



File Code: 1900; 1500
Date: June 13, 2015

The Lower Dutch Creek Channel Rehabilitation Project is a collaboration among the US Department of Interior's Trinity River Restoration Program and the US Department of Agriculture's Forest Service.



Dear Interested Parties:

In cooperation with the US Department of Interior's (USDI) Bureau of Reclamation (Reclamation), the Shasta-Trinity National Forest (STNF) proposes to conduct mechanical channel rehabilitation activities on National Forest System (NFS) lands along the mainstem Trinity River downstream of Lewiston Dam at the Lower Dutch Creek Rehabilitation Site (River Mile [RM] 85.0-85.5). Project work would be part of the ongoing Trinity River Restoration Program (TRRP) work to restore the anadromous fishery of the Trinity River.

The Dutch Creek Channel Rehabilitation Project was originally scoped in November of 2014. Reclamation and STNF have revised the proposed design of the Dutch Creek Channel Rehabilitation Project in response to public comments received during the scoping period and recommendations by the TRRP Design Team to maximize juvenile fish habitat. The project that was originally scoped as the Dutch Creek Channel Rehabilitation Project has been divided into two smaller projects, the Lower Dutch Creek Channel Rehabilitation Project and the Upper Dutch Creek Channel Rehabilitation Project. Each of these revised proposed actions will have a smaller footprint during implementation than the original project, allowing greater public and private access to recreationists and landowners during project implementation.



This scoping letter addresses the Lower Dutch Creek Channel Rehabilitation Project. The Upper Dutch Creek Channel Rehabilitation Project will be scoped separately at a later date. At that time, there may be a need to propose temporary road access to the Upper Dutch Creek Channel Rehabilitation Project through the Lower Dutch Creek Channel Rehabilitation Project area. This proposed action would be discussed during scoping for the Upper Dutch Creek Channel Rehabilitation Project.

The proposed river channel rehabilitation activities, which would occur on National Forest Service (NFS) lands, would create complex salmon and steelhead habitat, enhance natural river processes for the benefit of aquatic and terrestrial wildlife, and provide conditions suitable for reestablishing native riparian vegetation. As a Cooperating Agency under the National Environmental Policy Act (NEPA), the STNF will work with Reclamation to conduct NEPA analysis and write an Environmental Assessment (EA) for the proposed action. By preparing an EA, the agencies are fulfilling federal policy and direction to comply with NEPA pursuant to 36 CFR 220 and 43 CFR Part 46.

Your Involvement:

The purpose of this scoping letter is to invite you to participate in the NEPA analysis process for the Lower Dutch Creek Channel Rehabilitation Project (Project), by providing comments, suggestions, or concerns you may have about this proposal during this public scoping period. To encourage your informed participation, this letter includes a general description of the proposed action and the purpose and need for that action. If you have information you feel the agencies, including STNF and Reclamation may not be aware of, or feel you have issues (points of dispute, debate, or disagreement) regarding potential effects of this proposed action, please send those issues in writing to the USFS at the address listed at the close of this letter.

Issues that the interdisciplinary team identifies as valid and relevant to the analysis (key issues) will be considered in the analysis of environmental effects and will help the agencies develop alternatives to the proposed action. The STNF will be collecting the public comments for both of the agencies (see Section: The Planning Process and How You Can Participate).

Comments previously submitted in scoping for the Dutch Creek Channel Rehabilitation Project (in November 2014) will be retained and addressed. Therefore, they do not need to be resubmitted under scoping for the Lower Dutch Creek Channel Rehabilitation Project.

Project Location:

Reclamation established the TRRP to carry out restoration projects within a 40-mile stretch of the mainstem Trinity River between Lewiston Dam and the confluence of the North Fork Trinity. The entire stretch is designated under the National and California State Wild and Scenic River Systems to preserve the Outstandingly Remarkable Value of its anadromous fishery. The segment of the Trinity River encompassed by the proposed action is also classified and managed as a “recreational” reach by the Shasta-Trinity National Forest. NFS lands are managed in accordance with the Shasta-Trinity National Forest Land and Resource Management Plan (LRMP).

The Lower Dutch Creek Rehabilitation Site environmental study limit (ESL), or project area, encompasses 54.6 acres along approximately 0.4 miles of the Trinity River. The project area begins approximately 26.6 miles downstream of Lewiston Dam and is located just upstream of the north end of Evan’s Bar Road in Junction City (Figure 1). The project area is located on the Junction City, California 7.5-minute USGS quadrangle at Township 33 North, Range 10 West, Section 32, Mount Diablo Meridian. In addition to the land within the project area that is managed by the STNF (42.6 acres), approximately 11.9 acres of land are privately owned; there are private parcels on both sides of the river within the project area.

The land managed by the STNF – NFS lands – falls within two LRMP management prescriptions. Management prescription III, Roaded Recreation, “emphasizes recreational opportunities associated with developed road systems and dispersed and developed campsites. Fish and wildlife management which supports the recreational use of wildlife species (hunting, fishing, and viewing) is also emphasized” (LRMP pg. 4-64).

Management Prescription IX, Riparian Management, is to be managed “to maintain or enhance riparian areas, wildlife and fisheries habitat, and water quality by emphasizing streamside and wetland management” (LRMP pg. 4-59). Areas managed under Prescription IX are also termed “Riparian Reserves” and are required to meet Aquatic Conservation Strategy Objectives (LRMP

pg. 4-53). Unlike other management prescriptions, Riparian Reserves are not delineated on a map but extend a minimum of 300 feet on either side of fish bearing streams and a minimum of 150 feet on either side of perennial non-fish-bearing streams (LRMP pg. 4-53, 4-54). Based on these minimum riparian reserve widths, 35.3 acres of NFS lands within the ESL are located in Riparian Reserves and 7.3 acres of NFS lands are located within the Roaded Recreation prescription. In fact, Riparian Reserve widths may be larger than the minimum if certain site-specific attributes (unusually wide floodplains or tall trees) are present (LRMP pg. 4-53, 4-54). As a result, the true riparian reserve width within the ESL may encompass more than 35.3 acres of NFS lands. The activities proposed in this project meet the objectives of both Roaded Recreation and Riparian Management. Further, this project will be designed to meet the more stringent Standards and Guidelines required within Riparian Reserves. As a result, it is not necessary to determine the precise allocation of land between the two prescriptions.

Other relevant designations exist on NFS lands within the ESL. All 42.6 acres of NFS land are designated within an “Adaptive Management Area.” Within adaptive management areas, freedom in forest management is encouraged in order to allow for scientific and technical innovation regarding forest management (LRMP pg. 4-69). Finally, 13.2 acres of the ESL has been designated by the Fish and Wildlife Service as critical habitat for the northern spotted owl.

Purpose and Need for Action:

Completion of the Trinity and Lewiston Dams in 1964 blocked anadromous fish access to habitat upstream of Lewiston Dam, restricting anadromous fish to habitat below the dam. Trans-basin diversions from Lewiston Lake to the Sacramento River Basin altered the hydrologic regime of the Trinity River, diminishing annual flows by up to 90 percent. Consequences of diminished flows include encroachment of riparian vegetation, establishment of riparian berms, and fossilization of point bars at various locations along the river, as far downstream as the North Fork Trinity River. These geomorphic changes have reduced the diversity of riparian age classes and riparian vegetation species, impaired floodplain access, and adversely affected fish habitat. The underlying need for the proposed action is to reestablish river form and processes to the Trinity River and thereby to restore fish populations to pre-dam levels and restore dependent fisheries, including those held in trust by the federal government for the Hoopa Valley Tribe and Yurok Tribe. This need results from:

- Requirements in the Trinity River Mainstem Fishery Restoration Record of Decision (ROD; USDI 2000) to restore the Trinity River fishery through a combination of higher releases from Lewiston Dam (up to 11,000 cubic feet per second [cfs]), floodplain infrastructure improvements, channel rehabilitation projects, fine and coarse sediment management, watershed restoration, and an Adaptive Environmental Assessment and Management (AEAM) Program; and
- The expectation that the AEAM Program would continue to incorporate, through the planning, design, and implementation of the proposed action, those management actions that result from analysis of TRRP monitoring and assessment activities into future restoration and rehabilitation efforts proposed by the TRRP.

More information on the TRRP may be found on the internet at: <http://www.trrp.net>.

The purpose of the Lower Dutch Creek project is to increase the quantity and quality of suitable rearing habitat for native anadromous salmonids and other native fish species in the Lower Dutch Creek project area, while reestablishing geomorphic processes required to enhance alluvial features in the Trinity River. The project strategy creates complex habitat for anadromous fish through restored alluvial processes that should perpetuate a natural river ecosystem.

The proposed action continues to advance the implementation efforts of the Reclamation's TRRP and would:

- Increase the diversity and amount of habitat for salmonids, particularly rearing habitat for coho and Chinook salmon and steelhead;
- Ensure that the flows prescribed in the 2000 ROD would not increase the likelihood of flood-related impacts to public resources and private property within the project area boundaries;
- Increase the structural and biological complexity of habitat for various species of wildlife associated with riparian habitats;
- Increase hydraulic and fluvial geomorphic diversity and complexity; and
- Measure/demonstrate the ecological response to changes in flow regimes, morphological features, and aquatic, riparian, and upland habitats.

On NFS lands (LRMP 4-59 and 4-64), there is a need to improve fish habitat and to meet the Aquatic Conservation Strategy objectives which are, as follows:

- Maintain and restore the distribution, diversity, and complexity of watershed and landscape scale features to ensure protection of the aquatic systems to which species, populations and communities are uniquely adapted.
- Maintain and restore spatial and temporal connectivity within and between watersheds. Lateral, longitudinal, and drainage network connections include floodplains, wetlands, upslope areas, headwater tributaries, and intact refugia. These network connections must provide chemically and physically unobstructed routes to areas critical for fulfilling life history requirements of aquatic and riparian-dependent species.
- Maintain and restore the physical integrity of the aquatic system, including shorelines, banks, and bottom configurations.
- Maintain and restore water quality necessary to support healthy riparian, aquatic, and wetland ecosystems. Water quality must remain within the range that maintains the biological, physical, and chemical integrity of the system and benefits survival, growth, reproduction, and migration of individuals composing aquatic and riparian communities.
- Maintain and restore the sediment regime under which aquatic ecosystems evolved. Elements of the sediment regime include the timing, volume, rate, and character of sediment input, storage, and transport.
- Maintain and restore in-stream flows sufficient to create and sustain riparian, aquatic, and wetland habitats and to retain patterns of sediment, nutrient, and wood routing. The timing, magnitude, duration, and spatial distribution of peak, high, and low flows must be protected.
- Maintain and restore the timing, variability, and duration of floodplain inundation and water table elevation in meadows and wetlands.
- Maintain and restore the species composition and structural diversity of plant communities in riparian areas and wetlands to provide adequate summer and winter thermal regulation, nutrient filtering, appropriate rates of surface erosion, bank erosion, and channel migration and to supply amounts and distributions of coarse woody debris sufficient to sustain physical complexity and stability.

- Maintain and restore habitat to support well-distributed populations of native plant, invertebrate and vertebrate riparian-dependent species (LRMP pg. 4-53).

Proposed Action:

The proposed action includes a number of specific activities within the Lower Dutch Creek ESL. The activities proposed are similar to those implemented at previous channel rehabilitation sites on the Trinity River and include: reduction of riparian encroachment; physical alteration of alluvial features (e.g., floodplains and side channels); construction of large wood hydraulic and habitat structures and large woody debris placement; and removal/replacement of riparian and upland vegetation at strategic locations. Revegetation with native plant species, to mimic historic conditions, is also planned. The specific activities that would occur are described below and shown on Figure 2.

R-1: Hyporheic Connection

Area R-1 is a hyporheic connection (i.e., subsurface connection) that would provide the W-1 wetland/pond complex area with a year-round connection to the Trinity River. This feature would be approximately 150 feet long with a bottom width of 20 feet. The channel would be excavated and then backfilled with sorted (similar sized) large cobble to create a high-porosity and high permeability subsurface conduit to convey water from the river into the wetland and pond complex activity area (W-1). A geotextile fabric would be placed on top of the channel to secure the sorted cobble from washing away at higher flows. An additional layer of cobbles would be placed on top of the geotextile fabric to keep the fabric in place. Approximately 1,600 cubic yards of excavated material would be transported to the U-1 upland area.

W-1: Wetland/Pond Complex Area

Area W-1 is an existing high-flow side channel that would be deepened and enhanced as a wetland/pond complex area with varying topography that would connect to the mainstem at the downstream end. The existing feature lies opposite to Last Hole on the Left and is only wetted during flows in the range of about 6,000 cfs. The proposed design would lower the existing ground approximately five to six feet such that it would be drowned by backwater at winter base

flows. The hyporheic connection (R-1) would provide the wetland and pond complex with flow-through and circulation. The complex area would be about 950 feet long and 100 feet wide. This feature is designed to provide a range of water depths, including deep areas needed for thermal stratification and shallow wetland areas as well. The wetland/pond complex area would increase habitat available to western pond turtle (*Actinemys marmorata*) and Pacific chorus frog (*Pseudacris regilla*), and would provide off-channel rearing habitat for juvenile salmonids. Adjacent terrace lowering would provide areas for establishment of riparian vegetation. Given minimal ground cover in the area, only limited vegetation removal would occur. It is likely that the wetland/pond complex area, especially the upstream portion, would accumulate fine sediment and organic matter and would evolve to a wet meadow. Approximately 41,000 cubic yards of excavated material would be transported to the U-1 upland area.

R-2: Side Channel

Area R-2 is a low flow side channel along West Evan's Bar that is proposed to capture 10 percent of mainstem base flow (i.e., it would maintain a year-round surface water connection with the Trinity River). This channel would be excavated along an existing high-flow side channel and would be approximately 1,000 feet long. The channel bottom width is 20 feet, the top width is 80 feet, and excavation depths would range from 3.5 to 8 feet. It is estimated that excavation will generate 11,000 cubic yards of material. Subsequent to the excavation, numerous large wood structures would be installed to increase channel complexity and provide additional rearing and cover habitat for juvenile salmonids. The R-2 side channel is intended to immediately provide quiet-water juvenile rearing habitat throughout a range of flow levels. Rearing habitat conditions would be optimal at low and moderate discharge levels, and rearing area availability would increase over existing conditions at all discharges. Excavated material would be transported to the U-2 upland terrace area.

R-3 and R-4: Floodplain Enhancement Areas

The R-3 and R-4 activity areas are floodplain zones where changes are proposed to enhance the R-2 low flow side channel. The R-3 and R-4 floodplain enhancement areas would be contoured to create a surface or bench to be inundated at flows greater than 2,000 cfs. Vegetation would be removed in these areas, and they would be excavated and contoured to allow inundation to occur

at multiple flows less than about a 10-year recurrence flow. Large wood structures would be placed strategically across this surface to provide habitat cover and complexity. Over time these areas would naturally revegetate with riparian vegetation. It is anticipated that this floodplain lowering would provide quiet water foraging habitat for juvenile salmonids during the normal range of winter flows and should also support youthful riparian vegetation that is periodically removed by flows in the range of 6,000 cfs. Excavated material would be transported to the U-2 upland terrace area.

U-1, and U-2: Upland Terrace Areas

Upland terrace area U-1 is a bedrock terrace that was exposed by historic hydraulic mining. This area would serve as a storage area for the approximately 42,600 cubic yards of excavated material from the R-1 and W-1 activity areas. Preparation of the bedrock surface would include access road construction and removal of brush and several trees. Large cobbles and boulders would also be removed from the U-1 area for incorporation into other activity areas, as needed. Final configuration of the placed materials would emulate naturally-occurring rolling topography and is expected to occupy only a portion of the designated U-1 area. Constructed topographic variability may be blended into the hillside to mask the historic hydraulic mining scars. Limited trees of less than 10 inch diameter may be removed as necessary to stabilize the final placement. Prior to materials placement, boulders would be opportunistically harvested from this location for use in the project.

Upland terrace area U-2 would provide an area to place 13,000 cubic yards of material excavated from the R-2, R-3, and R-4 activity areas. The U-2 footprint would be minimized to reduce impacts to existing habitat and to blend with the surrounding environment. Prior to materials placement, boulders would be opportunistically harvested from this location for use in the project.

At a minimum, the U-1 and U-2 terrace areas would be mulched with weed free native grass straw at the end of the construction season so that erosion would be minimized, and then planted with appropriate upland vegetation within four years of project completion. The long term goal of revegetation in the U-1 and U-2 area would be to support native plant species and associated

seed sources, and are anticipated to achieve habitat for wildlife that is found adjacent to the terrace areas.

C-3: Contractor Use Area

Contractor use area C-3 would be used for construction access, staging of equipment, temporary stockpiling of excavated materials (e.g., large wood, fine sediment, boulders, high quality soils, and clean gravel ultimately utilized during construction), gravel/cobble processing, and other necessary construction activities. Contractor use area C-3 would support construction of activity areas R-1 and W-1. To the extent possible, existing vegetation in contractor use areas C-3 would not be impacted. Disturbed areas would be seeded and mulched post construction, revegetated with native vegetation, and where appropriate, contoured to enhance riparian and seasonal wetland development. This area would be replanted to improve ecological conditions post project.

C-4: Contractor Use Area

Contractor use area C-4 would be used for construction access, staging of equipment, temporary stockpiling of excavated materials (e.g., large wood, fine sediment, boulders, high quality soils, and clean gravel ultimately utilized during construction), gravel/cobble processing, and other necessary construction activities. Contractor use area C-4 would support construction of activity areas R-2, R-3, and R-4. To the extent possible, existing vegetation in contractor use areas C-4 would not be impacted. Contractor use area C-4 would be the main contractor use area for the project and is designated primarily as a support area. After stream rehabilitation activities are completed and depending on available funds, improved recreational opportunities could include improved public parking, a developed boat launch, parking area, and potentially, addition of a toilet. Unauthorized vehicular access to the river corridor south of the C-4 area will be restricted in order to improve water quality. Although implementation of these improvements would depend on available funds, the EA will analyze the most extensive recreational improvements. To the extent possible, existing vegetation in contractor use area C-4 would not be impacted. Within four years, disturbed areas would be seeded and mulched post construction, revegetated with native vegetation, and where appropriate, contoured to enhance riparian and seasonal

wetland development. These areas would be replanted to improve ecological conditions post project.

C-1 and C-2: Temporary Access Roads

C-1 and C-2 would serve as temporary access roads between the W-1 activity areas and the U-1 upland terrace area. C-1 and C-2 would provide continuous haul loop roads so that scrapers and other heavy equipment could be used efficiently and safely to construct the features and move excavated material to the upslope U-1 area. Within four years of project completion, C-1 and C-2 would be seeded, mulched, decommissioned, and planted with native, weed-free vegetation. When possible, small depressions would be excavated to develop seasonal (ephemeral) wetland areas in order to support early life stages of the Pacific chorus frog and western pond turtle.

X-1: Temporary River Crossing

Construction of a temporary ford crossing at the X-1 activity area would provide access to the R-1, W-1, U-1, C-1, C-2, and C-3 activity areas. The temporary ford crossing would be designed and constructed to meet the requirements for heavy equipment such as trucks, excavators, and scrapers. To maintain navigability and fish passage, at least 1/3 of the ford crossing would be submerged to a depth of at least 1 foot under low-flow conditions. The ford crossing would be constructed using native alluvial materials excavated from the bed and bank of the Trinity River, from activity areas, or adjacent sources. Throughout project implementation, vehicular crossings would be minimized to reduce the potential for a spill of hazardous materials into the river. A hazardous material spill prevention plan would also be implemented on the site for the duration of the Project.

The Planning Process and How You Can Participate:

The decision-making process provides opportunities for interested parties to provide their ideas and comments regarding resource management proposals. This input is important in assisting the agencies in identifying issues that will shape the alternatives evaluated and lead to a decision. This is your opportunity to be involved in helping to develop and refine the proposed action. You are encouraged to submit project-specific written comments related to the proposed action during the public scoping comment period. If you previously commented on the Dutch Creek

Channel Rehabilitation Project, there is no need to resubmit your comments. Comments received during the scoping period for that project will be applied to the revised Lower Dutch Creek Channel Rehabilitation Project.

Comments on the Lower Dutch Creek Channel Rehabilitation Project received by July 1, 2015 will be fully considered and most useful in helping the agencies develop issues and alternatives. The most useful comments provide new information or describe unwanted environmental effects potentially caused by the proposed action. If you reference scientific literature in your comments, you must provide a copy of the entire cited reference and include rationale as to how you feel it is pertinent to the project. As previously noted, all comments must be sent, in writing, to the STNF at the address listed below. After the scoping comment period, the interdisciplinary team will review all of the scoping comments (including those submitted previously under the Dutch Creek Channel Rehabilitation Project), determine key issues, and, if necessary, develop alternatives to respond to those issues. The Draft EA for the Lower Dutch Creek Project is expected to be available on the Shasta-Trinity National Forest website (currently at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=45449), or by request, in late 2015. A hard copy of the Draft EA may also be viewed at the TRRP office at 1313 S. Main Street (by Tops Market), in Weaverville, CA 96093, or the Shasta Trinity National Forest Headquarters at 3644 Avtech Pkwy, Redding CA 96002. Your participation now will ensure that you receive all future correspondence for the project.

Please include the following information with your comments:

- Your name and address (telephone and email are also suggested),
- The project name: Lower Dutch Creek Channel Rehabilitation Project,
- Site-specific comments about the proposed action, along with supporting information you believe will help identify issues, develop alternatives or predict environmental effects of the proposal,
- Signature or other verification of identity of individual or entity (individual members must submit their own comments to establish personal eligibility).

Please send your written comments to: David R. Myers, ATTN: Christopher Losi, Lower Dutch Creek Channel Rehabilitation Project, Shasta-Trinity National Forest, 3644 Avtech Parkway, Redding, CA 96002. You may also submit comments via email to: comments-pacificsouthwest-

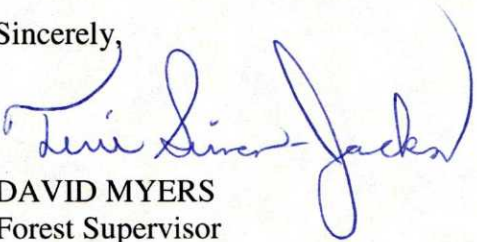
shasta-trinity@fs.fed.us; indicate "Lower Dutch Creek Channel Rehabilitation Project" in the subject line.

Comments received on the Lower Dutch Creek Channel Rehabilitation Project, including the names and addresses of those who comment, will be considered part of the public record on this proposal and will be available for public inspection. Comments previously received during scoping for the Dutch Creek Channel Rehabilitation Project (Nov/Dec 2014) will also be included in the public record on this proposal and be available for public inspection.

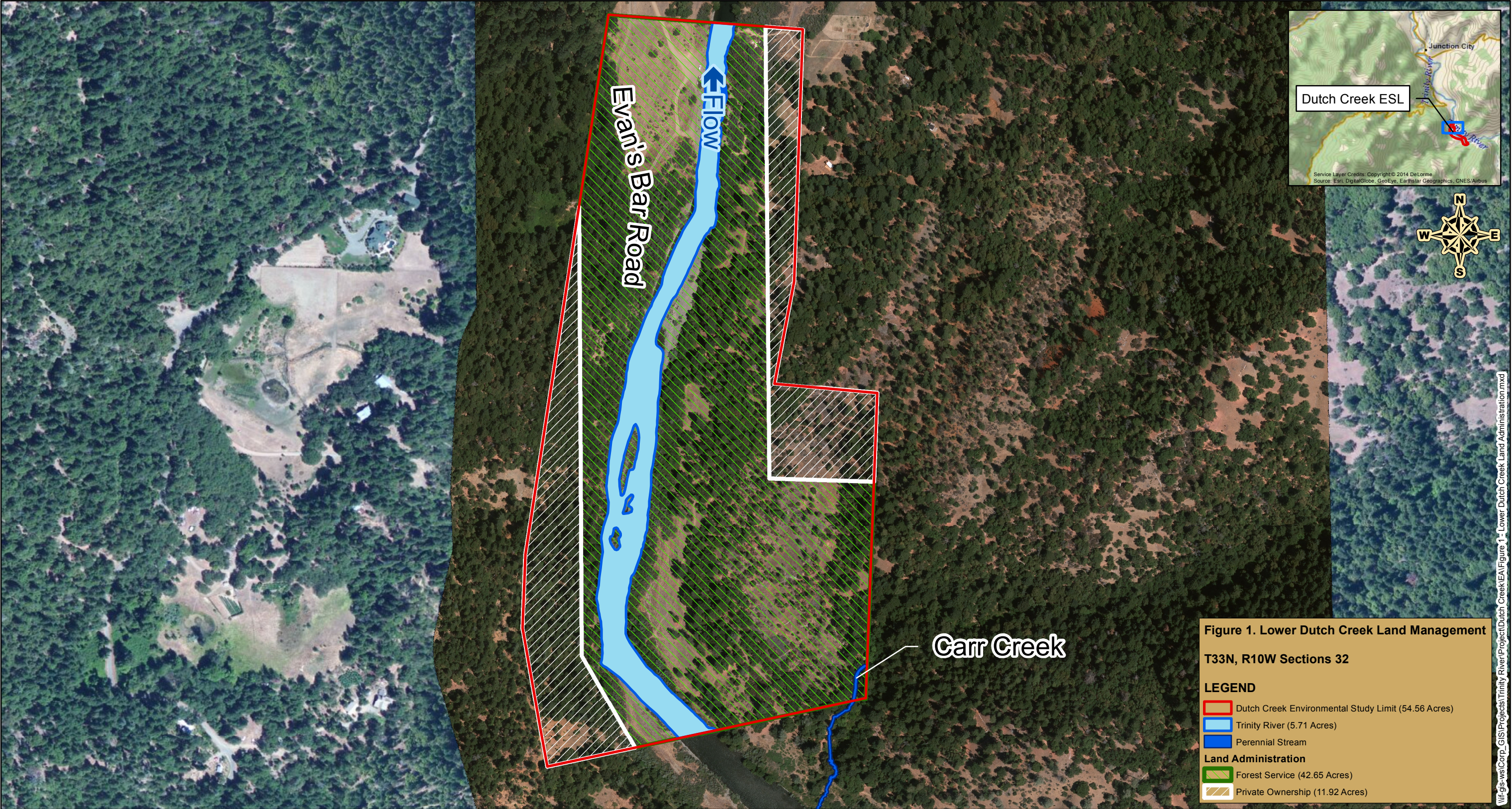
This project is subject to comment and objection pursuant to 36 CFR 218, Subparts A and B. Only those who submit timely project-specific written comments during scoping or other opportunity for public comment are eligible to file an objection. Individuals or representatives of an entity submitting comments must also sign the comments or verify identity upon request. Note that the 36 CFR 218 process is different than the 36 CFR 215 process in that commenters will have standing to object by providing timely specific written comments during any designated opportunity for public comment, including this scoping period. Pursuant to 36 CFR 218.2, specific written comments should be within the scope of the proposed action, have a direct relationship to the proposed action, and must include supporting reasons for the responsible official to consider.

We appreciate your interest in the management of public lands. To ensure your comments can be fully considered by the interdisciplinary team and Responsible Official, please respond by close of business on July 1, 2015. Please contact Christopher Losi, at (530) 226-2425, if you would like any additional information about this project.

Sincerely,



per DAVID MYERS
Forest Supervisor



California State Plane Zone 1, NAD83 Feet

2013 Aerial Imagery

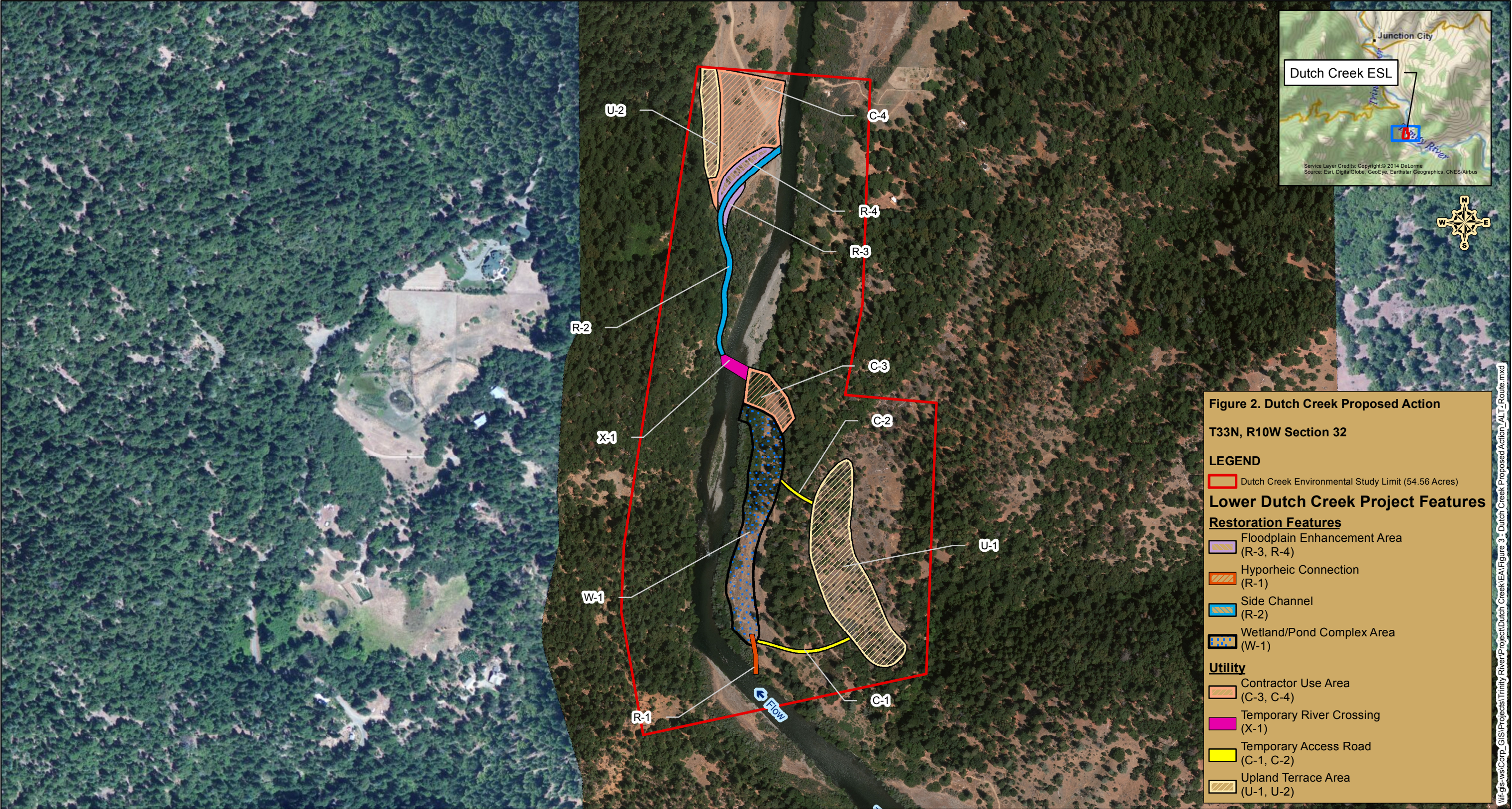


Figure 2. Dutch Creek Proposed Action

T33N, R10W Section 32

LEGEND

Dutch Creek Environmental Study Limit (54.56 Acres)

Lower Dutch Creek Project Features

Restoration Features

- Floodplain Enhancement Area (R-3, R-4)
- Hyporheic Connection (R-1)
- Side Channel (R-2)
- Wetland/Pond Complex Area (W-1)

Utility

- Contractor Use Area (C-3, C-4)
- Temporary River Crossing (X-1)
- Temporary Access Road (C-1, C-2)
- Upland Terrace Area (U-1, U-2)

California State Plane Zone 1, NAD83 Feet

2014 Aerial Imagery