that will be planted on eight project sites this coming late winter or early spring. This will increase the diversity of plants within the native habitats that are developing on these sites and provide traditional foods, herbal medicines and materials.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

The limited available staff time and the relative high expense of the camas seed gathered by staff has encouraged Project Management to explore the option of contracting the harvest of camas seed. Contractors will be focused on gathering the greatest amount of seed in the shortest time if they are contracted on a per pound rate. The Project has not contracted for the harvest of camas seed and a number of issues need to be settled before that can happen. Staff are discussing this option among other Tribal programs and departments. If contracting for the harvest of camas seed can be implemented, it may be used in the FY2021 budget cycle to determine whether costs can be reduced while the amount of seed harvested can be increased.

Funds provided by this Project are limited to the species identified in Addendum Table 3 of the grant application. Site specifics that favor the survival of these species within Project Sites are described only in general terms in the habitat descriptions for each species. Survival rates for these plantings are still relatively low, approximately 30% overall, but data gathered on survival from each year's plantings has provided insight into ways of increasing survival. At this point, it appears that the single issue limiting survival is the lack of moisture in the former floodplains along the entrenched channels in project sites. The entrenched channels dewater the former floodplains quickly as the seasons progress, creating the dry conditions that cause high plant mortality and observed slow growth rates. Raising the streambed would allow a normal, natural interaction between the streams and floodplains and increase the rates of survival and growth of plantings. However, raising the streambeds in Hangman creek is prohibitively expensive using standard restoration practices (approximately $2 million per mile of

stream). The alternative pursued by this Project is to partner with beaver, with the expectation that beaver will raise the water level in the entrenched channels. Currently, the Project faces a dilemma in that slow growth rates and high mortality of planted woody vegetation limits the expansion of the beaver population, while the lack of beaver allows for the rapid dewatering of floodplain resulting in high mortality and slow growth rates within the former floodplain.

The negative feedback loop of a lack of beaver resulting in a lack of robust woody vegetation cover; which then results in a lack of beaver is an obstacle for the Project to overcome. The two strategies that will be employed in the future will be: A) choose planting sites more carefully, focusing on wetter areas that can be identified by wetland grass species and robust grass growth rates, and B) assist beaver in holding water in entrenched channels by reinforcing dams constructed by beaver and installing beaver dam analogs, which are wooden structure that function similarly to beaver dams in project area streams.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

Project funds are intended for use in the gathering of the purchase of plantings and the gathering of seeds. This past fiscal year marked an increase in expenditures to rates that are expected to continue through the duration of the Project.

2) Please describe other cost share or contributing funds.

- **BPA Resident Fish Substitution provided funding for long range planning, staff salaries, tools, and "beaver centric" woody vegetation, and the work associated with "Partnering with Beaver."**
- **Avista Wetland Mitigation provided funding for the management of properties within the Hangman Properties that are devoted to the mitigation of lost wetlands.**
- **The Farm Service Agency provided funding for the CCRP contract that secures access to project sites, site specific planning, some "beaver centric" woody vegetation, and tools.**
- **The US Fish and Wildlife Service provided funding for wetland survey and design.**

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$208.76	$0	$0	$797.18	$1,005.94
Travel	$0	$0	$0	$0	$0
Supplies	$0	$4,320.00	$4,794.78	$15,363.00	$24,477.78
Equipment	$0	$0	$0	$0	$0
Contractual (Honorarium)	$0	$0	$0	$0	$0
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community	$0	$0	$0	$0	$0
Total Direct Costs	$208.76	$4,320.00	$4,794.78	$16,160.18	$25,483.72
Indirect Costs	$102.32	$0	$0	$399.81	$502.13
Total	$311.08	$4,320.00	$4,794.78	$16,559.99	$25,985.85

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

- **BPA Resident Fish Substitution Funds provided by BPA to enhance a resident redband population in the Hangman Watershed with the hopes of establishing a viable fishery as substitution for a returning anadromous fish resource were used to expand native habitats along 15.4 kilometers of streams. BPA is the primary partner with to this project, during FY2020 planting efforts encompassed 62.33 acres of floodplain. The species planted with BPA funding included "beaver centric" species with the intent of increasing beaver habitats to improve in-stream habitat conditions. In addition, BPA funds were used to plant native grass on 48.35 to initiate the transition from agricultural production to native habitats. These**

acres taken out of agricultural production will be the focus of future shrub and tree planting efforts.

- **Avista Wetland Mitigation funds were used to restore and manage approximately 1009.53 acres in the Hangman Watershed. While not a direct partner of this Project, these properties are near this Project Site and restoration on those Avista Properties contribute to the natural function of the floodplains and stream channels of the Watershed.**

- **The Farm Service Agency provided CCRP lease payments to landowners to allow native vegetation establishment on 62.33 acres of the Hangman Watershed.**

- **US Fish and Wildlife Surface- The Howellia Restoration Partners in Fish and Wildlife funds were used to develop designs for wetlands suitable for *Howellia aquatilis*, a regional sensitive species that is being removed from the Threatened Species List. Wetlands designed will serve to enhance floodplain hydrology, increasing the potential for the establishment of Plants of Cultural Significance.**

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

- **During the first quarter, camas seed was broadcast over 4 acres of a small field adjacent to Hangman Creek that was removed from agricultural production in 2009. The seed dispersal followed a prescribed burn that removed the grass duff and provided a flush of nutrients for the establishing camas. The success of this planting effort will be measured in FY2022 as the camas will not be distinguishable from the grasses until then.**

- **During the second and third quarter, tall-one planting stock as well as plant protectors and bamboo were purchased for the spring planting season. The season was divided by the COVID19 emergency with the field crew being forced**

to stop planting for 6 weeks from the 4th week of March through the 1st week of May. This disruption in the planting season will allow for an evaluation of data of planting on the rates of survival since the plantings were divided roughly in half between mid-March and mid-May.

- **During the fourth quarter, camas seed was gathered through direct seed gathering within the Project Site and the purchase of seed from a local nursery. These seeds will be stored in a freezer until enough is gathered to warrant dispersal in a field readied for seed distribution. Also, tall-ones were purchased for planting during the coming late winter / early spring planting season.**

- **The gathering and dispersal of camas seed, as well as the increase in food bearing and utilitarian woody vegetation will result in the availability of Coeur d'Alene Tribe Culturally Significant food and natural resources associated with foraging and recreation. These resources can only be made available through proper understanding and stewardship, all of which is included in Section 4.4.1 of the Coeur d'Alene Basin Restoration Plan.**

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

- **Camas production will be measured with line transect derived indices of density the third and fourth years after seed dispersal. The survival of planted woody vegetation will be measured through survival counts for the first two years after planting.**

- **The maturation of these resources over time will be observed and as is the case with all efforts to restore Cultural Significant Plants in the Hangman Watershed, the restoration will be considered successful when the abundance of these natural resources are sufficient to entice harvest.**

Project Title: ***chdelm khwa chatq'ele'et*** **Part B –**
Monitoring and Modeling Coeur d'Alene Lake's Response to Restoration

Project Approval Date: August 9, 2018
Trustee Council Resolution #: 44

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Funds Allocated: $268,668.00
Funds Spent this Quarter: $14,104
Funds Spent this Fiscal Year: $77,234

A. GENERAL INFORMATION

Project Proponent Name: Dale Chess, Coeur d'Alene Tribe, Lake Management Department
Primary Telephone Number: 208.686.1803
Email: dchess@cdatribe-nsn.gov

Project Sponsor: Coeur d'Alene Tribe
Primary Telephone Number: (208) 667-5772
Email: rstevens@cdatribe-nsn.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

Lake and River Water Quality Sampling 2020

- **On January 29, sampled the Coeur d'Alene River (CDAHarr), St. Joe River (SJ1) and Coeur d'Alene Lake (C5). Did not sample Chatcolet Lake (C6) as lake elevation was too low for access.**

- **On May 26, successfully sampled the Coeur d'Alene River (CDAHarr), St. Joe River (SJ1), Coeur d'Alene Lake (C5) and Chatcolet Lake (C6).**

- **On June 22 and 23, successfully sampled the Coeur d'Alene River (CDAHarr), St. Joe River (SJ1), Coeur d'Alene Lake (C5) and Chatcolet Lake (C6).**

- **On July 20 and 21, successfully sampled the Coeur d'Alene River (CDAHarr), St. Joe**

River (SJ1), Coeur d'Alene Lake (C5) and Chatcolet Lake (C6).

- **On August 17 and 18, successfully sampled the Coeur d'Alene River (CDAHarr), St. Joe River (SJ1), Coeur d'Alene Lake (C5) and Chatcolet Lake (C6).**
- **On September 21 and 22, successfully sampled the Coeur d'Alene River (CDAHarr), St. Joe River (SJ1), Coeur d'Alene Lake (C5) and Chatcolet Lake (C6).**
- **On October 20 and 21, successfully sampled the Coeur d'Alene River (CDAHarr), St. Joe River (SJ1), Coeur d'Alene Lake (C5) and Chatcolet Lake (C6).**

Data Analysis and Reporting

- **Continued writing report covering 2019 sampling season, including (below)**
- **All water quality data collected through December of 2019 has been analyzed and time-series trend analysis is complete for metals and nutrients.**
- **Seasonal analysis of phosphorus and nitrogen loading from the St. Joe River and its affects upon seasonal phytoplankton productivity, nutrients, metals and dissolved oxygen at sites C5 and C6 is complete.**

Lake Modeling

- **Continued calibration and sensitivity analysis of AEM3D model for Coeur d'Alene Lake.**

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

- **We were unable to sample the lake and rivers in February due to boat mechanical issues.**
- **We were unable to sample the lake and rivers in March and April due to Covid-19 issues**

C. EXPENDITURES

1) Please describe any unforeseen expenditures. **N/A**
2) Please describe other cost share or contributing funds. **N/A**

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$16,197.24	$10,341.40	$15,260.27	$7,042.71	$48,841.62
Travel	$0	$0	$0	$0	$0
Supplies	$0	$1,982.83	$655.83	$1,463.55	$4,102.21
Equipment	$387.97	$1,630.83	$0	$0	$2,018.80
Contractual (Honorarium)	$0	$672.74	$0	$1,490.99	$2,163.73
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$399.90	$0	$399.90
Total Direct Costs	$16,585.21	$14,627.80	$16,316.00	$9,997.25	$57,526.26
Indirect Costs	$6,170.77	$4,276.38	$5,154.00	$4,106.77	$19,707.92
Total	$22,755.98	$18,904.18	$21,470.00	$14,104.02	$77,234.18

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

- **EPA, IDEQ**

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland

habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.
   - **Ongoing data collection is providing water quality trend data.**

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.
   - **Analysis and correspondence between Tribal Staff and EPA Manchester Labs is showing QA/QC is being met.**

Project Title: ***chdelm khwa chatq'ele'et***
Part A-Coeur d'Alene Lake Management Plan Outreach and Implementation

Project Approval Date: August 9, 2018
Trustee Council Resolution #: 44

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Funds Allocated: $81,008.00
Funds Spent this Quarter: $11,000.71
Funds Spent this Fiscal Year: $36,382.26

A. GENERAL INFORMATION

Project Proponent Name: Rebecca Stevens
Primary Telephone Number: (208) 667-5772
Email: rstevens@cdatribe-nsn.gov

Project Sponsor: Coeur d'Alene Tribe
Primary Telephone Number: (208) 667-5772
Email: rstevens@cdatribe-nsn.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

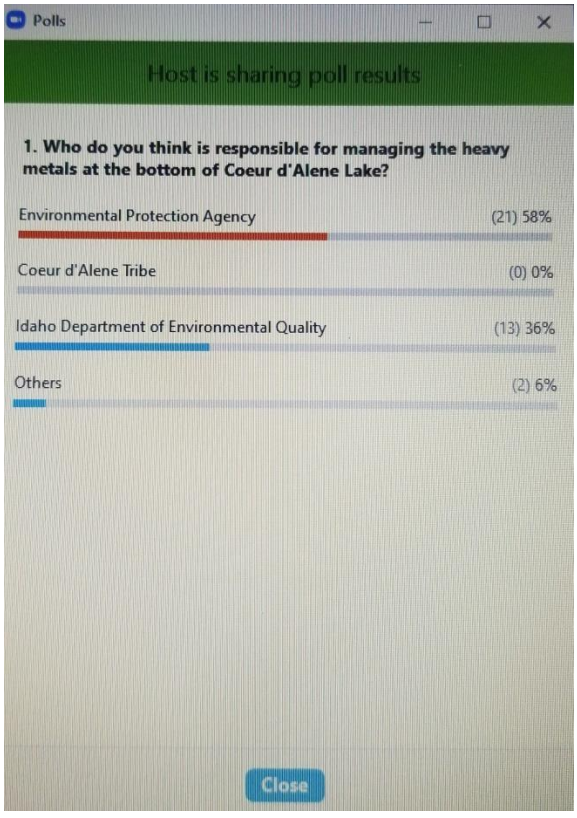
Prior to the CoVid 19 pandemic and stay at home orders that were put in place in April 2020, in person/in class room education and outreach was limited. Please refer to the FY20 Quarterly Reports 1-3 for details that occurred in during those respective quarters however, here are some highlights that occurred in FY20 that are worth capturing in this Annual Report:

1) Prior to CoVid 19: Provided classroom and field lessons on water quality for ~400 area high school students under The Confluence Project (TCP), and developed the schedule for Snow Science field days. Stay at home order: Canceled the May Youth Water Summit and started developing on line curriculum material to assist teachers and E-Students taking on line classes.

2) Worked DEQ staff and coordinated the 4th bi-Annual 'Our Gem Symposium' with a "Call to Action" with local community leaders, partners, and stakeholders.
https://www.youtube.com/watch?v=j-PTIaRMaXA&feature=youtu.be

3) Staff continued to be actively involved with the Our Gem Collaborative wherein collaboration on Lake Stewardship articles in the CDA Press continued throughout FY20 (e.g., nutrient and metals concerns, boating practices, revised Fish Consumption Advisory, construction and development adjacent to surface water, stormwater pollution prevention, lawn and garden care, clean drinking water, aquatic invasive species, and Baywatchers). All of the Our Gem Collaborative articles to date are located at:
https://www.uidaho.edu/cda/outreach/cwrc/our-gem

4) Tribal staff participated in the Our Gem Collaborative 'on-line' speaker series which consisted of 4 sessions during the last month (Sept. 2020) of 4th Quarter. The sessions consisted of; 1) Lake Science 101 with U of I Limnology Professor, 2) Preserving Water Quality from Kootenai County's perspective, 3) CDA Lake Management from the Tribe's and DEQ's perspectives, and 4) Aquatic Invasive Species. The photo below is of the online poll that the public provided.



5) Lake Outreach presentations (all via Zoom In or Microsoft Teams) were provided to the following but not limited to; 1) The Master Naturalists, 2) Kootenai County Economic Development Corps, 3) CDA Chamber of Commerce Natural Resources Committee, 4) Tribal Youth Interns via the Washington State University (WSU)-National Science Foundation, 5) Voices to Hear/Tribal Youth online internship with the Tribes' Dept. of Education https://arcg.is/0ri84T, and 6) Leadership Coeur 'Alene/Environment Day.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.
    - **Due to the delay in getting the revised Fish Consumption Advisory back from the Idaho Fish Consumption Advisory Council, the Our Gem maps were not printed until the 4th Quarter of FY20.**
    - **The Covid-19 National Emergency presented some timing challenges with several of the items above however, due to the technological capabilities a number of presentations were still successfully presented via Zoom and Microsoft Teams.**

C. EXPENDITURES

1) Please describe any unforeseen expenditures. **N/A**
2) Please describe other cost share or contributing funds. **APD, KEA, U of I, and DEQ for TCP duties.**

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$5,696.33	$3,831.46	$5,411.91	$6,860.80	$21,800.50
Travel	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0
Equipment	$146.00	$146.00	$146.00	$0	$438.00
Contractual (Honorarium)	$0	$0	$0	$0	$0
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$4,748.00	$0	$0	$0	$4,748.00
Total Direct Costs	$10,590.33	$3,977.46	$5,557.91	$6,860.80	$26,986.50
Indirect Costs	$2,359.93	$1,733.00	$1,162.92	$4,139.91	$9,395.76
Total	$12,950.26	$5,710.46	$6,720.83	$11,000.71	$36,382.26

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

- **Coeur d'Alene Chamber of Commerce, High Country News, Spokane River Forum, City of Coeur d'Alene, Kootenai County Commissioners, Kootenai Environmental Alliance, Lake City High school, Coeur d'Alene Charter Academy, retired USGS Limnologist, Idaho Conservation League, CDA 2030, U of I Water Resources Center, Silver Valley Economic Development Corps., North Idaho College, DEQ, Alta Science & Engineering, Tshimakian Creek Labs, Ridolfi Environmental, U of I Coeur d'Alene, and Clean Lakes Inc.**

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.
    - **The Call to Action at the Nov. 2019 Our Gem Symposium proved to be successful by way of the post Symposium survey results and overall attitude of the community which resulted in numerous requests for follow up presentations via Zoom or Skype. There was also positive feedback from the Our Gem CDA Lake Collaborative articles that were submitted to the CDA Press during the summer and early fall of 2020 as well as the on-line series that took place in Sept. 2020. Both the articles and online series were he results from the Our Gem Symposium. The following YouTube video was produced during the Symposium and utilized**

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.
    - **The Our Gem maps are re-printed and staff has started disseminating them to other Trustees and stakeholders for distribution to the public.**
    - **The final deliverable under this restoration project will be to revise the LakeASyst materials jointly with DEQ and other members of the Our Gem Collaborative. This task is anticipated to occur in FY21.**

Project Title: **Project Part C -Hepton Lake wetland restoration project *Gul Hnch'mchinmsh* (Swimmer's Landing among the Cottonwoods)**

Project Approval Date: **August 9, 2018**
Trustee Council Resolution #: **44**

Reporting Quarter/FY: **Quarter 4 / FY2020-Annual**

Partnership Funds Expenditures
Funds Allocated: **$210,900.00**
Funds Spent this Quarter: **$58,457.55**
Funds Spent this Fiscal Year: **$98,601.86**

A. GENERAL INFORMATION

Project Proponent Name: **Rebecca Stevens**
Primary Telephone Number: **(208)667-5772**
Email: **rstevens@cdatribe-nsn.gov**

Project Sponsor: **Coeur d'Alene Tribe**
Primary Telephone Number: **(208)667-5772**
Email: **rstevens@cdatribe-nsn.gov**

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

- **The Tribal IDTeam met throughout the year and updated the Hepton Lake timeline to coincide with the NRCS development of the Wetland Reserve Program (WRP) Plan of Operations as per the Farm Bill reporting requirements on land that is in a conservation easement through WRP. Tribal staff submitted/received the following; 1) Biological Evaluation/Assessment to USFWS for Section 7 of ESA Compliance, 2) Clean Water Act Section 401 Water Quality certification was approved, 3) Cultural Resources Inventory and Assessment was completed to comply with the National Historic Preservation Act, and 4) US Army Corps of Engineers (USACOE) 404 application was submitted in March 2020 and is being reviewed by USACOE.**

- **Tribal staff presented the 90% Design of the Levee Breach repair to the Tribe's Natural Resources and Culture Committees wherein they recommended to Tribal Council to move forward in contracting with Alta Science and Engineering, Inc. to finalize the levee breach repair design over the remainder of FY20. Tribal Council approved this action by way of Tribal Council Resolution 027 (2020) and adopted the name Gul Hnch'mchinmsh for the project as per Culture Committee's recommendation.**

- **Finalized the Wetland Reserve Program Plan of Operations (WRPO) as per the Farm Bill reporting requirements on land that is in a conservation easement through WRP. This will be submitted to NRCS in the 1st Quarter of FY21.**

- **Provided social distancing site visits for other RP representatives from BLM and DEQ.**

- **Met with the Tribal Historic Preservation Office (THPO) and Deputy THPO to discuss Cultural Resources Mitigation on the Site.**

- **Amended the contract for a certified Archeologist to conduct additional cultural resources inventory and assessment just outside of the Area of Potential Effects (APE) along the levee for the revised staging area.**

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

- **The Covid-19 National Emergency presented some timing challenges in getting contract documents routed through the process however, staff continued to work with the contracted engineer and was able to finalize the contract in the 3rd Quarter.**

- **The original Cultural Resources Inventory and Analysis was conducted with the anticipated material staging area being in a different location so as the Tribe continued to work with Alta Science & Engineering on the 90% design, the new staging area outside of the original APE constituted an amended inventory and assessment. This is now final.**

- **In order to meet all natural resource objectives for the Site, Tribal staff requested that Alta conduct a more thorough hydrologic analysis utilizing water level gage**

  data from the Ramsdell station on the St. Joe River that was not published or

available from USGS until the 4th Quarter. The original analysis compared the St. Maries and Coeur d'Alene Lake outlet gage data which might not be representative of anticipated flows and overtopping of the levee breach repair. Alta is conducting this additional analysis in order to determine the necessary levee breach repair height. This analysis is currently underway and the Tribe will be submitting a supplemental budget request to the Trustees in order to finalize this Phase I work as well as the Cultural Resource Mitigation Plan. The Tribe will be requesting Phase II Construction funds from NRCS under the Wetland Reserve Program in FY21. For more information or detailed timeline, please contact rstevens@cdatribe-nsn.gov.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.
   - **Additional funds for the 2nd round of cultural resources assessment was not anticipated nor was the additional hydrologic analysis needs. See 4th bullet above under Section B.**

2) Please describe other cost share or contributing funds.
   - **Bonneville Power Administration funds were used by IDTeam members in the Natural Resources Dept. to participate in the Planning process.**

   - **THPO's involvement was and will continue to be funded through the National Historic Preservation Act funding.**

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$866.84	$4,202.62	$12,026.64	$10,638.75	$27,734.85
Travel	$0	$0	$0	$0	$0
Supplies	$837.18	$634.72	$951.69	$609.25	$3,032.84
Equipment	$0	$0	$0	$0	$0
Contractual (Honorarium)	$0	$1,684.00	$14,565.06	$39,289.25	$55,538.31
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$0	$0	$0
Total Direct Costs	$1,704.02	$6,521.34	$27,543.39	$50,537.25	$86,306.00
Indirect Costs	$369.60	$1,828.36	$2,177.60	$7,920.30	$12,295.86
Total	$2,073.62	$8,349.70	$29,720.99	$58,457.55	$98,601.86

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

- **CDA Tribal staff in Natural Resources, GIS, Lake Mgt., and Culture Departments, NRCS, USFWS, ACOE, Rain shadow Research Inc., and Alta Science and Engineering, Inc.**

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.
   - **The 90% design for the levee breach repair is nearing 100% completion which will provide updated cost estimates for construction which is anticipated to occur in the Fall (3rd & 4th Quarters of FY21.**

   - **Ongoing coordination and feedback between Alta Science and Engineering, Tribal Staff, and NRCS are positive given the difficult CoVid pandemic situation via virtual meetings.**

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.
   - **N/A at this time as construction has not been initiated.**

Project Title: Gray's Meadow

Project Approval Date: 8-9-18
Trustee Council Resolution #: 44

Reporting Quarter/FY: Q4/FY20

Partnership Funds Expenditures
Total Amount Awarded: $ 250K planning; $2.25M construction contingent on plan reviews
Partnership Funds Spent this Quarter: $ 17,288
Partnership Funds Spent this Fiscal Year: $ 30,849

A. GENERAL INFORMATION

Project Proponent Name: David Leptich
Primary Telephone Number: 208-769-1414
Email: david.leptich@idfg.idaho.gov

Project Sponsor: Idaho Department of Fish and Game
Primary Telephone Number: 208-769-1414
Email: david.leptich@idfg.idaho.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

   a. Design Team meeting twice monthly or as needed. The 30% design documents were released for stakeholder review and comment on 9/17/20. We have and continue to schedule virtual meetings with key stakeholders to overview the 30% design and dialog.

   b. Surface/ground water monitoring through an array of piezometers across the site continue providing data in support of our design efforts.

   c. In April we began 12 months of water quality monitoring of both Gray's Meadow water transfers and Black Lake in coordination with IDEQ and the CDA Tribe. IDEQ is working on preliminary data summaries and loading calculations.

   d. Soil sampling to characterize both contaminant and agricultural metrics was completed and lab results are back. Data are being summarized and reviewed.

   e. Geotechnical borings/sampling to support construction and engineering designs were completed. Samples are being analyzed by the lab and data summaries and review are eminent.

f. EPA has been working through a Programmatic Agreement for cultural resources for the lower basin and site specific plans for the Gray's Meadow for the joint EPA/IDFG/RP remediation/restoration project. The draft agreement was completed and submitted for review and awaits finalization.

g. Public outreach Gray's Meadow Project information signs (previously shared with the RP) were installed at two access points on the CDAR WMA. The TOC Commission denied the CDA Trust encroachment permit request to temporarily place two similar signs within the TOC ROW to inform TOC users about the project goals and construction activities they will observe over the next ±36 months. No explanation or rationale for the denial was provided. It was disappointing to have this simple request denied by a sister agency and partner government especially in light of the fact that the effort was intended to benefit their constituents.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

a. In response to both Black Lake property owners and outside agency/government water quality concerns the design team is prioritizing relocation of pump and gravity water transfer discharge points to the tie channel and or CDA River. We are actively working on full designs to accomplish this objective with the intent to accomplish this during the 2021 calendar year. Doing so will eliminate any need (or ability) to transfer water to Black Lake over the next 3 years while remediation/restoration are executed. However, this will delay initiation of active remediation/restoration on the ground until calendar year 2022.

C. EXPENDITURES

1) Please describe any unforeseen expenditures. None.

2) Please describe other cost share or contributing funds.

CDA Trust provided the following cost share information:

a. Investigation expenditures to date in 2020 are $777,860

b. Design expenditures to date in 2020 are $384,766

c. Total expenditures to date in 2020 are $ 1,162,626

Project Expenditures: **FY20 October 1, 2019-September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe					
Travel					
Supplies	$2,465	$1,013	$194		$3,672
Equipment					
Contractual (Honorarium)				$6,000	$6,000
Permitting					
Long-term operation and maintenance			$3,882	$1,757	$5,639
Monitoring			$6,007	$9,531	$15,538
Other (Community Activities)					
Total Direct Costs	$2,465	$1,013	$10,083	$17,288	$30,849
Indirect Costs	$0	$0	$0	$0	$0
Total					$30,849

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

See B.1. above representing the combined efforts of the EPA, CDA Trust, IDFG, RP and our contractors and collaborators.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the

effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

We have published a project execution plan that includes milestones and timelines that provide a benchmark for project implementation progress.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Specific performance standards will be developed in conjunction with the 60% through construction design documents. Baseline WESPUS and MDT Montana Wetland Assessments have been performed as one ecological baseline against which to measure the ecological success of the project.

Project Title: Gene Day Pond

Project Approval Date: 5-29-19
Trustee Council Resolution #: 46

Reporting Quarter/FY: Q4/FY20

Partnership Funds Expenditures
Total Amount Awarded: $ 25,000
Partnership Funds Spent this Quarter: $ 0.00
Partnership Funds Spent this Fiscal Year: $ 0.00

A. GENERAL INFORMATION

Project Proponent Name: Chris Pfhal
Primary Telephone Number: 208-753-3812
Email: sveng@hughes.net

Project Sponsor: Idaho Department of Fish and Game
Primary Telephone Number: 208-769-1414
Email: david.leptich@idfg.idaho.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

No new on the ground progress. Lease agreement details with IDPR remain stalled and unresolved. IDFG has initiated negotiations with ITD on an alternative site outside the TOC ROW and IDPR jurisdiction to place the toilet facilities that may allow this project to move forward to completion.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

Working with IDPR and executing work within the TOC ROW remains a significant challenge.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

Staff time involvement funded outside the RP project budget is disproportional to normal workload for a project of this scope and scale.

2) Please describe other cost share or contributing funds.

None.

Project Expenditures: **FY20 October 1, 2019-September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe					
Travel					
Supplies					
Equipment					
Contractual (Honorarium)					
Permitting					
Long-term operation and maintenance					
Monitoring					
Other (Community Activities)					
Total Direct Costs	$ 0	$ 0	$ 0	$ 0	$ 0
Indirect Costs					$ 0
Total					$0

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

General coordination among Municipal and State partners with the SCSA project leads.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

This project is characterized as a human use project related to an ecological restoration project (Gene Day Pond). The project goal is safe public access to restored fishing opportunity and reduced risk of recreational exposure to metals contamination. Gene Day Pond experiences regular public use as a family and ADA friendly urban fishery. Completion of infrastructure projects as designed will satisfy the project goal and be deemed successful.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Construction performance is verified through transmittal review and regular site inspections by IDFG construction managers for conformance to project technical specifications. Because of the nature of this project infrastructure development in conformance with design standards is considered successful.

Project Title: Black Rock Slough

Project Approval Date: 5-29-19
Trustee Council Resolution #: 46

Reporting Quarter/FY: Q4/FY20

Partnership Funds Expenditures
Total Amount Awarded: $ 75,000
Partnership Funds Spent this Quarter: $ 3,652
Partnership Funds Spent this Fiscal Year: $ 24,100**

** $20,449 of Partnership Funds expended on this project this fiscal year were drawn from the IDFG Trustee Core Program Funds at their discretion. Only $3,652 of Black Rock Slough specific project funds have been spent this fiscal year.

A. GENERAL INFORMATION

Project Proponent Name: David Leptich
Primary Telephone Number: 208-769-1414
Email: david.leptich@idfg.idaho.gov

Project Sponsor: Idaho Department of Fish and Game
Primary Telephone Number: 208-769-1414
Email: david.leptich@idfg.idaho.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

The final IDPR lease agreement for this project development was secured this quarter. Construction has begun. The small (agri-drain) WCS at the west end of the project area is installed but still needs to be back filled and armored. The main pre-cast concrete WCS has been cast and we are awaiting delivery for installation.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

The project is on schedule to be completed in Q1FY21.

C. EXPENDITURES

1) Please describe any unforeseen expenditures. N/A

2) Please describe other cost share or contributing funds. AVISTA, USFWS (NAWCA Grant), and IDFG cost share partners contributed a combined $10,596 (75%) of all project costs incurred during Q4FY20.

Project Expenditures: **FY20 October 1, 2019-September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe					
Travel					
Supplies					
Equipment					
Contractual (Honorarium)				$3,652	$3,652
Permitting					
Long-term operation and maintenance					
Monitoring					
Other (Community Activities)					
Total Direct Costs	$ 0	$ 0	$ 0	$ 3,652	$ 3,652
Indirect Costs				$ 0	$ 0
Total				$3,652	$ 3,652

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

N/A beyond cost-share reported above.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

This project is phase 1 of a multi-phase approach to restoration of Black Rock Slough. Its primary immediate goals are: a.) to exclude or limit annual importation of contaminated sediment thereby reducing recontamination risk and setting the stage for future remediation/restoration; b.) improve the ability to actively manage wetland water level depth, duration, and timing to achieve management ecological and recreational objectives. The project is a success if the water control structures function as designed and achieve the above two goals.

Improved ecological function should result from water management that better mimic natural regimes. The full ecological potential of the site cannot be realized until remediation/restoration occur in future phases.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Construction performance is verified through transmittal review and regular site inspections by IDFG construction managers and the contracted design engineer for conformance to project technical specifications. The IDFG Engineering Bureau, in consultation with IDFG construction managers and the design engineer, will sign off on substantial completion before the final invoices are paid.

Functional performance, i.e. the ability to exclude or limit contaminated spring inflows and facilitate manipulation of wetland pool elevation to meet management goals will be confirmed over the first 36 months of operation by regular inspection and trial manipulations. No manipulations are planned during the first 6-12 months after construction in order to allow fill material to settle and vegetative cover to take hold and stabilize soils before applying force to the structures.

Ecological performance: In 2016 both Wetland Ecosystem Services Protocol for the United States (WESPUS) and Montana Department of Transportation Montana Wetland Assessment baseline surveys were conducted to provide a pre-project ecological baseline. These will be repeated 5 growing seasons post completion to document and evaluate ecological benefits resulting from this project.

Project Title:

ST. JOE RIVER – STREAMBANK STABILIZATION AND VEGETATION PROJECT

Project Approval Date: 10/30/2018
Trustee Council Resolution #: 41 (amended 02/01/2019)

Report Date: 08/30/2020
Project Fiscal Years: FY19-FY20

Partnership Funds Summary
Total Partnership Funds Awarded: **$ 3,500**
Partnership Funds Spent: **$ 3,500**
Excess Partnership Funds Remaining (if any): **$ 0**

Cost-Share: **$106,450**
Total Project Cost: **$109,950**

This final report was prepared by DEQ on behalf of the Benewah Soil and Water Conservation District for the Restoration Partnership reporting requirements. Contents are primarily based on the District's report to DEQ's 319 Subgrant Program.

A. GENERAL INFORMATION

Project Proponent Name: **Benewah Soil and Water Conservation District – Leann Daman**
Primary Telephone Number: **(208) 987-4011**
Email: **leann.daman@usda.gov**

Project Sponsor: **Idaho Department of Environmental Quality – Kajsa Van de Riet**
Primary Telephone Number: **(208) 666-4633**
Email: **Kajsa.vanderiet@deq.idaho.gov**

B. PROJECT DESCRIPTION & ACCOMPLISHMENTS

1) Describe project accomplishments, completion of deliverables, and how the project met its goals and objectives. As applicable, provide quantified estimates of these accomplishments such as the acreage or stream miles of habitat restored.

This project provided stabilization and revegetation for St Joe River streambanks near St. Joe City in Benewah County where inundation, boat wakes, and lack of vegetation had contributed to excessive bank erosion. The Benewah Soil and Water Conservation District (BSWCD), Idaho Soil and Water Conservation Commission (ISWCC), landowners, and contractors implemented the project on ten private recreational lots on the river. Rock and willow bundles were placed along 1,450 feet of streambank. Cottonwood trees were planted at the top of bank for approximately 0.5 ac of riparian area. The project also included public education and outreach and the involvement of many partners. The Restoration Partnership portion of the funding primarily funded the willow plants.

The project was initiated when property owners contacted BSWCD requesting assistance with severely eroding streambanks. These properties are relatively small, some with as little as 100' of shoreline and just enough depth to park a recreational vehicle. Landowners were frustrated that their "little piece of

heaven" was disappearing into the river at an alarming rate, some
cited 2-3 feet lateral bank erosion each year. The landowners were concerned that trees and bushes had toppled into the river. A bank erosion inventory by DEQ classified the sites' erosion potential as high to extreme. The banks were mostly bare and vertical (5-15 feet in height) and were eroding up to 5 feet per year, partly attributed to an increasing amount of recreational boat traffic on the river creating large wakes.

The project was also motivated by the need to improve fish and wildlife habitat, protect water quality, and provide community outreach about riparian management. For example, this reach of the St. Joe River is listed as water quality impaired due to excess temperature. DEQ established a temperature total maximum daily load (TMDL) and increased riparian vegetation is an important TMDL implementation measure. The project will also reduce sediment and nutrient loads into the St Joe River and downstream export to Coeur d'Alene Lake, a key goal of the Coeur d'Alene Lake Management Plan. In addition, the St. Joe River provides important habitat for westslope cutthroat trout and bull trout. It is designated critical habitat for bull trout and is a vital migration corridor for adfluvial fish between Coeur d'Alene Lake and the St. Joe headwaters.

ISWCC engineer Bill Lillibridge completed engineering designs, and all required permits were obtained. Landowner agreements were developed and signed. By the time the projects were fully funded and ready for construction, banks had eroded too much to allow for construction from the land as originally planned. The BSWCD secured a contract to construct the project from a barge. Construction started in November 2018, with sourcing and staging rock. A rock staging site and access road on one of the properties was established and leveled. The staged rock was then accessible for barge transport to the sites. At each site, the banks were prepped and shaped using the barge equipment and willow bundles were placed in the bare soil every 5-10 feet along each bank section. In total, 320 willow bundles were planted. Once the willows were planted, the barge operator would carefully place the rock along the bank. After the rock and willow placement, landowners planted black cottonwood on the tops of the banks. On one property, the landowner did not want cottonwoods and was allowed to plant alternative species. Existing riparian plants on site like Douglas hawthorn and red-osier dogwood were preserved whenever possible during the construction phase to help stabilize the banks and provide habitat values.

Once completed, there are immediate benefits that will increase with time as the plants mature. Based on similar projects on the St. Joe River, the plants will be well established and mature within 5-10 years. The project requires minimal long-term maintenance from the landowners and will be monitored to observe plant growth and changes over time. The sediment load reduction from the project was estimated by the Direct Volume Method based on bank dimensions and lateral recession rate as 705-750 tons per year.

Public outreach was another important component of the project, especially when working on a very busy section of the river. Just the sight of the barge at work brought many phone calls to the BSWCD office from other landowners interested in streambank stabilization and plantings on their recreational property. As a result, BSWCD personnel and ISWCC staff have visited and evaluated 23 new sites at the landowners' request. Exhibits featuring this project are placed annually at the Benewah County Fair to inform the public about the work. It was also featured at the local high school career fair. This connected with the students because they know the St. Joe River as it is in "their backyard" so to speak. The project was featured in outreach with Idaho Association of Soil Conservation District (IASCD)

Legislative Days at the Idaho Capitol Building, at IASCD Division 1
bi-annual meetings, and with the Benewah and Shoshone County Boards of County Commissioners.

A PowerPoint presentation of the completed project was shown at the fall 2019 Division 1 Meeting of Conservation Districts. Attendees included Idaho Representative Sage Dixon, Idaho Senator Jim Woodward; ISWCC staff; Tricia Cracroft, Idaho State Biologist with Natural Resource Conservation Service; Conservation Districts from Benewah, Kootenai, Shoshone, Bonner and Boundary counties; and representation from the Coeur d'Alene Tribe.

2) Describe any challenges encountered and how those challenges were overcome. Describe any changes to the project from the original application.

Many challenges were overcome during the course of this project. Before approaching the Restoration Partnership, the project was originally planned for 1,050 feet of streambank on 7 properties. This expanded to 1,450 feet of streambank to accommodate 3 additional properties. The initial plan and budget also included all rock placement and construction from the top of bank. During the 2-year planning and permitting process, some of the lots eroded to the extent that construction equipment could not access the shoreline. The barge cost was about $10,000 above the budget at that time. With design complete, rock sourced, permits issued, and most of the funding available, the entire project nearly crumbled. AVISTA had already come forward with an additional $27,560 to cover the added 3 properties. The District reached out for additional funding. DEQ's Coeur d'Alene Lake Management program committed $6,500 toward construction and administrative costs. The Restoration Partnership committed $3,500 for willows and staff time. [*Note from DEQ: The $3,500 from the Restoration Partnership was approved by the Trustee Council in an amendment to Resolution #41 that allowed $3,500 DEQ previously received for planning costs to be dedicated toward this restoration project. There was no new allocation from the NRD Fund.*]

The next challenge appeared when the rock supplier identified a need to reinforce the access road to the rock staging site. One landowner generously offered his property as staging site for construction rock. The existing access road simply would not stand up to heavy truck traffic, and another $4,500 was needed. The District contacted each landowner, explained the necessity of this expense and that an equitable plan would be for each landowner to share this cost equally. Landowners were given the option to continue and share the cost of this access road and staging pad or opt out of the project. All landowners joined to fund the access road. The project was back on track – again.

An additional challenge came with the willow plantings. Placing willow bundles amongst the rock was the responsibility of North Idaho Maritime crew. Initial supervision by ISWCC found that both the rock and willow bundles were being placed as designed. The contractor continued construction over a long holiday weekend, when construction supervision by ISWCC was not available. A site visit near the end of the construction period found that sometime during construction, the barge crew placed some of the willow bundles high above the water line and not according to design. ISWCC Engineer Bill Lillibridge, Water Quality Specialist Brad Shelton and Conservation District Board Supervisors and Staff spent 2 days cutting additional willows and planting them according to the design. Bill Lillibridge had access to an air-powered post driver owned by Division 2 that was modified to drive willow bundles. This driver required a special air compressor. Without budget to rent the required air compressor, BSWCD contacted the Jack Buell trucking company requesting the donated use of an air compressor. Jack Buell trucking company

donated the use of a truck, fuel, and the industrial air compressor,
along with the fittings needed to power the post driver to drive the willow bundles into the now frozen earth. The sites were visited after planting in 2019 and 2020 to observe plant survival and ensure as much success as possible.

Property ownership with some of these recreation lots is changing quite often. BSWCD continued to work with landowners through the permitting process, including transferring the permits to the latest owner and explaining the process to the new owners. Most of these new owners were pleased that the property was already involved in the riparian project and happy to work with BSWCD.

Most landowners planted the required cottonwood trees by summer 2019. Even after reminders from BSWCD, a few landowners had yet to plant the cottonwood trees by fall 2019. An additional mailing including a letter from Kristin Lowell of DEQ and another reminder from BSWCD reiterated that cottonwood plantings were a requirement of each landowner. Eventually, all landowners planted their portion of the riparian plants by spring 2020.

Please see attachment for maps and images of the project.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

There were no unforeseen expenditures of Restoration Partnership funds.

2) Please describe cost share or other contributions.

The vast majority of the project's cost (97% of the total cost) was provided by cost share sources. Cash and in-kind cost share was provided by the Idaho Soil & Water Conservation Commission (ISWCC), DEQ's §319 Nonpoint Source Program, DEQ's Coeur d'Alene Lake Management Plan, Avista, landowners, and the Benewah Soil & Water Conservation District (SWCD) Board of Supervisors.

Avista	$48,820
DEQ 319 Subgrant	$39,140
Landowners	$9,990
DEQ Lake Management Program	$6,500
Benewah SWCD	$2,000

A partnership between Benewah SWCD and the ISWCC provided project design and engineering. An ISWCC water quality specialist and certified project engineer were involved throughout the project to provide design and project oversight. These specialists met regularly with contractors to coordinate construction plans and timing. They also met regularly with the Benewah SWCD Board of Supervisors to keep them apprised of the activity and seek input. The Benewah SWCD Board of Supervisors took an active role in this project. Supervisors met with landowners, visited project sites, and cut and planted additional willows after the contractor deviated from the engineered design.

The total project cost was $109,950 including $3,500 from the Restoration Partnership and $106,450 from cost-share.

Restoration Partnership Expenditures:

	FY19	FY20	TOTAL PROJECT
Salaries/Fringe	$590	$0	$590
Travel	$0	$0	$0
Supplies	$2,910	$0	$2,910
Equipment	$0	$0	$0
Contractual	$0	$0	$0
Total Direct Costs	$3,500	$0	$3,500
Indirect Costs	$0	$0	$0
Total	$3,500	$0	$3,500

D. PROJECT PARTNERS

1) Please describe the involvement of project partners, if applicable.

Please see above in item C2.

E. MEASURES OF SUCCESS

1) Describe monitoring activities, if applicable, to measure or evaluate the effectiveness of the project. Please provide copies of monitoring plans and associated reports.

No formal monitoring is planned. BSWCD, ISWCC, and DEQ will continue to periodically observe and photograph the site over time to monitor integrity of the rock and the growth of plants. Updates and photos will be provided to the Restoration Partnership.

2) Describe performance standards used to measure the success of the project and how the goals and objectives were met.

The primary performance standards to measure success of the project were the successful completion of construction and riparian planting with installation of rock, willow bundles, and cottonwoods on 10 properties covering 1,450 feet of streambank and 0.5 acres of riparian area. The rock installation was completed as designed, but the initial planting of some willow bundles were too high on the bank. Follow-up planting with a pneumatic driver improved the location of willow bundles and their survival was considered successful. Most of the landowners planted their cottonwoods as planned; however, some required additional reminders. Eventually, all landowners planted their required cottonwoods or an alternative approved by BSWCD.

3) Describe the expectations for long-term viability and sustainability of the project. Identify risks and include short-term and long-term operation and maintenance planned for the project, if applicable.

The project requires minimal long-term maintenance and will be the responsibility of the landowners. The landowners are expected to observe plant survival and growth, monitor integrity of rock, and perform tasks such as weeds management and watering as needed. If problems are observed, they can contact BSWCD for assistance. BSWCD, ISWCC, and DEQ will continue to periodically observe the site over time. In projects with similar designs, the rock will trap fine sediments and create a place for riparian vegetation to establish. Other recent projects in the area have been completely revegetated and no rock is visible after 5-7 years. We anticipate the same with these projects with minimal operation and maintenance.

4) Adaptive management – Describe lessons learned from the project and how this information can be used to improve outcomes of future projects.

The original timeline and budget for the project expanded prior to receiving the Restoration Partnership funds in order to incorporate more properties, allow construction by barge, and construct an access road. The timeline was long in order to secure funding. With large-scale projects that take several years to implement, costs escalate and conditions can change (e.g., eroding banks, price of diesel, etc.). In future projects of this scale, it may be helpful to build the budget with this timeline and anticipated cost escalations in mind. The BSWCD and partners successfully adapted to these changes and secured additional funds.

Almost every landowner was cooperative and followed through with their portion of the project as planned; however, some landowners were delayed in their plantings and took prompting to follow through. The BSWCD did have landowner agreements in place, but there was no clear mechanism to enforce the agreement or recover costs if a landowner did not fully cooperate. There's also a cost-benefit to consider when it comes to that kind of situation. In some instances, conservation easements may be appropriate, but easements are not needed or realistic for every project on private land. Landowner agreements are an excellent tool and can be strengthened. BSWCD plans to strengthen their landowner agreements DEQ plans to develop landowner agreement templates for projects with Restoration Partnership funding that will include enforceable financial requirements. BSWCD is also ensuring stronger buy-in from landowners by requiring a larger cost share contribution from landowners up-front.

During construction, only one barge contractor was available to work on that section of the St. Joe River so no competitive bid process was available. It would be better to have multiple contractors to choose from and a competitive bid process whenever possible. Avoiding construction from a barge would reduce costs and provide greater opportunity for competitive bidding; however, that is not always going to be possible. There were also challenges with the contractor performing the planting as designed. When the ISWCC engineer was on site, construction proceeded as designed. The contractor decided to work over a long holiday weekend without ISWCC oversight and installed willows too high on the bank. BSWCD and ISWCC staff repaired the job by moving willows and planting additional willows. Future contracts could strengthen oversight requirements, clear design specifications, and enforceable mechanisms to require contractor to warranty or repair their work if not completed according to specifications. There may also be opportunities to build capacity with local contractors by offering training for habitat restoration work.

Attachment - St Joe River Streambank Stabilization and Vegetation Project Maps and Figures

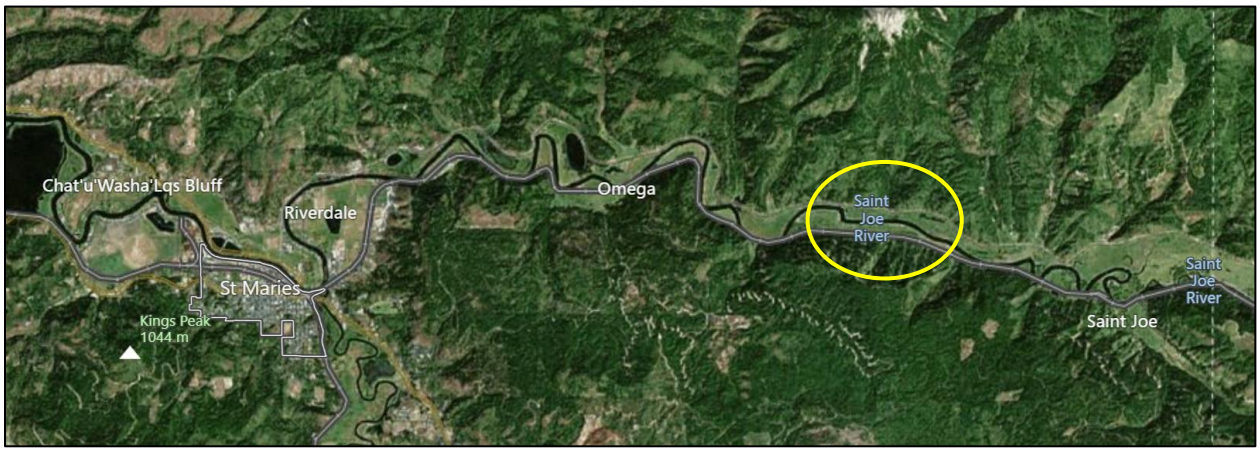


Figure 1. General project location along St. Joe River in Benewah County.

Figure 2. Overview of private properties for streambank stabilization and vegetation along the St Joe R.

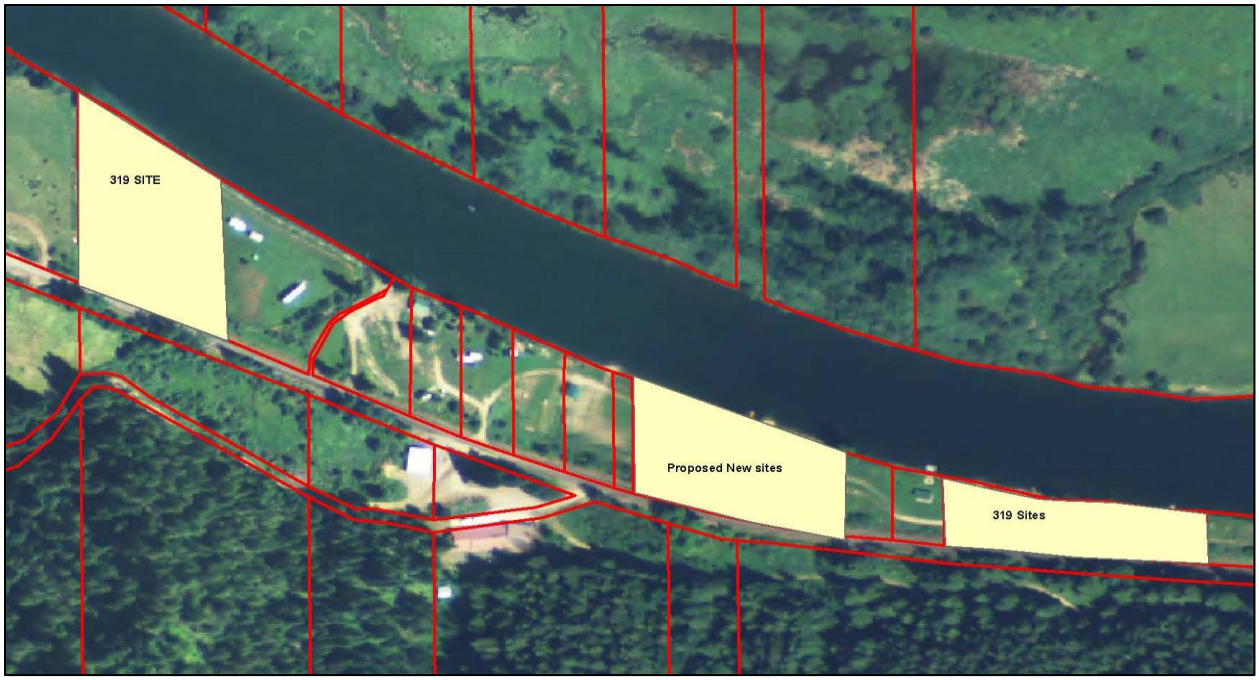


Figure 3. Closer view of upstream group of properties for streambank stabilization and vegetation along the St Joe River.

Figure 4. Closer view of downstream property area for streambank stabilization and vegetation along the St Joe River.

Figure 5. Eroding banks and lack of riparian vegetation, pre-restoration October 2017.

Figure 6. Eroding banks and lack of riparian vegetation, pre-restoration October 2017.

Figure 7. Tall, steep eroding banks and lack of riparian vegetation, pre-restoration October 2017.

Figure 8. Tall, steep eroding banks and lack of riparian vegetation, pre-restoration October 2017.

Figure 9. Unstable banks and lack of riparian vegetation, pre-restoration October 2017.

Figure 10. Access road and rock staging, during construction November 2018.

Figure 11. Barge for construction, during construction November 2018.

Figure 12. Beginning construction, during construction November 2018.

Figure 13. Willow planting, during construction November 2018.

Figure 14. Willow bundles being planted with rock, during construction November 2018.

Figure 15. Planting willows with pneumatic driver, during construction December 2018.

Figure 16. Completed construction, post-restoration June 2019.

Figure 17. Willow bundles, rock, and cottonwoods, post-restoration June 2019.

Figure 18. Willow bundles and rock, post-restoration June 2020.

Figure 19. When possible, existing riparian vegetation was maintained and supplemented with willow bundles, post-restoration June 2020.

Figure 20. One of this project's newly planted sites in the foreground with a past NRCS project on the adjoining property upstream in the background, post-restoration June 2020.

Restoration Partnership

Annual Report Form

Project Title: Wolf Lodge Creek Reach #3

Project Approval Date: 05/29/2019
Trustee Council Resolution #: 46

Reporting Quarter/FY: 4th Qtr – Annual FY2020

Partnership Funds Expenditures

Total Amount Awarded:	**$ 195,814.00**
Partnership Funds Spent this Quarter:	**$ 0.00**
Partnership Funds Spent this Fiscal Year:	**$ 26,054.00**

A. GENERAL INFORMATION

Project Proponent Name: Kootenai Shoshone Soil & Water Conservation District – Karla Freeman
Primary Telephone Number: (208) 209-4348
Email: KSSWCD@Yahoo.com

Project Sponsor: Idaho Department of Environmental Quality – Kajsa Van de Riet
Primary Telephone Number: (208) 666-4633
Email: kajsa.vanderiet@deq.idaho.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application. During the fiscal year we have completed the designs for the streambank restoration along with hiring a sub-contractor to clear and source wood on one of the landowner's property as well as clear and prep the staging areas. All necessary permits were obtained. We have also chosen the construction company and they are due to start on October 5, 2020.Construction started on October 5, 2020.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application. We have not had any delays.

C. EXPENDITURES

1) Please describe any unforeseen expenditures. No unforeseen expenditures in this quarter.

As described in the Q3 progress report and other correspondence with the Trustees, the District secured additional funding to complete this project. We were able to secure an additional 319 BMP grant through DEQ for $98,451.00 along with $5,000 from a grant with TransCanada as well as additional funds through the DEQ Lake Management program.

2) Please describe other cost share or contributing funds. We have had one of the Landowners donate the category 1 wood off his property as his portion of his cost share that is equal to $5,000.00. Other cost-share is coming from Idaho Soil and Water Conservation Commission, Natural Resources Conservation Service, Idaho Department of Lands, and Kootenai-Shoshone Soil and Water Conservation District board members.

Project Expenditures:

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$450.00	$1,198.96	$425.00	$0.00	$2,073.96
Travel	$0.00	$25.88	$0.00	$0.00	$25.88
Supplies	$0.00	$0.00	$0.00	$0.00	$0.00
Equipment	$0.00	$0.00	$0.00	$0.00	$0.00
Contractual (Honorarium)	$1,180.00	$22,222.47	$0.00	$0.00	$23,402.47
Permitting	$0.00	$0.00	$0.00	$0.00	$0.00
Long-term operation and maintenance	$0.00	$0.00	$0.00	$0.00	$0.00
Monitoring	$0.00	$0.00	$0.00	$0.00	$0.00
Other (Community Activities)	$0.00	$0.00	$0.00	$0.00	$0.00
Total Direct Costs	$1,630.00	$23,447.31	$425.00	$0.00	$25,502.31
Indirect Costs	$163.00	$346.19	$42.50	$0.00	$551.69
Total	$1,793.00	$23,793.50	$467.50	$0.00	$26,054.00

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable. We acquired TransCanada as a new contributing partner who donated $5,000.00. We also have East Side Highway District contributing rock and debris for the access roads needed for the project.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area. We have not completed this project yet, so no monitoring is needed.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Restoration Partnership

Project Update Form

Project Title: Canyon Marsh Agriculture to Wetlands Conservation Easements

Project Approval Date: August, 2018 and May, 2019
Trustee Council Resolution #: 44 and 46

Reporting Quarter/FY: Quarter 4/FY20

Partnership Funds Expenditures:
Funds Allocated: $801,480 (44) and $372,400 (46)
Funds Spent this Quarter: $ 11,650
Funds Spent this Fiscal Year: $ 12,774.55

A. GENERAL INFORMATION

Project Proponent Name: Tim Kiser
Primary Telephone Number: (509) 893-8023
Email: Tim_Kiser@fws.gov

Project Sponsor: U.S. Fish and Wildlife Service
Primary Telephone Number: (509) 891-6839
Email: Tim_Kiser@fws.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

    1.) Completed the appraisal for the Cole Conservation Easement and the landowners agreed to the appraised value of the easement. The appraisal was completed this quarter, but funds ($4,750) were expended in FY21 and will be shown in the FY21 Q1 report.
    2.) The survey is underway and the boundaries/legal description of the easement is nearing completion. The survey was contracted and is shown in the table below for this quarter.
    3.) Purchased Triticale seed, which was planted on ~80 acres on the Walker Easement. Triticale was planted to stabilize soils and reduce additional encroachment of large stands of woolgrass. The cost of the seed is shown in the table below as supplies.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

    None

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

No unforeseen expenditures occurred during FY20.

Annual Report of Expenditures: Please do not modify table categories.

Budget Category	**Q1**	**Q2**	**Q3**	**Q4**	**Total**
Salaries/Fringe	247.91	495.82	380.82	0	1,124.55
Travel					
Supplies				450.00	450.00
Equipment					
Contractual				11,200.00	11,200.00
Other					
Total Direct Costs					
Indirect Costs					
Total	**247.91**	**495.82**	**380.82**	**11,650.00**	**12,774.55**

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

The Inland Northwest Land Conservancy is completing the Baseline Resource Report for the Walker and Higbee Properties. This report will provide information on the baseline conditions of the properties prior to remedial and restoration actions that may be useful for future condition comparisons.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Restoration Partnership

Project Update Form

Project Title: Gleason's Marsh Agriculture to Wetlands Conservation Easement

Project Approval Date: August 9, 2018
Trustee Council Resolution #: 44

Reporting Quarter/FY: Quarter 4/FY20

Partnership Funds Expenditures:
Funds Allocated: $656,140
Funds Spent this Quarter: $ 0
Funds Spent this Fiscal Year: $ 505.71

A. GENERAL INFORMATION

Project Proponent Name: Tim Kiser
Primary Telephone Number: (509) 893-8023
Email: Tim_Kiser@fws.gov

Project Sponsor: U.S. Fish and Wildlife Service
Primary Telephone Number: (509) 891-6839
Email: Tim_Kiser@fws.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

   1.) No work was conducted this quarter.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

   None

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

   None

Annual Report of Expenditures: Please do not modify table categories.

Budget Category	Q1	Q2	Q3	Q4	Total
Salaries/Fringe	210.45	168.32	126.94	0	505.71
Travel					
Supplies					
Equipment					
Contractual					
Other					
Total Direct Costs					
Indirect Costs					
Total	**210.45**	**168.32**	**126.94**	**0**	**505.71**

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

The Inland Northwest Land Conservancy is completing the Baseline Resource Report for the Gleason Easement. This report will provide information on the baseline conditions of the property prior to remedial and restoration actions that may be useful for future condition comparisons.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Project Title: Lake Creek Watershed Restoration

Project Approval Date: January 11, 2020
Trustee Council Resolution #: 52

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Funds Allocated: $615,951.00
Funds Spent this Quarter: $13,194.32
Funds Spent this Fiscal Year: $13,194.32

A. GENERAL INFORMATION

Project Proponent Name: Coeur d'Alene Tribe Fisheries Program
Primary Telephone Number: (208) 686-6903
Email: ajvitale@cdatribe-nsn.gov

Project Sponsor: Coeur d'Alene Tribe
Primary Telephone Number: (208) 686-6903
Email: ajvitale@cdatribe-nsn.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

Project #6 - Upper Lake Creek fish passage improvement

Project Location:

Watershed: Lake Creek | **Legal: T24N, R 46E, S 19**
Sub Basin (River km):18.5 | **Lat: 47.56095 N Long: -117.042106 W**

Site Characteristics:

Slope/gradient: 4.2% | **Aspect: SE** | **Elevations: 840 m**
Valley/Channel type: C4/E5 | **Proximity to water: In-stream and adjacent floodplain**
Other: An undersized culvert was replaced to improve fish passage. Native trout will gain improved access to 182 meters of high value, cold water refugia.

Problem Description: Upper Lake Creek is an important spawning and rearing stream for resident and adfluvial westslope cutthroat trout in the Lake Creek watershed. This stream crossing was identified as an adult and juvenile fish barrier in the Forest Road and Fish Passage Assessment completed in 2008 (Duck Creek Associates 2009). The existing 48" diameter culvert was undersized and set at a 9% slope (perched 0.38 m above the stream channel where bankfull width is 2.43 m (Photo 1). A prioritization process completed by the Fisheries program ranked the replacement of this stream crossing as a high priority. The project will restore connectivity with the upper Lake Creek watershed,

including access to 182 meters of potential rearing and spawning habitats, and critical cold water refugia.

Description of Treatment: We collected data describing existing culvert size, length, road characteristics, flow line characteristics, floodplain information, and ground elevations using a Sokkia 530R total station. This information was imported into AutoCAD Civil 3D for analysis. In addition, cross-section information was collected to identify bankfull width and depth. Engineering drawings and specifications were developed for the new stream crossing structure using a variety of computer software. The Washington Streamstats Website was used to derive discharge values at the site for a variety of flow regimes. The Federal Highway Administration's HY-8 Culvert Hydraulic Analysis Program was used to size the culvert. ArcGIS was used to develop location maps and site maps. We followed design guidelines outlined in the *Water Crossing Design Guidelines* published by the Washington Department of Fish and Wildlife (2013). We determined that the maximum slope a culvert could have was 5.3%. The minimum size pipe was determined to be 12 feet wide in order to accommodate the bankfull width. In addition, there could be no more than one foot of channel regrade upstream of the new stream crossing.

Three different alternatives were analyzed to determine what design approach to use in replacing the existing pipe. These were 1) bridge, 2) arch pipe, and 3) open bottom arch culvert. The landowner requirements for a bridge stipulated that it be made of pre-cast concrete that would be 16 feet wide and 32 in span. This approach was priced out and determined to be prohibitive due to cost and equipment access. The site has limited access since it is an old logging road. An arch pipe was also considered but was deemed infeasible because of the location of the stream crossing by the hillside. Bedrock was predicted to be present (and later confirmed in field tests). This bedrock made setting the culvert at no more than 5.3% grade infeasible without blasting the bedrock to a lower elevation. Therefore, an open bottom arch pipe was chosen for the design due to cost considerations and feasibility of construction.

The design called for replacing the existing undersized pipe with a new 15' x 4.66' open bottom arch culvert that was 30 feet long. The culvert was placed on concrete footings that were 5' wide by 3.5' tall. Within the concrete footings was a rebar cage that was pre-assembled and brought to the site. Beneath the culvert, we simulated a stream channel following recommendations by the Washington Department of Fish and Wildlife. Twenty-five meters of stream channel was affected by this project. A total of 0.01 ha of wetland was disturbed during construction. Structural design work for the footings was completed by the landowner, who is a licensed engineer.

The following construction phases were the focus of restoration work:
Phase 1: Replace existing culvert. A Cat 320 excavator was used to remove the undersized culvert. The culvert was recycled at a local facility. A diversion pipe was installed to divert water around the construction area.

Phase 2: Installation of concrete footings. In order to create the concrete footings, the existing roadbed was excavated to one foot below the footing bottom design depth. The east footing was excavated first. In the upper portion of the east side footing, bedrock was encountered. Twelve inches of ¾" minus gravel was placed within the footprint of the footing and compacted in areas where there was no bedrock. The formwork for the east footing was modified to accommodate the bedrock. This formwork sat directly on the bedrock and the gravel pad where there was no bedrock

present. The footings were designed at a 5.3% slope to match the slope of the stream channel bed underneath the new culvert. Once the east footing was poured, concrete blankets were placed onto the new footing to help it cure. 20-22 CY of concrete was poured for each footing.

The west footing was constructed after the east footing. No bedrock was encountered during the excavation of this footing through several large boulders were unearthed. This footing was aligned with the east footing so that the new culvert could sit on top of both footings within a slotted channel (Error! Reference source not found.**). Photo 3 shows the completed culvert.**

Phase 3: Create stream simulation channel. Rounded river rock was used to create the new stream channel between the new footings. The channel was 8 feet wide and the top of bank on both sides matched the top of the footings. Boulders were placed prior to the river rock to help hold channel grade and create roughness. Two grade control structures were placed downstream of the culvert to help hold grade. In addition, an additional grade control structure was placed half-way through the culvert to create a 5.3% stream slope.

Phase 4: Install new open bottom culvert. The new 15' x 4.66' arch culvert was delivered in a series of metal plates and was constructed on site on the existing roadbed. There were nine plates in total. These plates were connected together via bolts by Tribal staff. Once the culvert was assembled, it was placed onto the footings with the excavator. Once the culvert was placed, gravel fill was compacted around and above the pipe.

Phase 5: Planting. Disturbed areas were seeded with native grass seed at a rate of 18 kg/ha.

Project Timeline: NEPA compliance documentation and a landowner agreement were completed in 2019. Installation of the culvert was completed in September-November 2019. Final grading of the road and planting was completed in July 2020.

Project Goals & Objectives: The goal is to restore connectivity with the upper Lake Creek subwatershed by removing a barrier to fish passage. Native trout will have access to 182 meters of prime rearing and spawning habitats upstream of the new culvert.

Relationship to Scope of Work: This work fulfills the Program commitments for Project #6 in the RP Lake Creek Watershed Restoration proposal (see Project Proposal, Table 1). RP funding was used to purchase rock delivered to the site to finish reconstruction of the forest road at the stream crossing.

***Photo 1**. The former upper Lake Creek stream crossing that was identified as a fish barrier.*

***Photo 2**. A simulated streambed was constructed between the two concrete footings. The slotted channel in the concrete footers on either side of the streambed that will hold the new culvert in place is clearly visible in this photo.*

Photo 3. The plate arch culvert was pieced together then lifted on to the concrete footers to finish the job of constructing the new passage structure.

Project #3 – Upper Lake Creek Riparian Planting

Project Location:

Watershed: Lake Creek | **Legal: T49N, R6W, S36 SW ¼**
Sub Basin (River Kilometer): 13.6/2.3 rkm | **Lat: 47.543732N Long: -117.037573W**

Site Characteristics:

Slope/Valley gradient: 1-2% | **Aspect: S** | **Elevations: 780 m**
Valley/Channel type: IX/E4 | **Proximity to water: Floodplain**
Other: Project to treat 21.9 hectares of floodplain and 1464 m of streambank to improve riparian function and condition over a period of 3-4 years.

Problem Description: Historically, the upper Lake Creek valley was a mosaic of open stands of conifers, wet meadows and stream corridor riparian forest. Forest composition and structure was maintained by frequent fires. A compositionally diverse, coniferous dominated forest was likely distributed along complex gradients of elevation, aspect and site water balance. Tree species likely included: ponderosa pine, western white pine, western larch, Douglas fir, lodgepole pine, grand fir, western red cedar, Engelmann spruce, aspen and black cottonwood. Riparian vegetation within the treatment reach was significantly altered dating back to the 1940's when native floodplain forest communities were altered by logging, grazing and agriculture (Photo 4). The riparian community is currently dominated by reed canary grass and douglas spirea, which provides sufficient root mass to maintain streambank stability, but generally lacks woody species capable of providing shade or contributing large wood to the channel. Several remnant beaver dams have been identified on the subject property, but the lack of preferred woody species makes it impractical to sustain beaver populations that would in turn have beneficial impacts on aquatic habitats. Without treatment, these riparian areas are not likely to meet our management objectives of >75% canopy cover in 2nd order tributaries and 70% of stream reaches with the ability to meet instream wood loading criteria over 150 years.

Description of Treatment: A primary strategy being utilized for Upper Lake Creek riparian restoration is the utilization of aspen and willow species to rapidly change the current degraded riparian ecosystem into a diverse self-sustaining riparian forest. These species will be most successful in competing with the non-native reed canary grass that is dominant across most of the floodplain, while providing preferred forage species for beaver. Establishment of a deciduous forest along the floodplain and stream banks will provide exceptional hydrologic, biogeochemical and plant and animal habitat functional lift within 5-10 years as well as control the trajectory of ecosystem development over next 100+ years.

Hydrologically, dense plantings of aspen will supply local beaver populations with ample dam building materials resulting in local backwater flooding of adjacent wetlands. These hydrologically restored areas will support a diverse emergent, scrub-shrub and forested wetland plant community. Additionally, other hydrologic functions will be enhanced (per Jankovsky-Jones 1999), including dynamic water storage, energy dissipation, and long-term surface water storage. Enhanced biogeochemical functions (also per Jankovsky-Jones 1999) will include the ability of the wetland to contribute to local water quality by the removal of imported nutrients, contaminants, and other elements or compounds. Enhanced beaver dam construction will significantly support wetland sediment and nutrient retention and removal functions.

Planting in the floodplain and adjacent to the stream is proposed for up to 1464 m of channel to provide shade to moderate water temperature, maintain stream bank stability, increase wildlife habitat values, and improve aesthetics. Plantings will consist of aspen, which will spread by suckering once established, followed by a variety of willow species in select locations where improving stream bank stability or maintaining undercut banks is desirable for fisheries. Planting methods for aspen will emulate those used by the landowner in the past which have proven to be successful; wherein individual planting sites are identified, treated with an aquatics approved herbicide (e.g., Rodeo®) in the spring, planted with containerized stock, then fenced to protect plants from animal browse. Willow plantings will utilize dormant live cuttings, placed in narrow trenches (12"wide x 4'deep) dug with a Cat 303.5 mini excavator where access permits. Willow plantings would likely need to be fenced until the plants are established, after which fences would be removed.

The stream buffer, where woody vegetation is generally lacking, is scheduled to be planted over several years. The buffer encompasses the 100-year floodplain and is bounded by agricultural production. A small test plot was planted in spring 2018 utilizing 60 containerized aspen trees. Survival of these trees exceeded 95% during the first growing season and the limited browse that was observed over winter should not affect long-term survival and growth (Photo 5). A second treatment consisting of 500 aspen trees was planted in Spring 2019 adjacent to approximately 964 meters of channel lying north of the primary access road and extending upstream to the agriculture/forest boundary. Each of these plantings was fenced with 6 foot tall welded wire to discourage animal browse while they become established.

Project Timeline: A small test plot consisting of 60 containerized aspen trees was planted in spring 2018. More widespread planting of 500 aspen was accomplished along 964 meters of channel in spring 2019. A third treatment is anticipated for spring 2021 adjacent to 500 meters of channel lying south of the primary access road and extending to the south property boundary. Additional plantings will occur throughout the longer reach to improve the diversity of the developing riparian forest and are planned for 2022.

Project Goals & Objectives: Reestablish a patchwork of native vegetation communities on approximately 4.39 hectares of the floodplain to lay the foundation for a compositionally and structurally diverse riparian ecosystem to develop over the next 25-50 years. Provide for significant increases in canopy density and overhanging vegetation over a 20 year timeframe. Focus plantings on preferred species (aspen and willow sp.) to support and sustain colonization of the site by beaver.

Relationship to Scope of Work: This project fulfills the Program commitments for Project #3 in the RP Lake Creek Watershed Restoration proposal (see Project Proposal, Table 1). RP funding was used to purchase nursery stock (tall 5 gallon Aspen) that will be planted in spring 2021.

***Photo 4**. Riparian vegetation within the treatment reach is dominated by reed canary grass and douglas spirea and lacks sufficient woody species capable of providing shade, contributing large wood to the channel, and sustaining beaver.*

***Photo 5**. Survival of aspen planted in test plots exceeded 95% and grew rapidly during their second season in the ground. All planted trees were fenced with 6-foot tall welded wire to discourage animal browse while they become established.*

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

Additional work was originally planned to be completed during September 2020 as part of Project #3 as described in the RP Lake Creek Restoration proposal. The treatment consists of placing large woody debris in Upper Lake Creek between river kilometer 2.3 and 3.2 where instream wood was lacking prior to treatment. A landowner agreement was negotiated and signed in 2018. Permits and NEPA compliance documentation for the project were received in early 2019. Wood was previously placed in 964 meters of channel during August and September of 2019, however, the addition of wood in a downstream reach measuring 538 m was rescheduled until October 2020. This was due to unusually wet conditions during the spring which affected the timing of planting in agricultural fields adjacent to the site. The landowner requested that the project be delayed so that the new timothy crop would have sufficient time to establish root mass prior to mobilizing equipment and supplies across these field to access the stream.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

No unforeseen expenditures occurred

2) Please describe other cost share or contributing funds.

A cost share in the amount of $86,678 was received from Bonneville Power Administration for planning, design and implementation of Project #6 Upper Lake Creek fish passage improvement.

A cost share in the amount of $82,866 was received from Bonneville Power Administration for planning, design and implementation of Project #3 Upper Lake Creek Riparian Planting.

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$0	$0	$0	$0	$0
Travel	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$13,194.32	$13,194.32
Equipment	$0	$0	$0	$0	$0
Contractual (Honorarium)	$0	$0	$0	$0	$0
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$0	$0	$0
Total Direct Costs	$0	$0	$0	$0	$13,194.32
Indirect Costs	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$13,194.32

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

Project partners involved during this reporting period include Bonneville Power Administration, and John and Terry Bauer.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]

Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Status and trend monitoring is conducted at the watershed scale by generating annual estimates of adfluvial spawners and juvenile outmigrants that serve to describe trajectories in adfluvial production and aid in the assessment of population responses to collective habitat restoration efforts (*Figure 1*). Survival rates of both life stages are also assessed annually at the watershed scale to evaluate population response to northern pike suppression measures. Monitoring is also conducted at the sub-drainage and reach scales to describe the spatial distribution of WCT during summer rearing periods which permits an examination of whether abundance trajectories differ across sub-drainages or reaches within sub-drainages. The detection of declining trends or persistently low numbers of fish at these scales may signal localized degradation or deficiencies in habitat conditions that need to be addressed and prioritized for prospective habitat improvements. The spatial distribution of the adfluvial life-history variant is also assessed at the sub-drainage scale to examine potential impediments to adfluvial production and to prioritize future restoration efforts for either the preservation or re-establishment of the migratory life-history strategy.

In the past, monitoring efforts for WCT have primarily focused on assessing the status and trend of populations at the watershed scale to identify primary factors limiting population recovery, and tracking the status and trend of sub-populations at smaller, sub-drainage scales to identify impairments in stream habitat for the prioritization of localized restoration efforts. More recently, however, monitoring actions are serving in analyses to evaluate the effectiveness of non-native fish suppression measures. Migrant traps will continue to be used as the preferred method to evaluate the numerical response of adfluvial WCT in the Lake Creek watershed to pike suppression, for estimates generated from both adult and juvenile traps are invaluable when interpreting population trajectories.

Adfluvial WCT originating from the Lake Creek watershed have responded favorably to northern pike suppression efforts that have been implemented in Windy Bay of Coeur d'Alene Lake since 2015. Juvenile outmigrants have returned to spawn at rates four times greater than those recorded over a ten year period prior to program implementation (*Figure 2*). In addition, approximately 500 spawners were estimated to have ascended Lake Creek in 2019, a most certain result of the increase in survival of WCT during lake residence that was documented by the tagged outmigrants (*Figure 3*). Furthermore, the 2019 adult abundance estimate was twice that obtained in 2018, and the largest estimate recorded over the migrant trapping program. Though the number of pike removed from Windy Bay declined by over 80% from 2015 to 2018, a total of 338 pike was captured in gillnets deployed during the spring of 2019, which exceeded the number removed in the first year of suppression (*Figure 4*). Moreover, almost 90% of the fish removed in the spring of 2019 were less than 600 mm, reflecting a young age distribution. The results observed allude to a compensatory response in young recruits due to the reduction of competition and cannibalism from the annual removal of larger pike. Consequently, suppression strategies have been modified in Windy Bay to introduce supplemental netting during both spring and fall periods to more effectively control pike numbers.

PIT-tag technology has been used to describe the spatial distribution of the adfluvial life-history form in the Lake Creek watershed, and to illustrate movements and growth rates of out-migrating juvenile WCT that allude to important seasonal spring habitats that can be reproduced with habitat restoration actions. Currently, it is being used to evaluate actions aimed at re-establishing the migratory component in sub-drainages in which the variant is seemingly deficient. In the upper Lake Creek watershed, monitoring efforts have consistently found adfluvial adults to ascend the Bozard sub-drainage over six times more often than the upper fork of Lake Creek, and juvenile adfluvial indices generated in the upper fork of Lake Creek during this reporting period were 2 to 3.5 times lower than what is typically observed in the Bozard sub-drainage (*Figure 5*, *Figure 6*). Given that putative barriers to adfluvial production were addressed in the upper fork of Lake Creek in 2018 and 2019, these metrics that illustrate the prevalence of the adfluvial variant will be tracked over time to evaluate the rate of its re-colonization in the upper fork of Lake Creek.

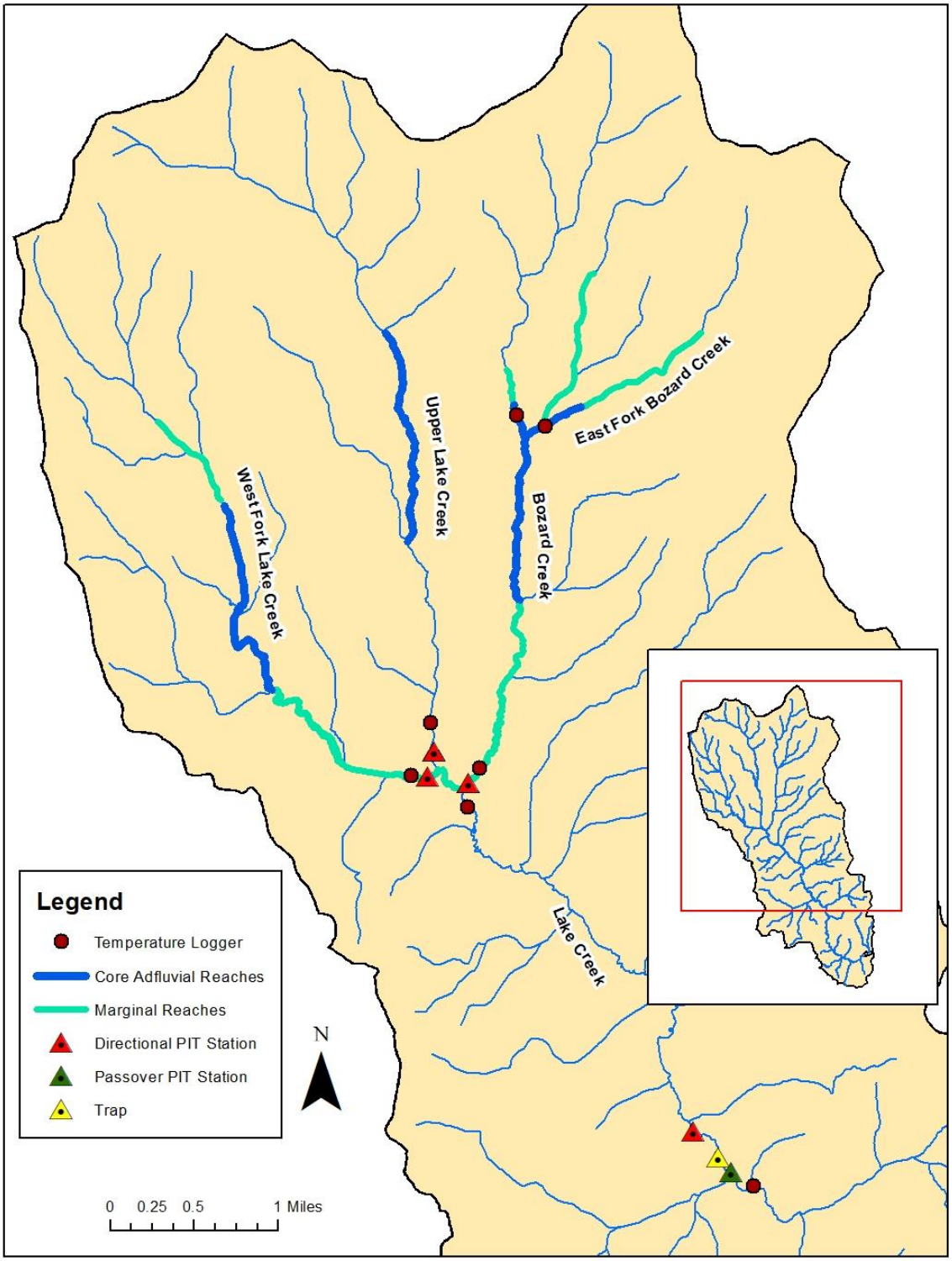


Figure 1. *Highlighted stream segments in sub-drainages of the upper Lake Creek watershed that delineate core and marginal reaches for WCT abundance and adfluvial production. Locations of stationary PIT interrogation stations, migrant traps, and temperature loggers are also displayed.*

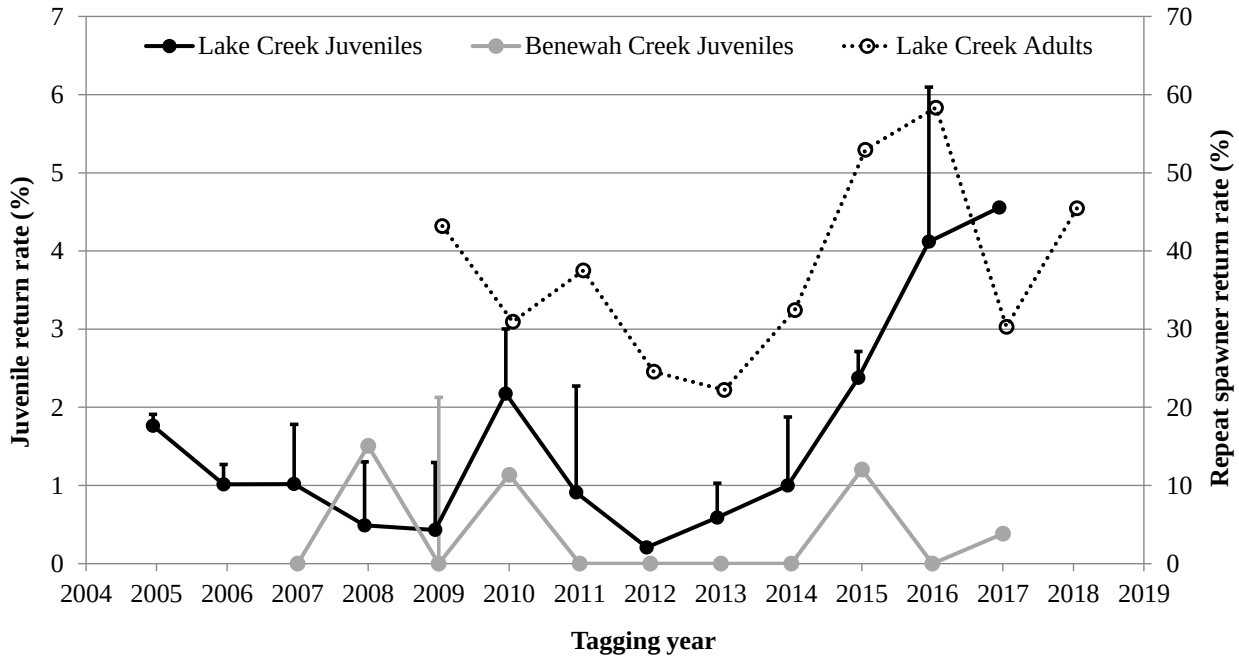


Figure 2. *Return rates of WCT tagged as ascending adults in Lake Creek and as outmigrating juveniles in both Lake and Benewah creeks during spring migratory periods, 2005-2018. For tagged juveniles, the circles represent the percentage of fish returning within two years of tagging, and the vertical bars represent the additional percentage of fish that required more than two years to return.*

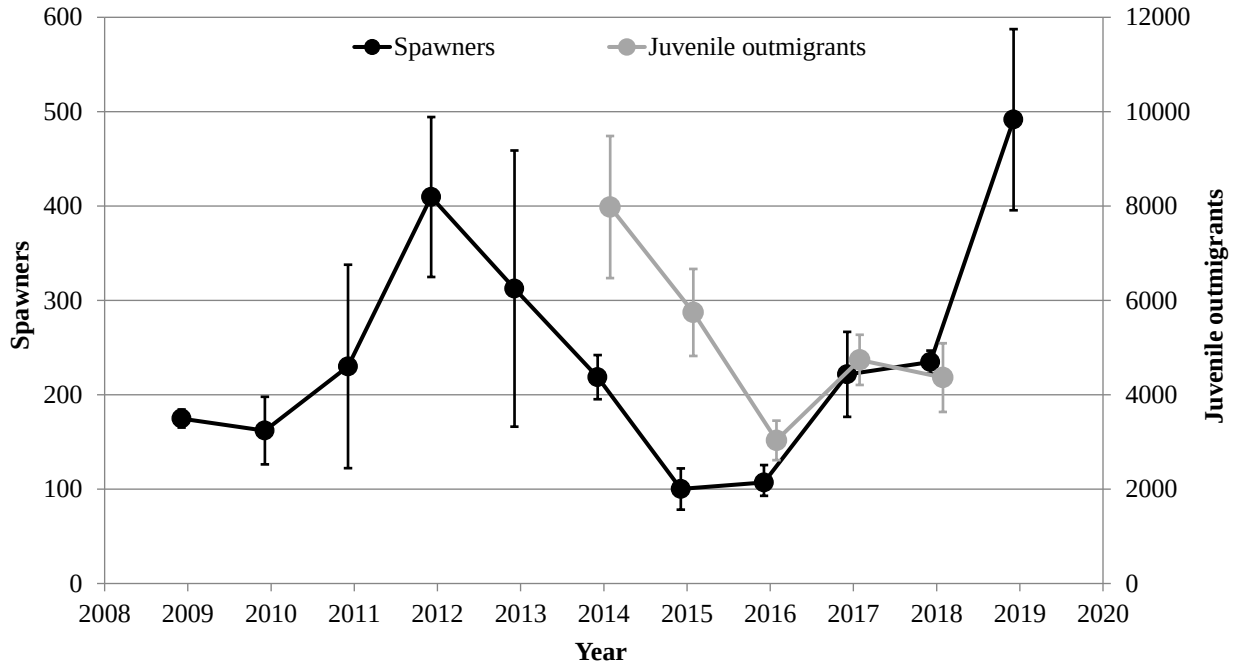


Figure 3*. Abundance estimates with 95% confidence intervals for WCT adfluvial spawners and juvenile outmigrants in Lake Creek (upper panel) and Benewah Creek (lower panel) from 2009 to 2019. Note the different scales for both life stages between watersheds.*

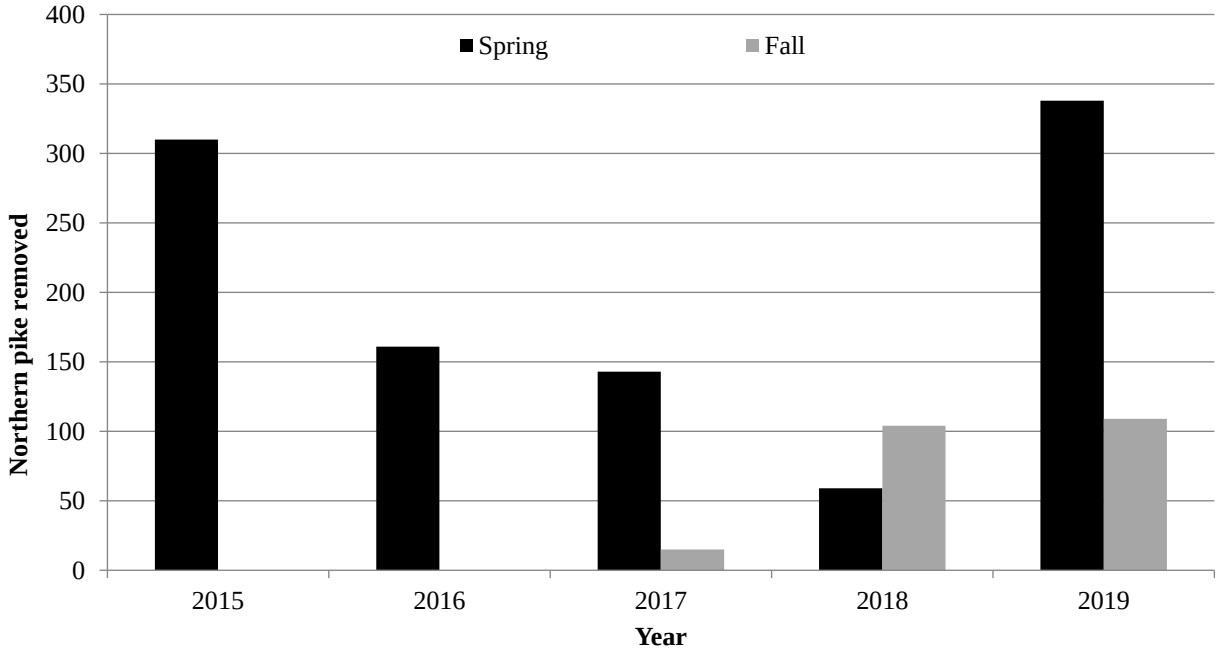


Figure 4. *Number of northern pike annually removed from Windy Bay in Coeur d'Alene Lake during spring and fall suppression periods, 2015-2019.*

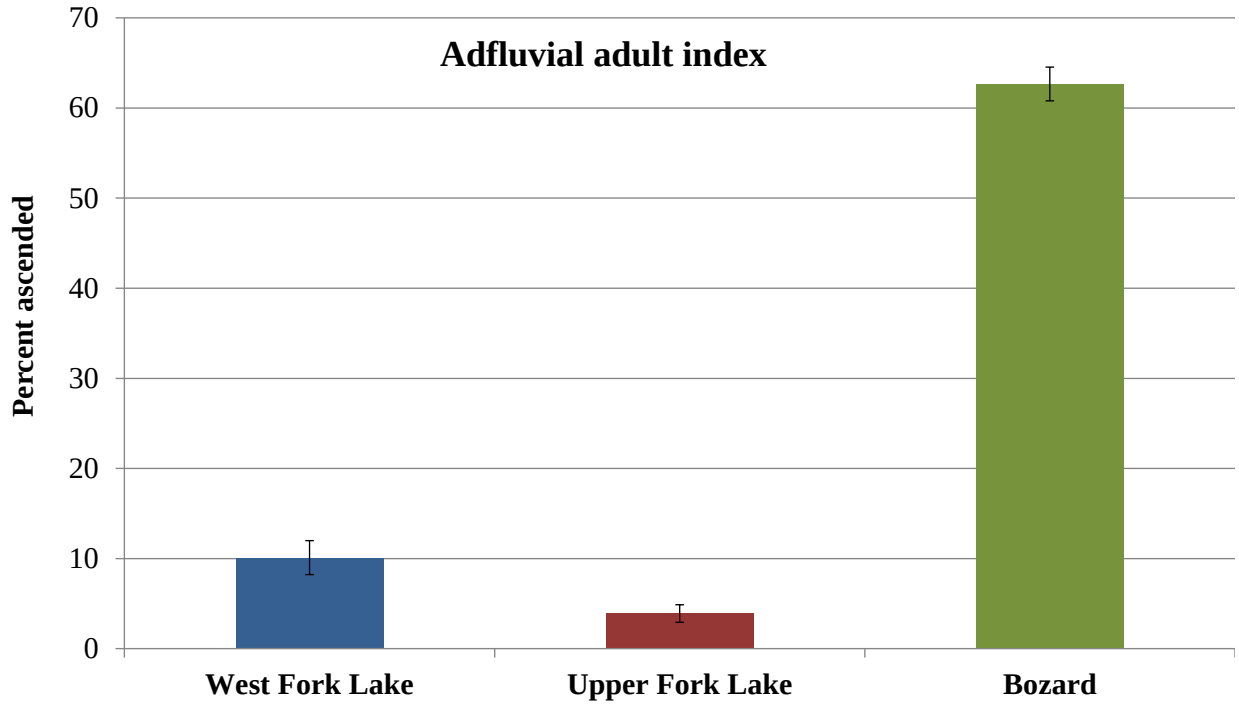


Figure 5. *Mean percent of tagged adfluvial adult WCT (± one standard error) that ascended sub-drainages during spawning migrations in the Lake Creek watershed from 2013 to 2017.*

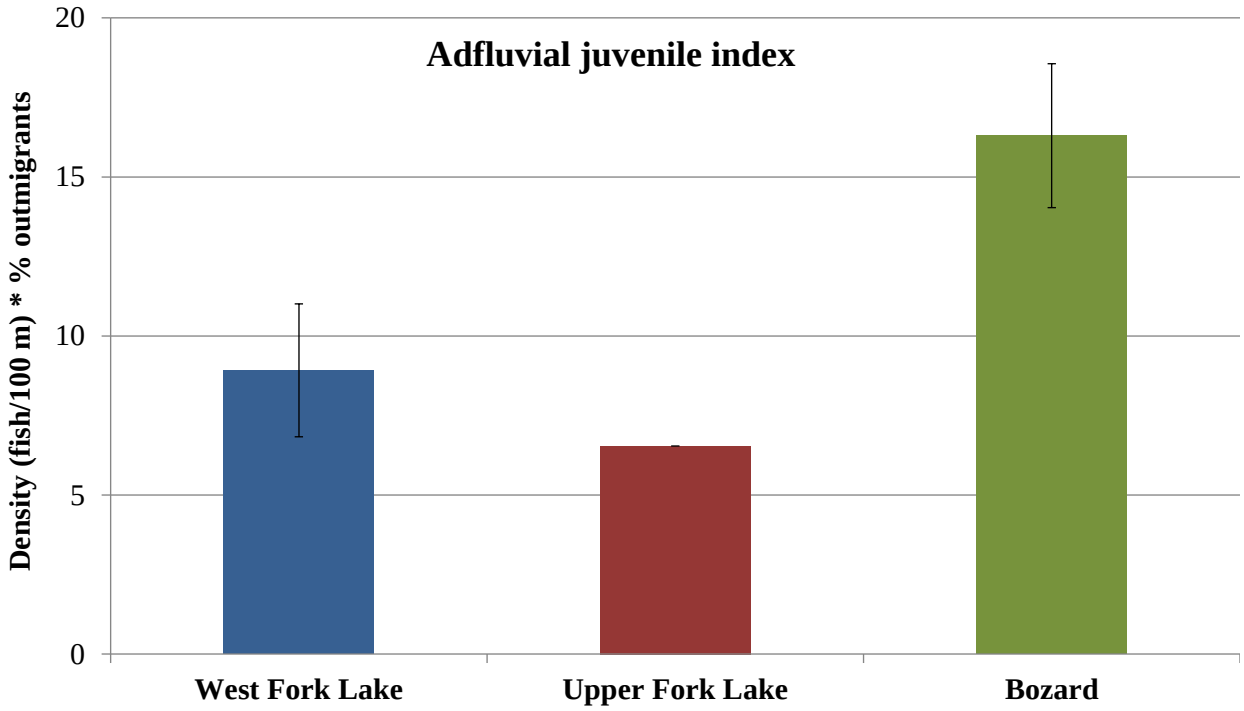


Figure 6. *Mean adfluvial WCT juvenile indices with associated standard errors calculated across core adfluvial reaches in the West Fork Lake, Upper Fork Lake, and Bozard sub-drainages.*

Restoration Partnership

Annual Report Form

Project Title:

Castle Rock Ranch – North Fork Coeur d'Alene River Riparian Restoration Project

Project Approval Date: **01/11/2020**
Trustee Council Resolution #: **52**

Reporting Quarter/FY: **Quarter 4 - FY 2020**

Partnership Funds Expenditures

Total Amount Awarded:	**$ 12,265.00**
Partnership Funds Spent this Quarter:	**$ 0.00**
Partnership Funds Spent this Fiscal Year:	**$ 0.00**

A. GENERAL INFORMATION

Project Proponent Name: **Kootenai Shoshone Soil & Water Conservation District – Karla Freeman**
Primary Telephone Number: **(208) 209-4348**
Email: **KSSWCD@yahoo.com**

Project Sponsor: **Idaho Department of Environmental Quality – Kajsa Van de Riet**
Primary Telephone Number: **(208) 666-4633**
Email: **Kajsa.vanderiet@deq.idaho.gov**

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

   The sub-award agreement was executed on 09/15/2020. Currently we have 2,400 plants reserved and working on a planting plan.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

   One of the challenges faced was the District had to do a revision to the Scope of Work to remove any rocking or bioengineering. We re-submitted the Scope of Work and received the sub award agreement within 10 days for approval.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.
   None at this time.

2) Please describe other cost share or contributing funds.
The District is tracking cost share from the landowner and other project partners including the Idaho Soil and Water Conservation Commission and Natural Resources Conservation Service.

Project Expenditures:

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	0.00	0.00	0.00	0.00	0.00
Travel	0.00	0.00	0.00	0.00	0.00
Supplies	0.00	0.00	0.00	0.00	0.00
Equipment	0.00	0.00	0.00	0.00	0.00
Contractual (Honorarium)	0.00	0.00	0.00	0.00	0.00
Permitting	0.00	0.00	0.00	0.00	0.00
Long-term operation and maintenance	0.00	0.00	0.00	0.00	0.00
Monitoring	0.00	0.00	0.00	0.00	0.00
Other (Community Activities)	0.00	0.00	0.00	0.00	0.00
Total Direct Costs	0.00	0.00	0.00	0.00	0.00
Indirect Costs	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

The District is working with the landowner and other project partners including the Idaho Soil and Water Conservation Commission and Natural Resources Conservation Service.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

Since this project is just getting started, we do not have any monitoring at this time.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Restoration Partnership

Annual Report Form

Project Title:

PRICHARD CREEK PHASE 1: CONSERVATION EASEMENT AND RESTORATION PLANNING

Project Approval Date: **01/11/2020**
Trustee Council Resolution #: **52**

Reporting Quarter/FY: **Quarter 4 - FY 2020**

Partnership Funds Expenditures

Total Amount Awarded:	**$ 1,908,450.00**
Partnership Funds Spent this Quarter:	**$ 4,982.94**
Partnership Funds Spent this Fiscal Year:	**$ 4,982.94**

A. GENERAL INFORMATION

Project Proponent Name: **Idaho Forest Group – Reid Ahlf**
Primary Telephone Number: **(208) 762-2969**
Email: **rahlf@idfg.com**

Project Sponsor: **Idaho Department of Environmental Quality – Kajsa Van de Riet**
Primary Telephone Number: **(208) 666-4633**
Email: **Kajsa.vanderiet@deq.idaho.gov**

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application.

Conservation Easement: ***Idaho Forest Group (IFG) is pursuing a conservation easement on more than 1,900 acres of property along Prichard Creek and its floodplain. As discussed in May and June 2020, IFG plans to donate the conservation easement and work with the Kaniksu Land Trust rather than pursue a Forest Legacy Program easement with compensation from the Restoration Partnership. In August 2020, IFG signed a Letter of Intent with Kaniksu Land Trust to initiate the conservation easement process. IFG and Kaniksu Land Trust are completing a baseline analysis and report.***

IFG has also taken steps to consolidate their ownership of property along the Prichard Creek channel. In September 2020, IFG completed a land trade to secure 5.5 acres along Prichard Creek near the Four Square placer mining operation. To obtain this land, they exchanged 30 acres of property north of the Thompson Pass Road and away from the stream channel upstream of Murray. With the land trade complete, IFG controls a continuous length of Prichard Creek with no vulnerable breaks in ownership.

Restoration Planning:

Memorandum of Agreement: ***Idaho Forest Group, Idaho Department of Environmental Quality (DEQ), Idaho Department of Fish and Game, and Trout Unlimited (TU) are entering into a Memorandum of Agreement regarding work together during the restoration planning phase. The MOA will be signed in October 2020.***

Metals Characterization: ***The Prichard Creek watershed has a long history of mining and previous studies by the U.S. Geological Survey and others revealed concerns associated with metals contamination from mine wastes. There have been extensive cleanups of mill sites in the Prichard drainage and past metals data is out of date and insufficient for restoration planning needs. Therefore, a comprehensive characterization of metals in Prichard Creek soils and surface waters is an important first step for restoration planning. The quickest way to obtain these data was to work through a DEQ technical services contract for late summer/fall data collection. A Task Order was executed in August 2020 and a sampling plan and Quality Assurance Project Plan (QAPP) was developed and finalized in September 2020. The QAPP was shared with the Trustee Council and Technical Staff in October 2020. Field work is taking place in October 2020 with a report expected at the end of the year. This year's field work includes low-flow surface water samples and we would like to obtain high-flow surface water samples in spring 2021.***

Beaver Relocation: ***We discussed the possibility of relocating a couple of beavers from another location where they weren't wanted into Prichard Creek where they could contribute toward increased habitat complexity and other benefits. It did not work out in 2020, but may happen in the future.***

Trout Unlimited Scope of Work: ***The Scope of Work is being developed for a subaward agreement between TU and DEQ for the restoration planning phase. This began with identification of specific goals and objectives for Prichard Creek restoration, compilation of existing data, and brainstorming about data needs for restoration planning and effectiveness monitoring comparisons of pre- and post-restoration conditions.***

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

There have been some challenges this year that delayed the project, but there is good progress now. The Restoration Partnership Trustee Council approved the project in January 2020, but the funds were not received until the end of April 2020 and by that time everyone was adapting to the coronavirus which is an ongoing challenge. In May and June 2020, we sorted out plans for the conservation easement. The current plan with Kaniksu Land Trust means the conservation easement will likely be in place sooner than it would have been through the Forest Legacy Program. During that time, we were also considering all options for contracting out restoration planning and considering non-profit organization partners. Eventually, the path forward became clear with Erin Plue joining TU as their new Coeur d'Alene Basin Project Manager late July 2020. Now that TU is a clear partner for the project, the MOA is being signed and Scope of Work is underway for restoration planning. Metals characterization for restoration planning is also underway so the project is generating good momentum.

C. EXPENDITURES

1) Please describe any unforeseen expenditures.
None.

2) Please describe other cost share or contributing funds.
We will report cost share in the next reporting cycle.

Project Expenditures:

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	0.00	0.00	0.00	0.00	0.00
Travel	0.00	0.00	0.00	0.00	0.00
Supplies	0.00	0.00	0.00	0.00	0.00
Equipment	0.00	0.00	0.00	0.00	0.00
Contractual (Honorarium)	0.00	0.00	0.00	$4,982.94	$4,982.94
Permitting	0.00	0.00	0.00	0.00	0.00
Long-term operation and maintenance	0.00	0.00	0.00	0.00	0.00
Monitoring	0.00	0.00	0.00	0.00	0.00
Other (Community Activities)	0.00	0.00	0.00	0.00	0.00
Total Direct Costs	0.00	0.00	0.00	$4,982.94	$4,982.94
Indirect Costs	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	$4,982.94	$4,982.94

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

The Kaniksu Land Trust has been added as a project partner for IFG's conservation easement. Trout Unlimited is a new nonprofit organization partner that will take on important roles for restoration planning and contracts management, outreach and volunteer coordination, and other responsibilities. Alta Science and Engineering is performing the metals characterization with assistance from Silver Valley Laboratories. The Bureau of Land Management has provided some technical assistance for restoration planning and helped plan and implement a riparian planting on IFG property near the mouth of Prichard Creek. The project site is downstream of the area that will be in the conservation easement. The riparian planting included 1,500 native plants from the Wildlife Habitat Nursery, excavation by Jerry Gladish, and Shoshone County provided a staff person and front end loader to transport plants. There is a lot of potential for partners and collaboration in the Prichard Creek Watershed that is just beginning.

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion. For example, one of the identified restoration goals for this Solicitation includes restoring wetland habitat. Therefore, restoration projects attempting to restore wetland resources will need to document a long term, quantitative increase in wetland habitat quality and/or corresponding migratory waterfowl use of the restored area.

This is not yet applicable to this project, but is being incorporated into restoration planning.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

Restoration Partnership

Annual Report Form

Project Title: Trapper Creek Bridge and Fish Passage Enhancement

Project Approval Date: Jan 11, 2020
Trustee Council Resolution #: 52

Reporting Quarter/FY: Q4/FY20

Partnership Funds Expenditures
Total Amount Awarded: $ 135,000
Partnership Funds Spent this Quarter: $ 0
Partnership Funds Spent this Fiscal Year: $ 0

A. GENERAL INFORMATION

Project Proponent Name: Mike Stevenson, USDI-BLM
Primary Telephone Number: (208)769-5024
Email: cstevenson@blm.gov

Project Sponsor: Idaho Department of Fish and Game
Primary Telephone Number: (208) 769-1414
Email: david.leptich@idfg.idaho.gov

B. PROGRESS DESCRIPTION

1) Include a description of project accomplishments this reporting period. Describe progress in securing required permits, quantify, as appropriate, x number of acres or habitat restored, and completion of any compliance documents as described in your original application. Alta Science and Engineering has completed a topographic site survey, a geotechnical evaluation, and evaluated two design alternatives. They selected a 40-foot span, pre-fab bridge for the final design.

DOI and IDFG executed a funds transfer of the full $135k from BLM to IDFG. This will greatly improve procurement-related efficiencies. This project will involve design and engineering oversight by Alta, with Shoshone County installing the bridge

IDFG and Shoshone County entered into a reimbursable agreement to help facilitate invoice payments as the project moves forward. The County is funding work up front and submitting periodic requests for reimbursement supported by contractor and materials invoicing receipts.

BLM has completed the NEPA and will obtain the permits from COE, IDWR, and others.

2) Describe any challenges which may have delayed progress this quarter, and how those challenges were/may be overcome. Include any changes to project specifications originally proposed in your application.

As with some other RP projects, the COVID-19 pandemic has resulted in direct and indirect challenges and delays. A major delay for this project has been the unanticipated lack of availability and slow-down in delivery time (over 8 weeks) for a pre-fab bridge. Shoshone County crews will be committed to plowing snow and other duties this winter and will not be available for a winter low-flow bridge installation. Therefore, the bridge installation will likely occur in the 2021 summer/fall low-flow period (typically Aug-September).

C. EXPENDITURES

1) Please describe any unforeseen expenditures.

None.

2) Please describe other cost share or contributing funds.

None.

Project Expenditures: **FY20 October 1, 2019-September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe				$0	$0
Travel				$0	$0
Supplies				$0	$0
Equipment				$0	$0
Contractual (Honorarium)				$0	$0
Permitting				$0	$0
Long-term operation and maintenance				$0	$0
Monitoring				$0	$0
Other (Community Activities)				$0	$0
Total Direct Costs				$0	$0

Indirect Costs				$0	$0
Total				$0.00	**$0.00**

D. PROJECT PARTNERS

1) Please describe the involvement of project partners (or new partners acquired) this reporting period, if applicable.

   Not Applicable

E. MEASURES OF SUCCESS – [Annual and Project Close-out reports only]
Describe monitoring efforts (if completed) that measures or evaluates the success and the effectiveness of the restoration project. The success, viability and sustainability of the restoration project should be documented at completion.

1) Describe measures of success and how each is related to the goals and objectives of the proposed project.

   The replacement of the existing undersized culvert with a 40-foot bridge should result in improved fish passage. This will be measured by visual observation of deposition, together with surveyed longitudinal profiles and low flow measurements, to determine if the passage barrier has been removed.

2) Describe performance standards for all phases of the restoration project and describe how the project will be certified as complete and successful.

   The performance standard will be that the bridge is installed according to specs and all BMPs and design measures are properly followed.

Restoration Partnership

Quarter 4/ Annual Project Update Form

LiDAR Acquisition in Priority Restoration Areas

Project Approval Date: June 17, 2019
Trustee Council Resolution #: 48

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Total Amount Awarded: $50,000 (50,000 was spent in quarter 2 to pay IDL contract)
Partnership Funds Spent this Quarter: $0.0
Partnership Funds Spent this Fiscal Year: $50,000

A. GENERAL INFORMATION

Project Proponent Name: USFS/Tim Price (previous Brendan Naples)
Primary Telephone Number: 208 765-7252 (Cell 208 597-1988)
Email: timothy.price@usda.gov

Project Sponsor: USFS
Primary Telephone Number: 208 765-7252
Email: timothy.price@usda.gov

B. PROGRESS DESCRIPTION

All LiDAR flights were successfully flown in fall of 2019 as per the IDL contract, 105,000 acres of data were successfully collected as proposed. Processing of the raw data has been completed. Delivery of final products were delayed due to COVID-19 and personnel changes however the data is now available on a high capacity hard drive at the Forest Service Supervisors Office in Coeur d'Alene for the Restoration Partnership members to pick up/checkout and make a copy. For more information about scheduling a checkout of the hard drive please call Tim Price at: 208 597-1988.

(FYI you will need at least 8 terabytes of capacity on a hard drive to copy the full set of data. It can take up to 10 hours to copy the data)

C. EXPENDITURES

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	$0	$0	$0	$0	$0
Travel	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0
Equipment	$0	$0	$0	$0	$0
Contractual (Honorarium)	$0	$50,000	$0	$0	$50,000
Permitting	$0	$0	$0	$0	$0
Long-term operation and maintenance	$0	$0	$0	$0	$0
Monitoring	$0	$0	$0	$0	$0
Other (Community Activities)	$0	$0	$0	$0	$0
Total Direct Costs	$0	$0	$0	$0	$0
Indirect Costs	$0	$0	$0	$0	$0
Total	$0	$50,000	$0	$0	$50,000

D. PROJECT PARTNERS

The Vegetation staff of IPNF served as point of contact for the broader IDL contract, during the raw data collection process. The R1 Regional office completed the data processing phase in August. A copy of this data was sent back to the IPNF and a copy was made for the Restoration Partnership. Other entities party to the contract include IDNCF, U of I, BLM, Potlach Deltic, Stimson, and Bennett.

E. MEASURES OF SUCCESS

105,000 acres proposed for LiDAR acquisition in the USFS RP application were successfully flown and the raw data acquired in the fall of 2019.

The raw data passed QA/QC as per the IDL contract specifications. The final data was processed by USFS Region 1 specialists. Processing and delivery of final products were delayed due to COVID-19 and personnel changes. However, the data is now available on a high capacity hard drive at the Forest Service Supervisors Office in Coeur d'Alene for the Restoration Partnership members to pick up/checkout and to make a copy. For more information about scheduling a checkout of the hard drive please call Tim Price at: 208 597-1988.

Going forward the IPNF will continue to facilitate the transfer of the LiDAR data to the Restoration Partnership members until all the partners have the use of the data.

Restoration Partnership

Quarter 4/ Annual Project Update Form

Project Title: Phase I – Dam Removal, implement 2021

Project Approval Date: June 2019
Trustee Council Resolution #: 52

Reporting Quarter/FY: Quarter 4 / FY2020-Annual

Partnership Funds Expenditures
Total Amount Awarded: $30,000
Partnership Funds Spent this Quarter: $0
Partnership Funds Spent this Fiscal Year: $0

A. GENERAL INFORMATION

Project Proponent Name: USFS/Tim Price (previous Brendan Naples)
Primary Telephone Number: 208 765-7252 (Cell 208 597-1988)
Email: timothy.price@usda.gov

Project Sponsor: USFS
Primary Telephone Number: 208 765-7252
Email: timothy.price@usda.gov

B. PROGRESS DESCRIPTION

The $30,000 NRDA funds (Trustee Council Resolution 52) made its way through FWS Regional Office in Portland and DOI Washington office and has been released and is in a FS account and was ready for use in 3/2020. The plan going forward is to use the NRDA awarded funds coupled with other funding (FS, FWS and the Idaho Conservation League (ICL)) to implement Phase 1 - Red Ives dam removal in 2021. This project requires permitting, contracting, mitigation and FWS programmatic consultation and is on track to be completed summer of 2021.

For more information please call Tim Price at: 208 597-1988

C. PROJECT PARTNERS

The Idaho Panhandle National Forest has a partnership with Trout Unlimited (TU). TU is a nonprofit corporation whose stated mission is to conserve, protect, and restore North America's coldwater fisheries and their watersheds. TU and the USDA Forest Service entered into a Service Wide Master Challenge Cost Share Agreement for activities to maintain and enhance the productivity of coldwater habitats on or affecting National Forest System (NFS) lands. It is therefore mutually beneficial for the

The IPNF has also received grant funding from ICL to assist in the Red Ives Creek Restoration project. Some of these funds may be used for phase 1 Dam Removal.

C. EXPENDITURES

Project Expenditures: **FY20 Oct 1, 2019- September 30, 2020**

	Q1 Oct - Dec	Q2 Jan - Mar	Q3 Apr - Jun	Q4 July-Sept	Annual
Salaries/Fringe	0.0	0.0	0.0	0.0	0.0
Travel	0.0	0.0	0.0	0.0	0.0
Supplies	0.0	0.0	0.0	0.0	0.0
Equipment	0.0	0.0	0.0	0.0	0.0
Contractual (Honorarium)	0.0	0.0	0.0	0.0	0.0
Permitting	0.0	0.0	0.0	0.0	0.0
Long-term operation and maintenance	0.0	0.0	0.0	0.0	0.0
Monitoring	0.0	0.0	0.0	0.0	0.0
Other (Community Activities)	0.0	0.0	0.0	0.0	0.0
Total Direct Costs	0.0	0.0	0.0	0.0	0.0
Indirect Costs	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0

D. PROJECT PARTNERS

The Idaho Panhandle National Forest has a partnership with Trout Unlimited (TU). TU is a nonprofit corporation whose stated mission is to conserve, protect, and restore North America's coldwater fisheries and their watersheds. TU and the USDA Forest Service entered into a Service Wide Master Challenge Cost Share Agreement for activities to maintain and enhance the productivity of coldwater habitats on or affecting National Forest System (NFS) lands. It is therefore mutually beneficial for the

The IPNF has also received grant funding from ICL to assist in the Red Ives Creek Restoration project. Some of these funds may be used for phase 1 Dam Removal.

E. MEASURES OF SUCCESS

It is the intent of the IPNF to implement Phase 1 - Red Ives Ram Removal in 2021. Removing the dam would allow 5 miles of bull trout habitat to be fully accessible. This project requires permitting, contracting, mitigation and FWS programmatic consultation and is on track to be completed summer of 2021.