DECISION MEMO

Pete King Creek Beaver Dam Analog

USDA Forest Service, Northern Region
Nez Perce – Clearwater National Forests
Lochsa - Powell Ranger District
Idaho County, Idaho

I. Introduction

After having reviewed relevant data, analyses, and public comments relating to this proposal, I have decided to install four beaver dam analogs along Pete King Creek in the Nez Perce-Clearwater National Forests, Idaho County, Idaho. The Project area is located in T33N, R6E, SW/4 Section 19, Boise Meridian. (See attached map).

II. Purpose and Need

The Purpose of the project is to use the analogs to mimic the natural conditions created by beaver dams and their effects on stream geomorphology. Pete King Creek suffers from chronic, long-term sediment aggradation, and high cobble embeddedness. Both cause declines in fish habitat resources. The analog structures are designed to function as partial dams that, during moderate flows, will scour pools, redistribute sediment, recruit additional vegetation and organic debris, improve channel complexity, and promote a diversity of substrate and hydraulic conditions for fish spawning/rearing habitat, and for their food sources. In addition, as there are beaver present in the Pete King drainage, the presence of the analogs may encourage beaver to take occupation of the structures and build upon them.

The project will help meet Clearwater National Forest Plan objective (Plan, p. II-5) to: *Restore selected, presently degraded fish habitat through habitat improvement projects designed to achieve stated objectives (See ... Management Area M2).*

<u>Management Area M2</u> (Riparian Area; Plan, pp. III-68 to III-73)

Goals: Manage...areas of special consideration, distinctive values, and integrated with adjacent management areas to the extent that water and other riparian dependent resources are protected.

<u>Wildlife and Fish goal</u> – Remove structures (log jams, etc.) ... identified as fish barriers. Retain those that enhance habitat. Construct new structures to improve or restore degraded habitat.

<u>Water and Soil goal</u> – Conduct watershed and stream improvements that will:

(1) Enhance riparian and water resources.
(2) Rehabilitate and/or mitigate the adverse effects of fire, flood, and other natural or management related causes.

Project Design / Environmental Mitigation

The Nez Perce Tribe (NPT), in partnership with the Nez Perce –Clearwater National Forest, proposes to install up to four beaver dam analogs along a quarter mile stretch of Pete King Creek. All work will be done by hand using a hydraulic post driver, chainsaw, and hand tools. Access to the project site is via Forest Service Road 453. The project location is approximately 0.25 miles past the point the road turns to a designated motorcycle trail.

NPT personnel will construct the in-stream structures using locally gathered posts and willow or alder cuttings. The structures will be created by driving the un-treated posts into the stream bed using a hydraulic post driver and then weaving willow and alder branches/cuttings in-between the posts. The analogs will be installed such that they partially cross the active channel of Pete King Creek (i.e. the structures will not stretch from bank to bank). The structures will be set approximately 300 feet apart on alternate sides of the stream reach to mimic the existing large wood and remnant beaver dams currently present in Pete King Creek.

Floodplain inundation will be more frequent in the areas of beaver dam analog construction and locally fine sediment will be trapped behind the structures. Conversely, localized bank scouring may occur opposite the structures. The structures are designed to be temporary, washing out with high flow events. No forest roads or trails are present where the structures are to be constructed. Only beneficial effects for wetland vegetation, stream substrate sorting, and habitat enhancement are expected.

The use of locally gathered willow or alder cuttings is anticipated to have minimal impacts on the local native vegetation. To mitigate the effects of gathering the material, a sprouting branch will be left on every harvested plant to allow for rapid re-growth. The area harvested for the project will not exceed 0.25 acres.

All permits required for disturbance of water or wetlands (e.g. Army Corps of Engineers 404 permit, Idaho Department of Water Resources Stream Alteration Permit) will be obtained prior to initiating project work.

The instream work window for the project will be from July 15 to September 30 in compliance with the Programmatic Biological Opinion for Habitat Restoration Projects in Idaho (USFWS 01EIFW00-2014-F-0456, NMFS No. 2014/832).

Design Criteria include:

- All equipment and vehicles will be thoroughly cleaned to prevent the introduction or spread of noxious weeds.
- A spill kit will be onsite for fuel spills (chainsaw gas).
- Structure design and installation will insure that the scour and redistribution of sediment do not undermine stream banks or cause excessive headcutting.
- Posts will be cut to a height to provide effective dam function but not trap excessive debris at high flows.
- Willow and alder cutting should be postponed as late in the project window as possible, preferably after August 1, to avoid potential disturbance/destruction of active nests (bird).

If an active nest is found the occupied tree as well as any immediately adjacent trees should be left uncut, and the area avoided during project implementation.

III. Rationale for Decision and Reasons for Categorically Excluding the Decision

Category of Exclusion and Rationale for Using the Category

Based on information in this document and the project record, I have determined this project is not significant in either context or intensity (40 CFR 1508.27), that no extraordinary circumstances affecting resource conditions exist (36 CFR 220.6), that this project may be categorically excluded from documentation in an EA or EIS, and that it meets all the criteria outlined in 36 CFR 220.6(e)(18): *Restoring wetlands, streams, riparian areas or other water bodies by removing, replacing or modifying water control structures such as, but not limited to, dams, levees, dikes, ditches, culverts, pipes, drainage tiles, valves, gates, and fencing, to allow waters to flow into natural channels and floodplains and restore natural flow regimes to the extent practical where valid existing rights or special use authorizations are not unilaterally altered or canceled.*

The rationale for my decision is based on: (1) the proposed action fully meeting the criteria for Categorical Exclusions, (2) the proposed action meeting the purpose and need, (3) the findings related to extraordinary circumstances, discussed below, (4) the project's consistency with laws and regulations, (5) the on-the-ground review and discussion with District resource specialists, and (6) my review of the Biological Assessments (BA), Biological Evaluations (BE), and specialists' reports.

Finding of the Absence of Extraordinary Circumstances to Resource Conditions

1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat or Forest Service sensitive species.

The Forest Interdisciplinary (ID) Team Botanist determined the project would have "no effect" to federally listed plant species and/or their habitats. The project may impact green bug-on-a-stick, Pacific dogwood, light hookeria, and naked-stem rhizomnium, Regional Forester's sensitive species, but would not cause a trend toward federal listing or reduce viability for the population or species.

The ID Team Wildlife Biologist determined the project would have "no effect" to Canada lynx or its habitat. A "may adversely impact individuals or habitat" determination was made for flammulated owl, fisher, fringed, long-eared and long-legged myotis, gray wolf, and Western (boreal) toad. Overall, the effects from human disturbance (presence and noise) would be minor and of short duration and would not result in a loss of viability, nor cause a trend towards federal listing or a loss of species viability range wide.

The Interdisciplinary Team Fish Biologist determined the proposed actions would "likely adversely affect" bull trout and steelhead trout, federally threatened species, because the species and designated critical habitat are both located within the project area. Based on project timing and fish distribution, a "no effect" determination was made for fall Chinook salmon. The project is designed to comply with all Terms and Conditions and Design Criteria

in the Programmatic Biological Opinion for Habitat Restoration Projects in Idaho (USFWS 01EIFW00-2014-F-0456, NMFS No. 2014/832). Pre-project checklists have been presented to these agencies.

Westslope cutthroat trout, spring Chinook salmon, interior redband trout and their habitats may also be adversely affected; however project activities would not result in a loss of viability in the planning area, nor cause a trend to federal listing or a loss of species viability range wide.

Based on the above assessment, no effects exist that will cause an incremental cumulative effect and no extraordinary circumstances were identified for these resources. For the complete analyses, see the Fishery, Wildlife and Botany Biological Assessments and Evaluations and specialists' reports in the project record.

2. Floodplains, wetlands, or municipal watersheds.

The Forest Hydrologist has determined the project would have no direct or indirect adverse effects to floodplains, wetlands, or municipal watersheds. No measureable increase in sediment would occur. Overall net benefits to aquatic resources and stream channel processes are expected with this project, including: increased planform and bedform complexity (i.e., higher sinuosity, more pools, increased sediment sorting, multiple channels), more floodplain access, raised water tables, decreases in stream temperatures, an expansion of the riparian forest, and an increase in the number of beaver dams. Cumulative effects (if they occur) would be most noticeable at the site scale, becoming progressively less discernible at the sub-watershed, watershed, and sub-basin scales. Given the low degree of anticipated site-level effects, cumulative effects are expected to be negligible.

The proposed project is also consistent with all applicable State and Federal water quality laws because project design criteria and best management practices (BMPs) have been included to protect water resources.

Based on this analysis, no extraordinary circumstances were identified regarding the effects to water quality of streams within the area; downstream waters; or resources in floodplains, wetlands, and municipal watersheds; thereby complying with EO 11988, EO 11990, and FSH 1909.15 Chapter 31.2.2.

3. Congressionally designated areas, such as wilderness, wilderness study areas or national recreation areas.

The project is not located in a wilderness, wilderness study area or national recreation area.

4. Inventoried Roadless areas or potential wilderness areas.

The project is not located in a roadless area or potential wilderness area; therefore, the proposed action will have no effect on Roadless characteristics as identified in 36 CFR 294.

5. Research Natural Areas.

The project is not within or adjacent to any Research Natural Areas.

6. American Indians and Alaska native religious or cultural sites.

The Forest Cultural Resource Specialist has determined the above project has little likelihood to adversely affect cultural properties. As a result, a *No Inventory Decision* has been made. Therefore, no extraordinary circumstances were identified to native religious or cultural sites.

7. Archaeological sites or historical properties or areas.

The Idaho State Historic Preservation Officer, or the Forest Archaeologist via the use of the North Idaho Programmatic Agreement, has determined that no archaeological or historic property will be adversely affected by this project. Therefore, no extraordinary circumstances were identified to these resources

IV. Interested and Affected Agencies, Organizations, and Persons Contacted

On December 17, 2015, letters providing information and seeking public comment were mailed to individuals, organizations, a variety of state and local agencies, and the Nez Perce and Coeur d'Alene tribes. Three letters, as well as any responses, are found in the project record. Their comments were considered in the resource analyses, and are addressed in Appendix A.

V. Findings Required by other Laws

Based on my review of the actions associated with this project, I find that this Project is consistent with applicable Federal laws and regulations, including the standards and guidelines contained in the 1987 Clearwater National Forest Plan, as amended, as required by the National Forest Management Act of 1976. My decision also complies with all Federal, state or local laws or requirements for the protection of the environment and cultural resources, as follows:

National Forest Management Act and Clearwater National Forest Plan: This action is consistent with the standards and guidelines contained in the 1987 Clearwater National Forest Plan, as amended, as required by the National Forest Management Act of 1976. In addition, design features and mitigation measures ensure compliance with the act.

Forest Plan Amendment 20 - PACFISH Riparian Habitat Conservation Areas (RHCAs): All activities associated with the proposed action comply with direction regarding PACFISH (refer to the project record).

Clean Water Act and State Water Quality Laws: The ID Team Hydrologist has determined that this project complies with the Clean Water Act and state water quality laws, and will protect beneficial uses.

Clean Air Act: This project will comply with the provisions of the Clean Air Act, and the rules, regulations, and permit procedures of the Environmental Protection Agency (EPA) and the Idaho Department of Environmental Quality (IDEQ). No prescribed burning or other activity with the potential to significantly affect air quality is proposed.

Endangered Species Act: A Forest Service Fish Biologist, Wildlife Biologist, and Botanist evaluated the proposed action with regard to the Endangered Species Act as documented in the Biological Assessments, Biological Evaluations, and specialist's reports, and determined this project is consistent with the Endangered Species Act.

Migratory Bird Treaty Act: This project complies with the Migratory Bird Treaty Act since it will result in no substantial loss of migratory bird habitat, nor will there be any measurable impact(s) on Neotropical migratory bird populations as a whole.

The project complies with the U.S. Fish and Wildlife Service Director's Order #131 related to the applicability of the Migratory Bird Treaty Act to Federal agencies and requirements for permits for "take." In addition, this project complies with Executive Order 13186 because the analysis meets agency obligations as defined under the January 16, 2001 Memorandum of Understanding between the Forest Service and U.S. Fish and Wildlife Service designed to complement Executive Order 13186.

National Historic Preservation Act: Because no cultural properties are located within the area of potential effects, the Forest Cultural Resource Specialist has made a "no historic properties affected" determination for the project per the North Idaho Programmatic Agreement. Therefore, this project meets the agency's responsibilities under the National Historic Preservation Act (16 USC 470), as amended, and is consistent with the *Programmatic Agreement between the Idaho State Historic Preservation Officer, the Advisory Council on Historic Preservation and the Region 1 National Forests in Northern Idaho Regarding the Management of Cultural Resources.*

American Indian Treaty Rights: The project was presented to the Nez Perce Tribe during the quarterly staff-to-staff coordination meetings on January 22, 2016. The project will not affect Nez Perce Tribe Treaty rights or Nez Perce Tribal members' abilities to exercise those rights.

No effects to watershed resources, fisheries, wildlife or plant resources will occur as a result of the proposed actions (see B. Finding of the Absence of Adverse Effects to Extraordinary Circumstances). By ensuring viability of all species and protection of watershed resources, the proposed actions are consistent with treaty obligations and trust responsibilities.

Environmental Justice: The proposed action will not disproportionately impact consumers, Native American Indians, women, low-income populations, other minorities or the civil rights of any American Citizen, in accordance with Executive Order 12898. No disproportionate impacts to minority or low-income populations were identified during scoping or the effects analysis.

Prime Farm Land, Range Land, and Forest Land: The proposed action complies with the Federal Regulations for prime land. The definition of "prime" forest land does not apply to lands within the National Forest System. The project area does not contain any prime range land or farm land. Federal lands will be managed with appropriate sensitivity to the effects on adjacent lands.

Energy Requirements: There are no unusual energy requirements for implementing the proposed action.

Other Laws or Requirements: The proposed action is consistent with all other Federal, State or local laws or requirements for the protection of the environment and cultural resources.

VI. Contact Person

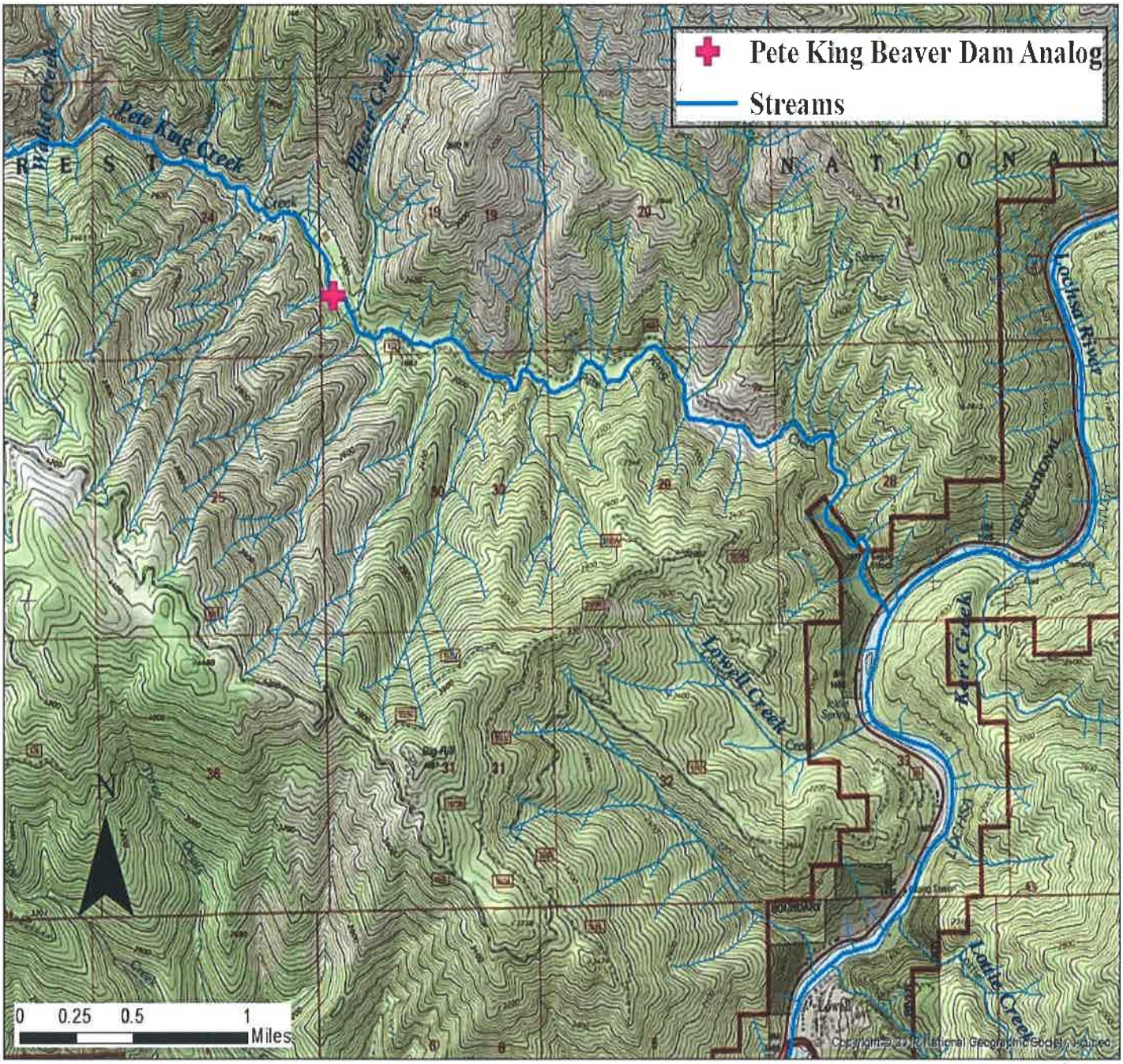
Questions regarding this decision should be sent to Jeff Chynoweth, Small NEPA Team Coordinator, c/o Nez Perce–Clearwater Supervisor's Office, 903 Third Street, Kamiah, Idaho 83536 or by telephone to (208) 935-4260 or FAX at (208) 935-4275 during business hours (M-F, excluding Federal holidays, 7:30 a.m. to 4:30 p.m., PST).

VII. Signature of Deciding Officer

BRANDON KNAPTON
Lochsa-Powell District Ranger

6-30-16
Date

cc: Rebecca Lloyd

Enclosures (1): Map

Map of Pete King Creek Beaver Dam Analog Project Site