

Decision Memo

Christopher Creek Aquatic and Riparian Habitat Enhancements

Payson Ranger District

Tonto National Forest

Gila County, Arizona

Township 11 North, Range 12 East, Sections 17, 18, 19, 20, 26, 25, 29 and 30

Background

Christopher Creek is located east of the Town of Payson in Gila County, Arizona, entirely on lands managed by the Payson Ranger District Tonto National Forest (TNF). The Arizona Game and Fish Commission (Commission), through the Arizona Game and Fish Department (AGFD), has been coordinating efforts to enhance the existing aquatic habitat and riparian characteristics of Christopher Creek (See Figures 1). AGFD has conducted a series of aquatic habitat assessments documenting current conditions of the creeks within the project area. Stream morphology, geomorphic condition, and potential for aquatic habitat enhancement and restoration are addressed in these assessments, which include:

- *Natural Channel Design (NCD), Inc. 2010a. Christopher Creek Aquatic Habitat Assessment, Project #E0075803, Site Assessment Report, Submitted to the Arizona Game and Fish Department.*
- *Natural Channel Design, Inc. 2010b. Christopher Creek Aquatic Habitat Improvement Project #E0078277. Submitted to the Arizona Game and Fish Department.*
- *Tonto National Forest Land Management Plan (LMP). 1985 (as revised)*

The results of these assessments and recent surveys indicate that stream restoration action is necessary. Over the past decade, the condition of aquatic habitat has declined due to severe flooding from high intensity fires in the watershed. Flooding in streams with steep slopes has scoured stream channels to bedrock. Stream substrate has been transported downstream reducing pool and run habitat due to sedimentation. A decrease of pool and run habitat causes a reduction in the number and size of trout that can occupy the impacted stream reach. Additionally, some reaches lack enough riparian vegetation to prevent increases in water temperature that are unfavorable for coldwater fishes, such as trout.

Purpose and Need for Action

The purpose of this project is to enhance aquatic habitat in two reaches of Christopher Creek; the upstream reach is a relatively short portion upstream of the village of Christopher Creek at the See Canyon trailhead and the campground reach is a 1.3-mile section of Christopher Creek centered on Christopher Creek Campground (See Figure 1).

This action is needed because the creeks have deteriorated in the past decade from severe fires flood and roadway construction and use (NCD 2010a, NCD 2010b). This action responds to the goals and objectives outlined in the 1985 TNF Plan and helps move the project area toward desired conditions described in that plan.

The project area is located in Management Area 4D (Mogollon Rim Area) as described by the TNF Plan (1985). The area is managed for a variety of renewable resource outputs with primary emphasis on intensive, sustained yield timber management; timber resource protection; creation of wildlife habitat diversity; increased populations of harvest emphasis species; and recreation opportunity. The project would be in conformance with all applicable Standards and Guidelines for Management Area 4D as outlined in the Forest Plan. The proposed action would be anticipated to improve habitat for wildlife, specifically aquatic and riparian obligate wildlife species and sustain recreational fishing opportunities.

Conservation Measures and Best Management Practices

The following conservation measures would be used to protect the soil and water, and biological resources within the project areas of the creeks and thus reduce construction related impacts to the watershed and biological resources (Tonto National Forest Plan 1985):

- When possible, trees that have fallen naturally and are still suitable for use would be used instead of felling live trees.
- If no fallen trees are available living trees will be used. No trees greater than 18 inches diameter at breast height (dbh) would be felled (larger diameter downed logs can be used) (Forest Plan pp. 40-8 to 40-12).
- Tree removal would focus on trees that are suppressed or subordinate in growth form and/ or diseased, when possible;
 - Slash would be lopped and scattered in such a manner so that no slash pile is over three feet high and is not in contact with living trees (Forest Plan pp. 40-8 to 40-12.);
 - Slash would be used to cover disturbed areas when possible; and
 - No Douglas fir or riparian obligate trees would be felled.

- A Forest Service biologist would assist in the identification of trees (living or downed) to be used within designated critical habitat for the Mexican spotted owl. No trees would be felled from a goshawk post fledging area (PFA) or Mexican spotted owl protected activity center (PAC). No trees with a raptor nest that has been active in the past year would be felled (Forest Plan pp. 40-8 to 40-12).
- The active stream channel would not be crossed by heavy equipment.
- Soil raking, distributing slash from felled trees, and replacing ground litter would be used to return the terrain to a natural condition immediately after ground-disturbing activities such as, but not limited to:
 - Heavy equipment use--trucks, trailers, tractors, back hoes, front end loaders, etc.;
 - Skid marks (drag marks) caused by dragging felled trees into place;
 - Divits caused by removing boulders from the uplands and moving into place; and
 - Any other ground disturbing activities associated with securing logs or boulders into place.
- Willow and cottonwood pole cuttings would be taken during the dormant season; after leaf fall and before bud burst.
- No more than two-thirds of the willow or cottonwood pole source tree would be harvested.
- Pole planting on freshly worked banks would be accompanied by seeding with a mix of local native grasses.
- Project related construction activities would only occur September 1 through November 30. Restricting construction activities to the autumn would reduce or eliminate impacts to recreational users of the creek, nesting migratory birds, nesting goshawk and Mexican spotted owl, and other sensitive avian species (Forest Plan pp. 40-8 to 40-12).
- Construction of enhancement features within the active channel would not occur during high flows, such as during heavy local storms.
- Construction activities would be subject to standard Forest Service best management practices (BMPs) contained in FSH 2509.

Cultural and historic properties mitigation measures include:

- Cultural sites and historic properties will be flagged for avoidance.
- Only at the point of rehab, may rehab materials (sand, soil, gravel, etc.) be piled adjacent to site boundaries (Forest Plan, Appendix H, pg. 251).

Reasons for Categorically Excluding the Proposed Actions

My assessment is that this proposal falls within the categories of actions listed in the Forest Service National Environmental Policy Act Handbook (FSH) that are excluded from documentation in an Environmental Assessment or Environmental Impact Statement. This category is found in FSH 1909.15, Chapter 32.2 (7) “Modification or maintenance of stream or lake aquatic habitat improvement structures using native materials or normal practices.”

I have determined that there are no extraordinary circumstances associated with this project that would preclude the use of this category. This determination is based on the absence or the negligible level of adverse effects on the following resource conditions:

- a. Federally-listed threatened, endangered and/or Region 3 sensitive species or designated critical habitat.** A biological assessment and biological evaluation (BABE) was prepared by the Tonto NF to determine potential project related impacts to federally-listed threatened or endangered species or designated critical habitat, species proposed for federal listing or proposed critical habitat, or forest service sensitive (TES) species (USFS, 2010a). A wildlife specialist report (WSR) was prepared to assess potential project related impacts to Forest Service management indicator species (MIS) and migratory birds (USFS, 2010b). The WSR determined that actions proposed in this project are not expected to cause a trend in migratory bird species toward federal listing as threatened or endangered. No significant effects will occur to rangewide populations of migratory bird species, because the proposed action will not affect the suitability of migratory bird habitat and will not alter forest structure.
- b. Floodplains, wetlands, or municipal watersheds.** The Proposed Action would authorize aquatic habitat improvements within the active stream channel of Christopher Creek. Perennial streams, riffle and pool complexes, and semi-continuous fringe wetlands are present throughout the project areas. With the exception of a few isolated rocky locations, the banks along each of the creeks meet the requirements for classification as a wetland fringe, including the presence of hydrophytic vegetation and wetland hydrology. The TNF conducted a Clean Water Act Section 404 Jurisdictional Delineation Report (TNF 2010c) and has submitted this report to the UA Army Corps of delineation of “waters of the United States” (Waters) which may be affected by dredge or fill associated with the proposed aquatic habitat restoration of Christopher Creek.

Approximately 3.0 acres of non-wetland Waters are located in the Christopher Creek survey areas. Based upon the estimated width of semi-continuous wetland fringe along each creek, it is approximated that 1.2 acres of potential wetland

habitat are located in the Christopher Creek survey areas. The project would require a pre-construction notice to be submitted to the US Army Corps of Engineers (COE) Notifying Nationwide Permit Number 27. Subsequently the TNF has determined that the proposed project will manipulate the streambed morphology of portions of Christopher creek and will enhance the geomorphic stability of the stream as well as improve riparian habitat and habitat conditions for trout.

- c. **Congressionally-designated areas, such as wilderness, wilderness study areas, or National Roadless Areas.** The project is outside any of these areas, therefore no discussion is warranted.
- d. **Inventoried Roadless Areas.** The project area is outside any of these areas, and therefore no discussion is warranted.
- e. **Research Natural Areas.** The project area is outside any of these areas, and therefore no discussion is warranted.
- f. **American Indian religious or cultural sites; and archaeological sites, or historic properties or areas.** A cultural resources specialist report (CRSR) was prepared for the Christopher Creek project area (Logan Simpson Design, 2011). The CRSR recommended the project area should be surveyed for heritage resources before the implementation of the aquatic habitat enhancement project. A Class III survey was subsequently conducted. Two previously recorded prehistoric cultural resources sites were documented. One of the sites has been previously determined eligible for inclusion in the National Register of Historic Places and the other is recommended as not eligible for listing in the NRHP. Avoidance of the site that is NRHP eligible is recommended.

The implementation of the proposed action may encroach on cultural sites that are eligible for listing in the NRHP or that are unevaluated for NRHP eligibility. Direct effects from this action would be mitigated through minor adjustment to the access location, native material gathering areas and construction activities to avoid cultural sites. Additionally, appropriate soil erosion measures and requirements would be implemented during construction to stabilize any cultural resources site adjacent to an enhancement site. There are no anticipated effects from the proposed action because cultural resources sites located and documented from pre-construction surveys would be avoided. Sites will be flagged by a qualified archaeologist prior to construction, and monitoring will occur during all ground-disturbing activities to ensure the sites are avoided. If previously unrecorded cultural resources are encountered during project activities, these activities must be discontinued in the immediate vicinity of the discovery, and work should not resume until the Tonto NF archaeologist has been allowed time to properly address the nature and significance of the discovery.

Additional comments received during scoping. Few comments were received during the scoping process that voiced concerns with the scope of this decision. Subsequent to comments received during the scoping period, the Interdisciplinary Team concluded that no additional field review of the proposed action is warranted and did not constitute extraordinary circumstances.

Public Involvement

On December 22, 2010, a notice of 30-day comment period was published in the *Payson RoundUp* and a scoping letter was mailed out to 39 individuals and organizations outlining the proposed action. Three letters were received during the comment period: White Mountain Apache Tribe requested a copy of the Cultural Resources Specialist Report and asked for a more detailed description of the proposed action; The Arizona Department of Environmental Quality indicated the necessary permits required for this project; and the Grand Canyon Chapter of the Sierra Club included concerns that the project may focus on non-native aquatic species, suggested minimizing use of heavy equipment. All of these comments have been addressed in the “Conservation Measures and Best Management Practices” section of this decision.

Findings Required by Other Laws and Regulations

This decision is consistent with the Forest Plan, Forest Service Policy, and other management considerations. The project was designed in conformance with the Forest Plan and other federal and state law, policy, and direction applicable to the resources present in the Tonto NF. *The National Forest Management Act of 1976 (Public Law 104-33, as amended)* requires the U.S.F.S. to provide for biological diversity on National Forest Service lands consistent with overall multiple-use objectives and to maintain viable wildlife populations in the planning area. The Forest Plan discloses forestwide standards and guidelines and management area direction.

Implementation of this decision will not violate any Federal, State, or local laws or requirements imposed for the protection of the environment including:

- *Clean Water Act*, as amended
- *Clean Air Act*, as amended
- *Endangered Species Act of 1973*, as amended
- *American Antiquities Act of 1906* and *Historic Preservation Act of 1966*
- *Executive Order 13186 of 2001, Migratory Bird Treaty Act*
- *Executive Order 12898 of 1994, Environmental Justice*
- *Executive Order 11988 Floodplain Management*
- *Executive Order 11990 Protection of Wetlands*

Decision

I have decided to enhance aquatic habitat in approximately 1.3 miles of Christopher Creek, specifically:

- Installation of spawning gravel, mini-weirs, root wads, tree or rock barbs, cross-over and loose-crossed logs, boulder clusters, log overhangs, and brush revetments;
- Excavation of pools; bank sloping; willow pole and seeding plantings along banks; and
- Replacement of Jersey barriers.

Heavy machinery will be used only in areas that are currently accessible to heavy equipment. In areas that cannot accommodate heavy equipment access, the enhancements will be accomplished using hand tools. These structures can be installed in phases over a period of approximately 4 months to 4 years, depending on the availability of funds.

In addition to enhancement of fish habitat, some minor trail work may be included in the project design such as designation of paths, placement of steps and stream access points to remove braided trails and improve streamside vegetation establishment.

In general, material for construction of enhancement features will include relocation of existing boulders and/or logs from within the active stream channel. When material is not available in the active channel, it will be obtained from within a 100-foot radius of the proposed feature. Some structures will require steel cable and anchors to keep them in place; however, the use of cable will be minimized and native materials will be utilized as much as possible. In areas without machine access, structures will be installed by hand crews, which will limit the size and types of materials utilized.

Administrative Review (Appeal) Opportunities

This decision is not subject to appeal pursuant to regulations at 36 CFR 215 because no substantive comments were received. Substantive comments are defined in Title 36, Code of Federal Regulations, section 215.2 (36 CFR 215.2) as “comments within the scope of the proposed action, specific to the proposed action, have a direct relationship to the proposed action, and include supporting reasons for the responsible official to consider.” Substantive comments provide meaningful and useful information about concerns and issues and can be used to enhance project analysis and decision making. It is the responsibility of the responsible official to determine if a comment meets the definition of a substantive comment (36 CFR 215.5(a)(6)). If there is a question about whether a comment is substantive or not, it should be deemed substantive. The determination of the responsible official of which comments are substantive and who submitted them (whenever practical), should be written, dated, and placed in the record.

Implementation Date

This project can be implemented immediately after the decision is published in *Payson RoundUp*. I anticipate implementing this project on April 1, 2013.

Contact

For additional information, contact Angela Elam, District Ranger, Payson Ranger District, 1009 E. Hwy 260, Payson, Arizona 85541, (928) 474-7900; aelam@fs.fed.us



12-27-2012

ANGELA ELAM

Date

Payson District Ranger

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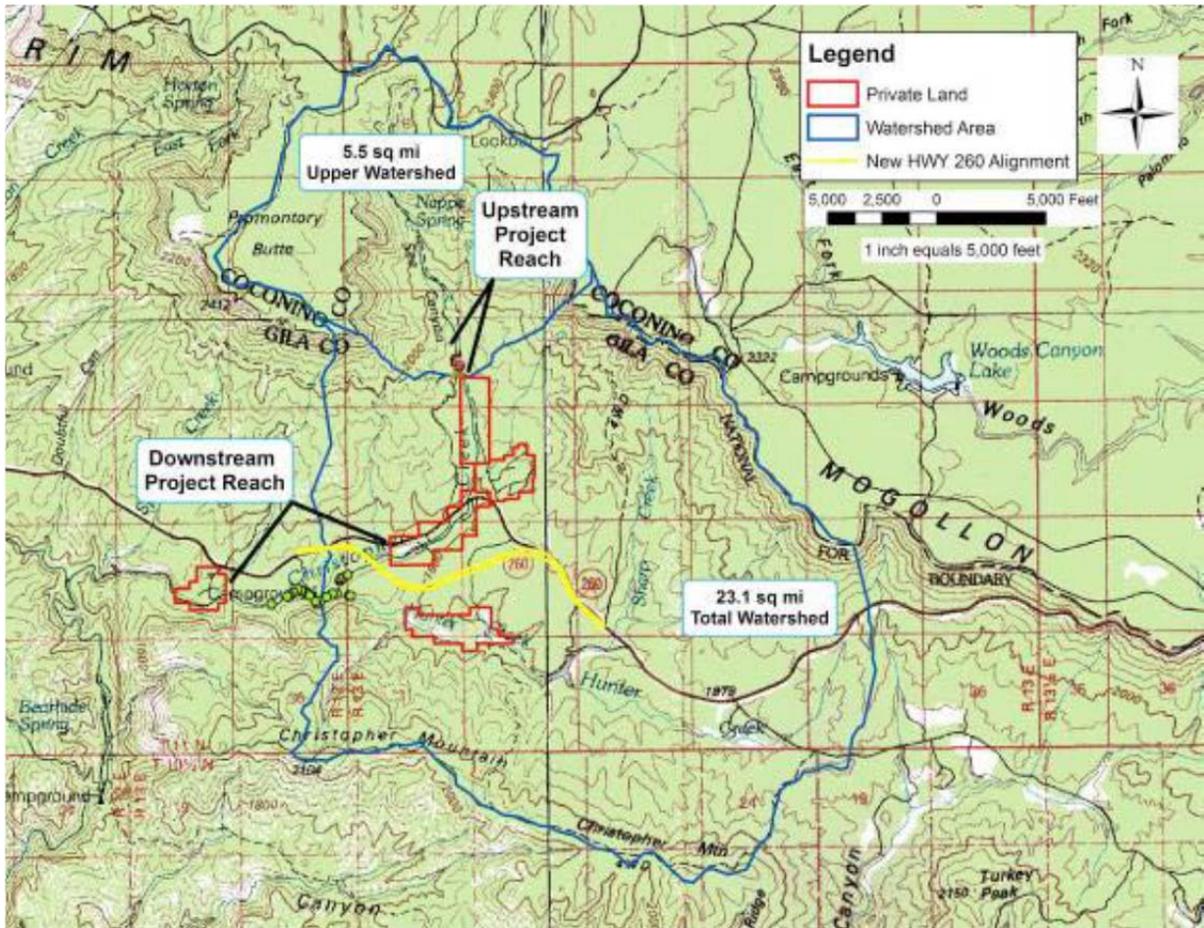


Figure 1: Map of Christopher Creek Aquatic and Riparian Habitat Enhancements