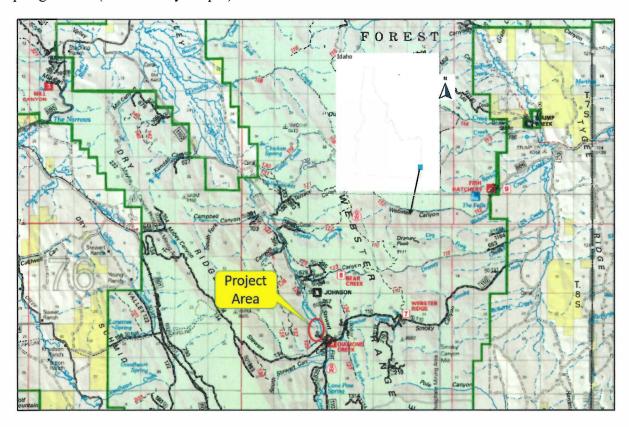
File Code: 1950

Date: February 12, 2020

# INVITATION FOR COMMENTS DIAMOND CREEK RECONNECT PROJECT

Dear Interested Citizen,

The Caribou-Targhee National Forest (CTNF) is seeking comments on a proposal to improve 0.8 miles of Diamond Creek below Stewart Canyon. Project is roughly 20 miles due east of Soda Springs Idaho (See Vicinity Map 1).



Map 1. Vicinity and Location, Diamond Creek tributary to the Blackfoot River 20 miles east of Soda Springs Idaho.

## Background

Diamond Creek is home to Yellowstone cutthroat trout a sensitive species and also contains non-native brook trout. Brook trout seem to dominate the headwaters and cutthroat dominate the lower reaches where fluvial and adfluvial cutthroat may still spawn.

The project is called the reconnect project since prior to 1947 based off aerial photos (Photo 1.) a ditch was started off the creek or a beaver pond that diverted the stream along the higher



easterly side of the valley drying up the original channel along the lower westerly side of the valley. The stream has since been naturalizing in place.

The diverted channel has a very narrow riparian corridor with no real floodplain with an incised channel and many raw vertical banks. A past project 20 plus years ago placed large logs along the bank edges presumably to discourage livestock crossings and to allow the channel to heal. Healing within the existing channel is unlikely to occur until the stream erodes a floodplain as part of this diverted channel.

The project area falls within forest prescription 5.2(b) forest vegetation management and the bottoms within 300 feet of the stream channel is within prescription 2.8.3 aquatic influence zone. This project would result in some shifting within the valley bottom of the 2.83 prescription.

### **Purpose and Need**

The primary purpose of this project is to direct the stream back into its historic channel where it will naturally be connected back to its floodplain and erosion halted in the diverted channel. Fisheries and wildlife habitat will also be improved as habitat will be more stable and diverse as the system can dissipate stream energy over a floodplain.

This project will also improve water quality. Presently the Diamond Creek assessment unit (ID17040207SK016\_03a) is 303(d) listed for sedimentation/siltation and E coli and a total maximum daily load (TMDL) has been established for these pollutants (IDEQ 2018).

There is a need to implement projects across the Forest that improve riparian habitat, both to meet Forest Plan direction for the restoration of riparian areas and from a larger scale perspective, to improve habitat for sensitive species. The 2003 Revised Forest Plan for the Caribou National Forest states that management emphasis is to restore and maintain the health of these riparian areas. This project would be designed to help meet the Forest Plan goals and guidelines for aquatic influence zones (2003 RFP pp. 4:47-53).

#### **Proposed Action**

The action being proposed is to reconnect 0.8 miles of Diamond Creek back to within the historic channel. We propose to do this with a series of plugs on the diverted channel and by excavating a 0.25 miles of new channel within the historic floodplain (Photo 2, white line). Willows and stream bank vegetation is to be salvaged out of the diverted channel to stabilize the stream in the historic channel. Large conifers within the historic channel may be removed and utilized to fortify stream banks and create habitat. Work in the historic channel will be done in the dry, to minimize sediment mobilization, and grades adjusted after water is diverted back in. Material excavated out of the historic channel will be used to plug the diverted channel.

For the majority of the reconnected stream length within the more heavily willowed portions the stream will be left to find the old channel that is visible and determine its own path. Over time as the area is re-watered conifers that have encroached on the valley bottom may be flooded out.

The goal is to recreate a willow dominated valley bottom where water is spread across the floodplain at high flows and in multiple channels across the floodplain at low flows as assisted by beavers.

Channel dimensions will be based upon reference reaches.

This project proposes to use the following 5 types of treatment to meet project objectives and goals (Photo3):

- Set riffle elevations while excavating the channel
- Excavate pools and plant whole willow clump transplants, and place logs along the outside meander bends (Fig. 1.)
- Place sod along all banks, point bars may be left bare
- Plug the diverted channel at 3-4 locations
- construct 3-4 beaver dam analogue structures to support the existing beaver dam (Photos 4 and 5, Fig. 2)

#### **Implementation Timing**

Project is in the stage of undergoing environmental review and comment as well as design, and permitting. Once these phases are complete the next steps will be to secure funding and begin project construction. We anticipate that construction would not begin before July 15, 2021 but may occur any time after the decision memo has been signed and permitting is received.

#### **Categorical Exclusion**

The Council of Environmental Quality (CEQ) regulations provide for categorical exclusions (CE) to allow Federal agencies to exclude from documentation in an environmental assessment (EA) or environmental impact statement (EIS) certain categories of actions that do not individually or cumulatively have a significant effect on the human environment. Due to the minimal amount of disturbance associated with this proposed project, along with the improvements to wildlife habitat the Forest Service is considering analyzing this proposed project under a CE.

This proposal is consistent with the types of actions described within the Forest Service's National Environmental Policy Act Handbook (FSH 1909.15 Chapter 30) contained in Sec. 32.2 category 6 wildlife habitat improvement activities that do not include the use of herbicides or more than a mile of low standard road (36 CFR 220.6(e)(6)). Forest Service resource specialists have reviewed the proposed action and do not anticipate the proposed project to lead to any significant impacts or extraordinary circumstances, as described by Forest Service NEPA procedures at 36 CFR 220.6(b)(i-vii).

The Soda Springs District Ranger will be the deciding officer on this project.

If this project is analyzed under a CE, pursuant to the Consolidated Appropriations Act of 2014 (Pub. L. No. 113-76) and the Agricultural Act of 2014 (Farm Bill) (Pub. L. No. 113-79), this project is not subject to pre-decisional administrative review or administrative appeal. Further, it is not subject to legal notice and comment under the pre-decisional administrative review process (36 CFR 218.23).

We are interested in your comments on this proposed action. Please mail, email, or fax your comments to:

Lee Mabey, Project Lead 1405 Hollipark Drive Idaho Falls, 83401 email: lee.mabey@usda.gov phone: 208-557-5784

fax: 208-557-5826

Please feel free to pass this notice on to others you think may have an interest or concern with this project. Comments would be most useful if received by March 16, 2020.

Sincerely,

Bryan K. Fuell District Ranger

Sugar & Juell

References:

Idaho Department of Environmental Quality, 2018, Idaho's 2016 Integrated Report Final. (https://mapcase.deq.idaho.gov/wq2016/scripts/adb2016.aspx?WBIDSEGID=ID17040207SK01 6 03a)

## **Photos and Figures**

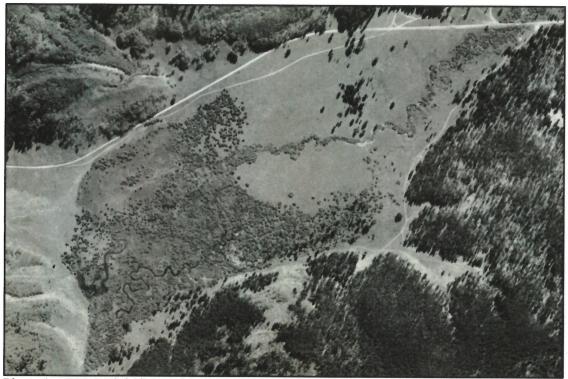


Photo 1. 1946 Aerial photo of project area, stream appears to have been naturalized for some time. Note road on westerly margins near historic stream channel.



Photo 2. 2016 aerial photo, Red line indicates easterly channel, blue line the westerly historic channel, and the white line the 0.25 mile portion of the historic channel that will need to be remeandered and revegetated.

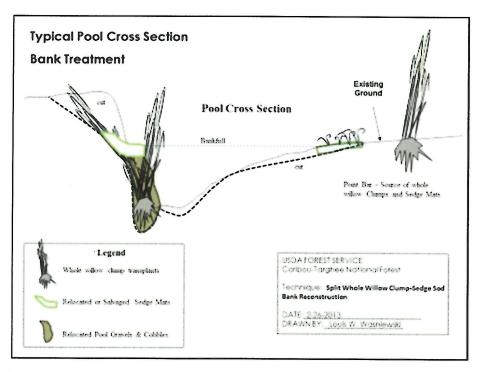


Figure 1. Typical Pool cross-section and willow plantings.

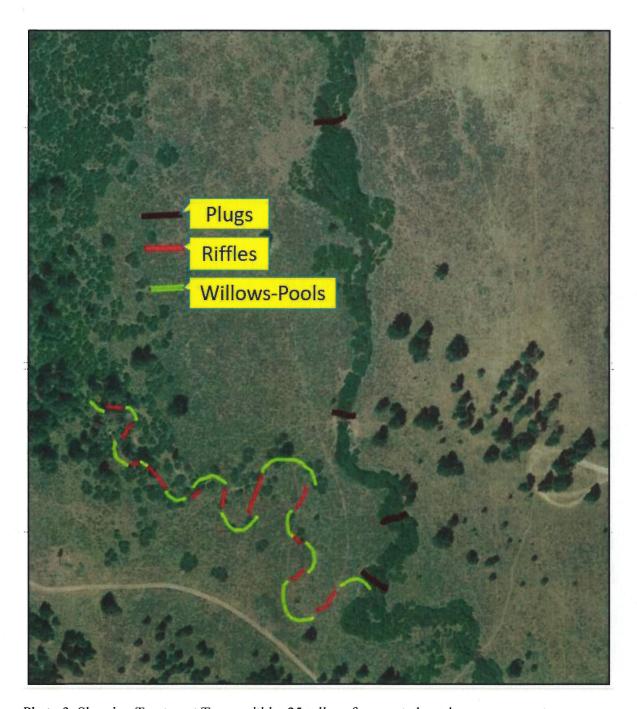


Photo 3. Showing Treatment Types within .25 miles of excavated reach.



Photo 4. Showing downstream side of large beaver dam (see Below), all supporting dams downstream have blown out.



Photo 5. 2016 Aerial photo with evidence of three Beaver dams, in 2019 when this site was visited most evidence of these dams were gone. Propose to hand construct post assisted structures here that the beaver can build on to relieve pressure on the primary dam.

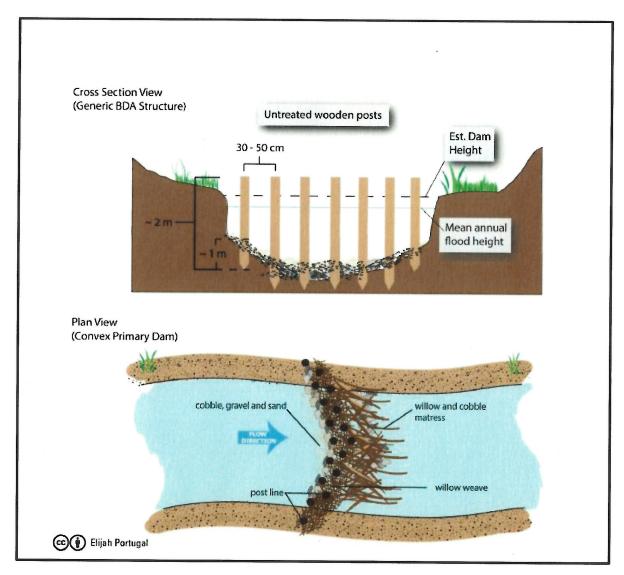


Fig 2. Generalized illustration of BDA construction, Illustration Credit: Elijah Portugal.