

Project Name: Blackfoot River Watershed Restoration - Phase 3 Funding Year: 2021

Stakeholders

<u>Forest Service Region:</u> USDA Forest Service - R4 <u>Sponsoring Organization:</u> Idaho Dept. of Lands <u>State Project Contact:</u> Tyre Holfeltz | 208-666-8653 | tholfeltz@idl.idaho.gov <u>Participating Organizations:</u> Idaho Dept. of Lands <u>Grantee:</u> Idaho Dept. of Lands

Project Funding
Agreement(s): 21-DG-11010000-022

Project Design



Project Purpose

The project is in the Caribou PLA in SE ID within the WMA. Work will focus on Aspen/riparian habitat restoration (150 acres/ 11k linear ft) along the meandering BR. The Idaho Forest Action Plan identifies this area within the PLA as Mod-High - High forUncharacteristic Wildfire, Water Quality/Quantity, & Wildlife/Biodiversity issues. The project also aligns with 4 of the 6 LSO (listed in section 7). Unstable banks have led to decreased ecosystem health and increased sediment in the BR. Activities will restore ecosystem health/improve watershed functions within the project area and across USFS/State/Private ownerships

resulting in regenerated aspen forests (removal of encroaching conifer), re-established cottonwood, and reduced sedimentation within the BR. Project work complements BR area restoration actions on USFS land and will lead to replication of work on adjacent private ownerships stimulating cross-boundary landscape-level impacts.

Forest Action Plan = FAP; Wildlife Management Area = WMA; Priority Landscape Area = PLA; Blackfoot River = BR; Landscape Objectives = LSO

Resource Objective

Primary Objective

• Maintain or improve water quality and watershed function

Secondary Objective(s)

- Improve fish and wildlife habitats, including for threatened and endangered species
- Improve important forest ecosystems
- Reduce the risk of uncharacteristic wildfires



Strategic Issues

FAP Priorities:

P1: Idaho's Forests are diverse/resilient to climatic changes/other threats (fire, insects, disease, noxious weeds, etc.)

P2: Forestlands that provide the highest ecosystem benefits are identified/ maintained/ enhanced

Project Goals and Objectives:

G1: Enhance aspen forest health/resiliency

O1: Mechanical removal of conifers (150 acres) to stimulate aspen suckering

G2: Restore/Enhance BR and riparian habitat and improve water quality via BR bank stabilization activities

O1: Use conifer root wads to stabilize banks; narrow channel/create in-stream structures on 2mi of BR (all leverage funds)

O2: Plant willow/cottonwood/aspen clumps/poles on BR banks for stabilization/riparian restoration; reseed disturbed banks; grow

containerized cottonwoods for planting in 2023

O3: Reconnect floodplains/expand riparian/wet meadow acres (all leverage funds)

O4: Treat reed canary grass/noxious weeds (herbicide/mechanical); restore desired vegetation

G3: Increase LO ecosystem knowledge and promote future actions

O1: Host field tours for private LO ecosystem education and establish future projects

O2: Present at/host outreach events: ID Chapter of American Fisheries Society/The Wildlife

Society, SE Region Agency Coord

meetings & Caribou County Commissioners meetings

O3: Utilize IDFG web/social/local media outlets to advertise current work/establish future project work

Collaboration & Partners

1 Idaho Dept of Fish and Game (IDFG)

2 Southeast ID Habitat Improvement Team (HIT)

3 Idaho Dept of Environmental Quality (IDEQ)

4 Idaho Fish and Wildlife Foundation (IFWF)

5 Upper Blackfoot Confluence (UBC)

6 High Dessert Chapter Idaho Master Naturalists

7 Idaho State University

8 Idaho Dept of Lands (IDL)

9 US Forest Service (USFS) Caribou-Targhee National Forest



Integrated Delivery

This project incorporates work on IDFG/IDL/private land utilizing cross-boundary collaborative partnerships between 12 orgs/

agencies at varying levels. Some of these partners began working together 3 years ago during development/implementation of

initial phases of BR WMA restoration work. An example of collaborative efforts influencing this landscape-scale project is the HIT.

Formed in 2016, HIT is a partnership of resource mgmt agencies charged w/ implementing habitat projects to mitigate impacts

from phosphate mining in SE Idaho. Members include IDFG, IDL, IDEQ, USFWS, BLM, USFS and the Shoshone-Bannock Tribe.

The team also collaborates w/ non-member participants including NGOs/mining company representatives. This group provides

significant input/funding towards the development/implementation of this project. Cooperation and coord. w/ the adjacent private

LO (willow/cottonwood planting) is based on 10 years of land mgmt agreements/restoration discussions lending to the coord. of

phase 3 restoration actions on their land. Project deliverables were developed based on PLA needs/FAP issues/LSO as well as

common goals/obj across ownerships identified in early stages of project development. Throughout the project period, field tours

w/ each of the below orgs/agencies will be conducted to enhance efforts including educational opportunities/technical transfer of

knowledge/innovations for future work/continued promotion of sustainable partnerships. For phase 3, partner contributions include: IDEQ funded water quality assessments; project design/engineering from the UBC (

NGO collaborator) totaling \$70k in leverage funding (these partnerships are critical to the design/implementation stages of this

project helping to ensure viability/sustainability of outcomes); the HIT is providing \$110k in leverage funds for on-the-ground

project work carried out in cooperation w/ the High Desert Master Naturalists volunteer group (in-kind labor); the IFWF will also

contribute \$10k in leverage funds to support material/contracted work needs; Idaho State University is contributing staff time/

data collection in the form of pre/post project monitoring/surveys to validate the success of project deliverables/outcomes totaling

\$1k in leverage funding; and finally, collaboration w/ the Caribou-Targhee NF has led to comparable project activities to those

being implemented on BR area federal lands enhancing scope/landscape-level effectiveness of the project.



Influence on Positive Change

Outcomes meet 4 of 6 Landscape Objectives (LSO):

1) Reduce the risk of uncharacteristic wildfires

2) Improve fish/wildlife habitats, including for threatened/endangered species

3) Maintain/improve water quality/watershed function

4) Improve important forest ecosystems

Measures of Success/Outcomes linked to FAP Priorities (P) and LSO:

P1: Idaho's Forests are diverse and resilient to climatic changes and other threats (fire, insects, disease, noxious weeds, etc.)

LSO1 Project Deliverables = thinning/removal of conifer from 150 acres of aspen stands Outcomes = reduction of hazard fuel loadings and regeneration of fire-resistant aspen (250+ stems/acre 1-year post treatment)

. Success will be measured through before/after photo-points of 150 treated acres.

LSO4 Project Deliverables = implementation of conifer reduction/thinning, reed canary grass treatments, and reconnection of

floodplains

Outcomes = increased riparian habitat/aspen health as a result of expanded acres of wet meadows and decreased conifer

invasion. Improved understory vegetation production as a result of conifer thinning. Success will be measured through

comparison of before/1-year post treatment photo-points.

P2: Forestlands that provide the highest ecosystem benefits are identified, maintained, and enhanced

LSO2 Project Deliverables = Removal of 15+ tons of sediment at project completion; planting of cottonwood/willow poles along

BR banks

Outcomes = bank stabilization through willow/cottonwood planting/decreased sedimentation/increased water quality/quantity will

lead to increased production/population/resiliency of Yellowstone Cutthroat Trout & Leopard Frog, and other important aquatic/

riparian species/Idaho listed Species of Greatest Conservation Need. Success will be measured through streambank erosion

inventories pre/post project implementation and amphibian/reptile surveys conducted by Idaho State University (leverage).

LSO3 Project Deliverables = Removal of 15+ tons of sediment at project completion; planting of cottonwood/willow poles along

BR banks

Outcomes = decreased water temperatures/increased water quality from sediment removal and addition of shade from

cottonwood/willow planting on 11k linear ft of BR banks; 32lbs Nitrate/16lbs Phosphate reduced annually leading to increased

water quality. Success will be measured through strategically placed temperature loggers and water quality samples at 1, 3, & 5-year intervals.



Accomplishments

Deliverables

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Accomplishments to Date

2021-06. State Grant Awarded. Funds made available to the IDL.

2022 - MOU formalized with cooperator

2023 - ~50 acres of aspen habitat improvement through conifer removal (~1600 logs with roots attached removed). Treated and addition 20 acres of hazard fuels. 2 miles of Blackfoot River bank stabilization and habitat improvement using logs with roots attached. Reseeding of disturbed sites from logging and bank stabilization. Weed control was conducted in project area. Planted 100 cottonwood container grown saplings. Planted 2.5 miles of Blackfoot River upland/bank with willow poles. Hosted seven (7) presentations/tours of work - 191 total attendees.

2024: 1.8 miles of river bank were planted with 8150 willow poles

Quantities to Date

- Hazardous Fuels Management 20 Acres treated to reduce hazardous fuels
- Water Quality Enhancement 4.30 Miles of riparian forest treated to enhance water quality
- Water Quality Enhancement 102 Number of trees and seedlings planted to enhance water quality
- Wildlife Habitat Enhancement 52 Acres of habitat treated to enhance wildlife
- Wildlife Habitat Enhancement 4.30 Miles of riparian forest treated to enhance wildlife

Deliverables in Progress

2021 - MOU development with cooperator

- 2022 Implementation of Project work
- 2023 Additional planting of cottonwood saplings and willow poles.

2024: Project is complete

<u>Challenges</u>

2021 - Fire season has caused a delay for IDL being able to enter into agreement with cooperator.

2022 & 2023 - No additional challenges

2024: an excessively large and early snowpack make access to complete plantings difficult.



Impact Area



Information Last Updated 11/6/2024