RECLAMATION
Managing Water in the West

Finding of No Significant Impact

Round Valley Indian Tribes – Mill Creek Streamflow and Riparian Corridor Restoration Project

FONSI 19-21-MP

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1 Background

The Bureau of Reclamation (Reclamation) prepared an Environmental Assessment (EA) to evaluate and disclose potential environmental impacts associated with providing WaterSMART Drought Response Grant funding to the Round Valley Indian Tribes (RVIT) to implement the Mill Creek Streamflow and Riparian Corridor Restoration Project to restore 2.4 miles of Mill Creek. Mill Creek is in the California Coast Range of northern Mendocino County near the town of Covelo, California.

1.1 No Action

Under No Action, Reclamation would not award WaterSMART grant funds to RVIT for the Proposed Action.

1.2 Proposed Action

Reclamation would award WaterSMART grant funds to RVIT which would allow RVIT to restore a 2.4-mile riparian corridor at Mill Creek. RVIT would grow the plants needed to complete the restoration work in a greenhouse. Approximately 30,000 trees and shrubs would be planted along barren portions of the creek. RVIT would install a drip system to water the vegetation until it becomes established. RVIT anticipates restoring approximately 10.1 acres per year for 3 years, for a total of 30.3 acres.

2 Findings

Based on the attached EA, Reclamation finds that the Proposed Action is not a major Federal action that will significantly affect the quality of the human environment, and preparation of an Environmental Impact Statement is not necessary. The EA describes the existing environmental resources in the Proposed Action and evaluates the effects of the No Action and Proposed Action alternatives on the resources near the Mill Creek area. The EA was prepared in accordance with National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR 1500-1508), and Department of the Interior regulations (43 CFR Part 46) and is hereby incorporated by reference. Following are the reasons why the impacts of the proposed action are not significant:

1. The Proposed Action will not significantly affect public health or safety (40 CFR 1508.27(b)(2)).

2. The Proposed Action will not significantly impact natural resources and unique geographical characteristics such as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order (EO) 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (40 CFR 1508.27(b)(3)).

3. The Proposed Action will not have possible effects on the human environment that are highly uncertain or involve unique or unknown risks (40 CFR 1508.27(b)(5)).

4. The Proposed Action will neither establish a precedent for future actions with significant effects nor represent a decision in principle about a future consideration (40 CFR 1508.27(b)(6)).

5. There is no potential for the effects to be considered highly controversial (40 CFR 1508.27(b)(4)).

6. The Proposed Action will not have significant cumulative impacts (40 CFR 1508.27(b)(7)).

7. The proposed action will have no effect on any districts, sites, highways, structures, or objects listed, or eligible for listing, in the National Register of Historic Places (40 CFR 1508.27(b)(8)). Pursuant to 54 USC § 306108, commonly known as Section 106 of the National Historic Preservation Act, and its implementing regulations at 36 CFR Part 800, Reclamation reached a determination of no historic properties affected; consequently, the proposed action will have no impact upon cultural resources.

8. The Proposed Action will not affect listed or proposed threatened or endangered species (40 CFR 1508.27(b)(9)).

9. The Proposed Action will not violate Federal, state, tribal or local law or requirements imposed for the protection of the environment (40 CFR 1508.27(b)(10)).

10. The Proposed Action will not affect Indian Trust Assets (512 DM 2, Policy Memorandum dated December 15, 1993).

11. Implementing the Proposed Action will not disproportionately affect minorities or low-income populations and communities (EO 12898).

12. The Proposed Action will not limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007 and 512 DM 3).

RECLAMATION

Managing Water in the West

Environmental Assessment

U.S. Bureau of Reclamation WaterSMART Drought Response Program

Round Valley Indian Tribes – Mill Creek Streamflow and Riparian Corridor Restoration Project

19-21-MP

U.S. Department of the Interior
Bureau of Reclamation

September 2019

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Contents

List of Acronyms and Abbreviations

APE	Area of Potential Effect
EA	Environmental Assessment
FYLF	Foothill Yellow-Legged Frog
GHG	Greenhouse gases
MCAQMD	Mendocino County Air Quality Management District
NAAQS	National Ambient Air Quality Standard
NHPA	National Historic Preservation Act
PM_{10}	Particulate matter less than 10 micrometers in diameter
Reclamation	Bureau of Reclamation
THPO	Tribal Historic Preservation Officer
RVIT	Round Valley Indian Tribes
WPT	Western Pond Turtle

Section 1 Introduction

1.1 Background

This Environmental Assessment examines the potential direct, indirect, and cumulative impacts to the affected environment associated with the Bureau of Reclamation (Reclamation) providing WaterSMART Drought Response Grant funding to the Round Valley Indian Tribes (RVIT) to implement the Mill Creek Streamflow and Riparian Corridor Restoration Project. Reclamation would award $689,101 to RVIT to restore 2.4 miles of Mill Creek. Mill Creek is in the remote California Coast Range of northern Mendocino County near the town of Covelo, California. (Figure 1).

Over the decades, Mill Creek has undergone extensive streambank erosion. The creek has degraded from a single thread channel of approximately 50 feet wide to several side channels spreading over 700 feet wide. Due to the degradation of the creek, the riparian zone has been lost. Using grant funding RVIT has been implementing a multi-year, multi-agency restoration effort to restore Mill Creek back to its single channel course. RVIT would use the WaterSMART funding to implement the final phase of the Mill Creek Streamflow and Riparian Corridor Restoration Project. Restoration efforts would stabilize the creek and restore the ecological functions which would improve water conservation. The project would improve water conservation by stabilizing the water table level in the creek and reducing evaporation.

Figure 1. Aerial Photo of Project Area

1.2 Need for Action

The 2.4 mile long reach of Mill Creek has no riparian vegetation and consequently the stream banks are unstable. The lack of vegetation also increases water temperature and decreases water retention in the creek in the summer and aquifer recharge. This has reduced or eliminated habitat for fish and other water-dependent species. The lack of vegetation has also reduced the water supply for RVIT since Mill Creek serves as the primary aquifer recharge system for RVIT and its residents.

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: “No Action Alternative” and “Proposed Action”. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the environment.

2.1 No Action

Under No Action, Reclamation would not provide grant funds to RVIT to restore 2.4 miles of Mill Creek. If RVIT does not receive Reclamation funding, then they would continue to seek grants from other sources on a year to year basis.

2.2 Proposed Action

Under the Proposed Action Alternative, Reclamation would provide $689,101 to RVIT to implement the Mill Creek Streamflow and Riparian Corridor Restoration Project. The grant would provide four years of funding which would allow RVIT to restore a 2.4-mile riparian corridor. RVIT would grow the plants needed to complete the restoration work in a greenhouse. Approximately 30,000 trees and shrubs would be planted along barren portions of the creek. RVIT would install a drip system to water the vegetation until it becomes established. RVIT anticipates to restore approximately 10.1 acres per year for 3 years, for a total of 30.3 acres. Figure 3 illustrates a planting plan based on distance and orientation (Zone) to the stream channel. Details of the planting plan are in Appendix A.

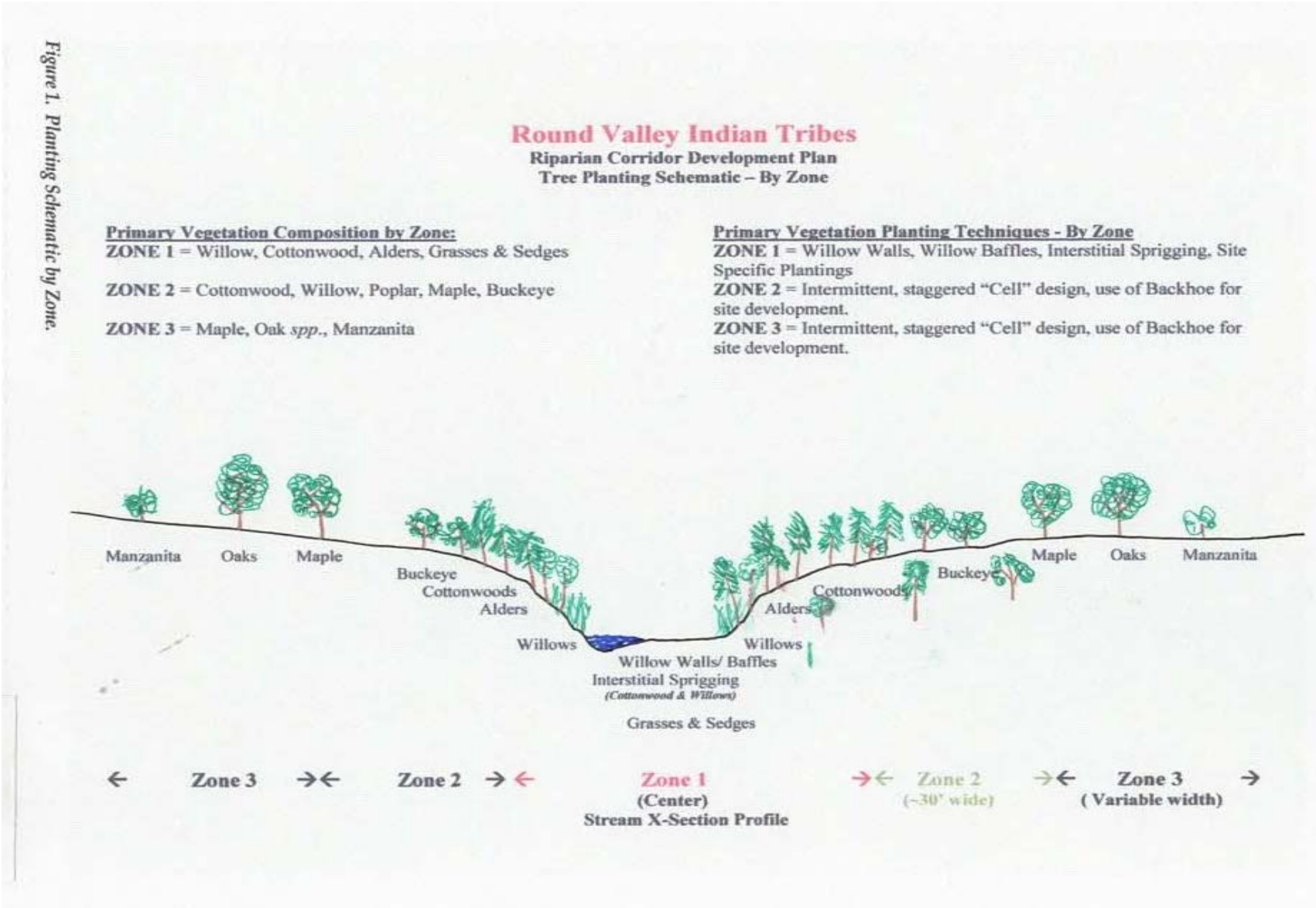

Figure 2. Planting Zone Schematic

2.2.1 Greenhouse Propagation

To facilitate the high demand for riparian vegetation needed for the Proposed Action, RVIT's Natural Resources Department constructed a greenhouse to propagate the plants that would be used for the restoration (Figure 3). Local seed stock from native species (including alders, cottonwoods, buckeye, maple, oak, and manzanita) would be collected and propagated in the greenhouse for subsequent planting in throughout the project area. The greenhouse would produce approximately 10,000 trees and shrubs per year. If the greenhouse is unable to produce the plants needed for the project, RVIT would supplement what the greenhouse produce with fresh willow and cottonwood cuttings.

Figure 3. The RVIT greenhouse where the project plants would be grown

2.2.2 Vegetation Planting

The riparian vegetation would be planted in zones between the water line and the upland habitat. The planting zones are separated based on soil moisture. The riparian vegetation would be planted in three zones Zone 1, Zone 2, and Zone 3.

2.2.1.1 Zone 1 - Interstitial Sprigging and Bank Stabilization

Vegetation planted in Zone 1 would primarily consist of willows, cottonwoods, and alders. Zone 1 would have between 200 to 500 sprigs, willow baffles, and willow walls install along the creek channel. The sprigs would be installed by hand and placed in cracks between the existing rip-rap

(Figure 4). The sprigs would be approximately 1 to 3-inch in diameter and 4 feet long. The sprigs would be planted to the greatest depth possible (minimum of 2 feet). Installation of the sprigs would occur at the direction of the Project Biologist.

Figure 4. Willows sprigs in rip-rap

Willow Baffles

Willow baffles are used to alter stream flow to produce a desired hydrological effect (deposition or deflection) at site specific locations. They are used in conjunction with existing rip-rap as a bioengineering technique to achieve a restoration goal. The willow baffles would be designed on a site by site basis by the Project Biologist; about 15 would be installed. The willow baffles would be planted in a 4 to 6-foot deep trench at an angle of 20 to 45 degrees along the creek bank.

Willow Walls

Approximately 25 willow walls would be installed the base of bank slope (Figure 5). A backhoe would be used to dig a trench adjacent to the creek to a depth that reaches the water table. Fresh willow poles cut to 7 to 10-foot in length would be planted in the trench approximately 18 inches apart. Cottonwood poles, 7 to 10-foot length, could also be planted and would be spaced approximately 10 feet apart. Once the willows and cottonwood poles are placed in the trench, a backhoe would backfill the trench with the excavated material. A water truck would spray the poles as backfilling occurs to initiate the rooting process.

Figure 5. Willow wall planted in wetted trench adjacent to where surface flow goes subterranean.

2.2.2.1 Zone 2 - Full Bank Width plus 30 Feet

Vegetation planted in Zone 2 would primarily consist of sprigs of alders, cottonwoods, buckeyes, and maple trees. The planting areas are described in Appendix A and prioritization of planting would be determined by the Project Biologist on a yearly basis. A backhoe would dig holes in 10 to 15-foot intervals to a depth of approximately 2 feet. A sprig would be planted so that at least 80 percent of the sprig would be in the ground. The backhoe would then re-fill each hole and lightly compact the soil. The plant would be hand watered and the waterline system would be installed. A cluster of large rocks would be placed around each plant to protect the plants from running over by off-road vehicles or motorcycles. A certain level of mortality is expected; therefore, replacement planting would be conducted annually. Replacement springs would be planted in the same hole as the plant that was replaced.

2.2.2.2 Zone 3 - Floodplain

Zone 3 vegetation consists of trees that are more tolerant of drier conditions since they would be planted further from the active channel. Species that could be planted include buckeye, maple, oak, and manzanita. Planting in Zone 3 would take place on a limited basis where suitable as prescribed by the Project Biologist.

2.2.3 Vegetation Watering

RVIT would install a drip line watering system upon completed of the vegetation planting (Figure 6). The watering system involves a 1½ inch main waterline which would have many 1/2-inch waterlines connecting off the main line. Multiple 1/8-inch waterlines would connect off the 1/2-inch waterlines which would dispense water to a plant. A water truck would be connected to the main line to pump water into the system. Sections of the restoration area may need a series of drip lines. A water truck would systematically works its way through a planted area hooking up to the main waterline for each drip line.

Figure 6. Waterline System for Watering Large Areas

2.3 Schedule

Implementation of the Proposed Action is expected to begin in 2019 and would be completed in four years. Table 1 outlines the activities that would occur over the course of a year during. A final Report would be completed in 2022.

Table 1. Seasonal Work Plan Schedule

Task/Work Item	*Responsible Personnel*	*Timeline (months)*	*Deliverables*
Collecting Riparian Vegetation for Greenhouse Propagation	RVIT Natural Resources Dept. - Restoration Crew	Sept - Oct	Collecting a variety of limb cuttings and seeds for propagation in the Tribe's greenhouse until ready for

			planting throughout the riparian corridor
Planting Riparian Corridor Vegetation	RVIT Natural Resources Dept. - Restoration Crew	Oct - May	Begin a multi-year, multi-species, multi-acre tree and vegetation planting effort as part of the Riparian Corridor development component of this project
Dripline Installation for Riparian Vegetation	RVIT Natural Resources Dept. - Restoration Crew	Apr - June	Develops the infrastructure necessary for the ease of watering the riparian vegetation planted in conjunction with riparian corridor development efforts.
Watering Riparian Corridor Vegetation	RVIT Natural Resources Dept. - Heavy Equipment Crew	June - Oct	Watering the planted vegetation for approximately 3 years - typical length of time necessary for vegetation to become self-sustaining.
Collecting Riparian Vegetation for Greenhouse Propagation	RVIT Natural Resources Dept. - Restoration Crew	Sept - Oct	Collecting a variety of limb cuttings and seeds for propagation in the Tribe's greenhouse until ready for planting throughout the Riparian Corridor.
Planting Riparian Corridor Vegetation	RVIT Natural Resources Dept. - Restoration Crew	Oct - Dec	Begin a multi-year, multi-species, multi-acre tree and vegetation planting effort as part of the Riparian Corridor development component of this project.
Final Report Preparation	Project Biologist	Dec	Final Report

2.4 Environmental Protection Measures and Commitments

RVIT would implement the following conservation measures to minimize the potential effects of the project:

- All construction equipment will be in proper working condition according to manufacturer's specifications.
- Re-fueling of heavy equipment and vehicles would not occur on-site
- Vehicle speeds will be limited to 10 miles per hour (mph) on unpaved roads.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]).

- During restoration activities, staging of equipment and supplies would be confined to the minimal area necessary.
- Before any work begins, construction personnel will receive worker environmental awareness training conducted by a U.S. Fish and Wildlife Service/California Department of Fish and Wildlife-approved biologist to recognize special status species and their habitat. The education program will cover the species and their habitats that may be encountered during the project and will cover all restrictions and guidelines that must be followed by crews to avoid or minimize impacts. Upon completion of training, crews shall sign a form stating that they attended the training and understand all the field personnel conservation and protection measures.
- To avoid impacts to the Federally-listed California Coastal Chinook salmon (*Onchorhynchus tshawytscha*) and Northern California steelhead *(Onchorhynchus mykiss irideus*), Pacific lamprey (*Entosphenus tridentatus*) (Federal and State Species of Concern), the foothill yellow-legged frog *(Rana boylii)* (FYLF) (State Candidate for listing) and the western pond turtle (*Emys marmorata*) (WPT) (State Species of Concern), no ground disturbing activities would occur within the creek channel when water is present.

Section 3 Affected Environment and Environmental Consequences

3.1 No Action Alternative

Under No Action, Reclamation would not provide grant funds to RVIT for the Mill Creek Streamflow and Riparian Corridor Restoration Project. RVIT would continue to seek funding to complete this project over the next several years from various funding agencies. The impacts of no action would be similar to the Proposed Action.

3.2 Proposed Action

3.2.1 Required Resource Disclosures

Department of the Interior Regulations, Executive Orders, and Reclamation guidelines require a discussion of the following resources when preparing environmental documentation.

3.2.1.1 Indian Trust Assets

Indian Trust Assets are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. The project area is within tribal lands of the RVIT, a federally recognized and sovereign Tribe. The project was designed by RVIT to have no effect on Indian Trust Assets (Appendix C).

3.2.1.2 Indian Sacred Sites

Executive Order 13007 (May 24, 1996) requires that federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoids adversely affecting the physical integrity of such sacred sites. The Proposed Action would not be located on Federal lands. RVIT confirmed the project would not affect or prohibit access to and ceremonial use of Indian sacred sites.

3.2.1.3 Environmental Justice

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. Reclamation has not identified adverse human health or environmental effects on any population because of implementing the Proposed Action. Therefore, implementing the Proposed Action would not have a significant or disproportionately negative impact on low-income or minority individuals within the Proposed Action area.

3.2.2 Cultural Resources

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. Title 54 U.S.C. 300101 et seq., formerly and commonly known as the National Historic Preservation Act (NHPA) is the primary legislation for Federal historic preservation. Section 106 of the NHPA (54 U.S.C. 306108) requires Federal agencies to take into consideration the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation an opportunity to comment. Historic properties are those cultural resources that are listed on or eligible for inclusion in the National Register of Historic Places (National Register). The implementing regulations at 36 CFR Part 800 for Section 106 describe the process that the Federal agency takes to identify historic properties within the area of potential effects and to assess the effects that the proposed undertaking will have on those historic properties, through consultations with the State Historic Preservation Officer, Indian tribes, and other identified consulting and interested parties.

Reclamation determined that the granting of Federal funds is an undertaking as defined in 36 CFR § 800.16(y) and a type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a).

To identify historic properties in the Area of Potential Effect (APE), Reclamation reviewed a cultural resources report authored by a consultant retained by RVIT for this project (Cull 2019). The consultant's findings indicate that the potential for intact cultural resources in the APE is very low due to long-term braiding and rechannelization of the streambed, which would have removed and redeposited cultural items out of their primary context. No cultural resources were identified in the APE by the consultant.

Reclamation identified RVIT as the only Indian tribe who might attach religious and cultural significance to historic properties within the APE. Because the tribe is both the project proponent and grant awardee, Reclamation determined that there was no need to consult with the tribal council regarding sites of religious and cultural significance and instead directed our consultation effort towards the RVIT Tribal Historic Preservation Officer (THPO).

Reclamation initiated consultation with the RVIT THPO by letter dated July 22, 2019 (Appendix B) requesting concurrence with our finding of no historic properties affected for the proposed project. Additionally, Reclamation requested that the THPO sign, date, and return a one-page form acknowledging that RVIT agreed with Reclamation's finding of effect. No response was received. On August 27, 2019, Reclamation sent a follow-up email to the RVIT THPO requesting confirmation of receipt of the consultation letter; again, no response was received. On September 6, 2019, Reclamation attempted to reach the RVIT THPO by telephone; no answer was received, and a voicemail message was left. Consequently, Reclamation determined under 36 CFR § 800.3(c)(3) that a good faith effort had been made to obtain concurrence from the RVIT THPO on our finding of affect.

3.2.3 Biological Resources

3.2.5.1 Affected Environment

Mill Creek is a Class I stream that supports native runs of the California Coastal Chinook salmon Evolutionary Significant Unit and Northern California steelhead Distinct Population Unit. Both

species are listed as threatened under the Endangered Species Act of 1973, as amended (16 USC §1531 et seq.). Mill Creek is designated critical habitat for the California Coastal Chinook salmon and steelhead. Mill Creek also supports the Pacific lamprey and provides seasonal habitat for State species of special concern FYLF and the WPT.

Mill Creek provides suitable habitat both upstream and downstream to the project area, where a functional riparian corridor exists, and water remain in the creek throughout the summer months. However, the section of Mill Creek where the project area is located becomes completely dry during the summer months. Subsequently, there is not suitable habitat for Chinook salmon or steelhead during the summer months due to the lack of water, hot summer temperatures, lack of shade, and evaporation.

A list of federal endangered and threatened species was generated for species with the potential to occur in the project area from the U.S. Fish & Wildlife Service's Information for Planning and Consultation database on February 26, 2019, and the National Marine Fisheries Service database on August 20, 2018 to determine which federally listed species the Proposed Action would have the potential to affect within the action areas. The U.S. Fish and Wildlife Service identified the northern spotted owl, western snowy plover, yellow-billed cuckoo, California red legged frog, Burke's goldfields, Contra Costa goldfields, and showy Indian clover. However, there is no suitable habitat for these species at or near the site. The National Marine Fisheries Service identified the Chinook salmon and steelhead as the listed aquatic species in the area; see above paragraph.

The California Natural Diversity Database was queried for sensitive species. A total of 34 sensitive wildlife species were identified as having potential to occur within the project, but only two species have habitat potential to occur. The FYLF occurs near quiet permanent streams, marshes, ponds and lakes. In summer, they estivate in small mammal burrows, leaf litter or other moist sites within a few hundred feet of riparian areas. There is only seasonally available habitat along Mill Creek for the FYLF. The WPT occurs in permanent ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams in a wide variety of habitats. Seasonally suitable habitat exists within Mill Creek for the WPT.

A reconnaissance survey was conducted in July 2018 by the Project Biologist to identify special status species. No special status species were observed during the survey.

3.2.3.2 Environmental Consequences

No in-channel work would occur if there is surface water in the project area. The proposed action would not affect Chinook salmon, steelhead or Pacific lamprey because construction would occur when the species are not present. If water is present in the project area, restoration activities would only occur in the floodplain (Zone 2 and 3 activities).

The Proposed Action is not anticipated to affect FYLF or WPT because the project area does not provide suitable summer habitat. Prior to restoration activities begin, the Project Biologist would conduct a pre-construction survey for FYLF or WPT. If FYLF or WPT is found, the animal would be relocated to a suitable location outside the project area.

Prior to the return of Mill Creek flows following construction, rainfall is expected to gradually saturate and compact soil in the disturbed areas. This would result in disturbed soils settling and compacting as well as various seeds germinating. This settling, compaction, and plant growth is expected to return Mill Creek back to ambient conditions resulting in no exceedances of turbidity standards (see: Basin Plan Standards. Available at https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf.)

Birds Protected Under the Migratory Bird Treaty Act

Potential nesting and roosting sites are limited in the project area due to lack of riparian vegetation. Suitable nesting habitat exists in the riparian corridors approximately 100 feet upstream and downstream of the project area and within the forested hillsides in the area surrounding the project site.

3.2.4 Air Quality

The Proposed Action is in northern Mendocino County, which lies within the North Coast Air Basin. Air quality in the Proposed Action area is regulated by the Mendocino County Air Quality Management District (MCAQMD). Pollutant levels have decreased dramatically since the 1980s even with substantial region-wide population growth. In Mendocino County, most air pollution during the summer comes from mobile sources, which are vehicles, agriculture, and construction equipment that are used every day. In the wintertime, most air pollution comes from wood burning in residential fireplaces and wood stoves.

The U.S. Environmental Protection Agency and California Air Resources Board developed federal and state health-based air quality standards, known as National and California ambient air quality standards (NAAQS and CAAQS), for criteria air pollutants. Criteria air pollutants consist of carbon monoxide, ozone, sulfur dioxide, nitrogen dioxide, inhalable particulate matter between 2.5 and 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead. The CAAQS also set standards for sulfates, hydrogen sulfide and visibility.

Section 110(a) of the Clean Air Act (42 U.S.C. 7401(a)) requires states to develop plans, known as State Implementation Plans (SIPs), that describe how they would attain NAAQS. Mendocino County is in non-attainment status for State standards for PM_{10} and is attainment or unclassified status for all other State standards and all Federal standards (Table 2).

Section 176(c) of the Clean Air Act (42 U.S.C. 7506(c)) requires that any entity of the federal government that engages in, supports, or in any way provided financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable SIP before the action is otherwise approved. The U.S. Environmental Protection Agency promulgated the General Conformity Rule to ensure that such federal actions are consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS for criteria air pollutants and achieving expeditious attainment of those standards. If an action does not conform to the SIP, the Federal agency must submit a conformity determination to the U.S. Environmental Protection Agency, State and local air pollution control agencies, and to the public. Federal actions that are exempt from the General Conformity Regulations include, but are

not limited to, actions with associated emissions clearly at or below specified *de minimis* levels (USEPA 2016).

3.2.4.1 Environmental Consequences

Equipment use would primarily consist of two water trucks, a backhoe and an excavator. The equipment would be used for about 11 weeks each project year. Short-term air quality impacts associated with construction would arise from dust generation (fugitive dust) and operation of construction equipment. Fugitive dust results from excavation and vehicle traffic. Fugitive dust is a source of airborne particulates, including PM_{10} and $PM_{2.5}$. Watering is required to control fugitive dust in conjunction with ground disturbing as part of the MCAQMD's Standard Mitigation Measures for construction projects (MCAQMD 2018 rule 1-430).

Equipment would access the project area though existing roads. The road system within the project area consists of compacted river bed rock; therefore, a minimal amount of dust would be generated when accessing the site. Vehicles would be required to travel less 10 mph, per MCAQMD Rule 1-430.

The construction equipment is powered by gasoline or diesel which are sources of combustive emissions, including nitrogen dioxide, carbon monoxide, volatile organic compounds, sulphur dioxide and small amounts of air toxics. Emissions from the Proposed Action were estimated using the 2016 California Emissions Estimator Model (CalEEMOD, version 2016.3.2. The estimated emission of the Proposed Action (with control measures) and the Federal and local thresholds are shown in Table 2. Construction emissions of PM_{10} would each be less than the *de minimis* thresholds established by the U.S. EPA for conformity analyses. The proposed action would not contribute to a violation of NAAQS and does not require an in-depth conformity analysis. The Proposed Action is presumed to conform to the PM_{10} State implementation plan.

Table 2 - Estimated Emissions for the Proposed Action During Construction and Federal and Local Emissions Thresholds in Tons Per Year

Pollutant[a]	State Attainment Status for MCAQMD	Federal Attainment Status for MCAQMD[b]	Thresholds for Federal Conformity Determinations[c]	Local Significance Thresholds[d]	Estimated Project Emissions[e]
PM_{10}	Nonattainment	Unclassified	100	80 lbs / day (14.6 tons per year)	0.0007

[a]Only pollutants with nonattainment status are in the table
[b]MCAQMD (2018b) [c]40 CFR 93.153 [d] MCAQMD (2018c)
[e] Construction emissions estimated with CalEEMOD Windows Version 2016.3.2

3.2.5 Cumulative Impacts

According to CEQ regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as "*the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such*

other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." (40 CFR 1508.7).

It is unlikely that any single project by itself could have a significant impact on the environment with respect to greenhouse gases. However, the cumulative effect of human activities has been clearly linked to quantifiable changes in the composition of the atmosphere, which, in turn, have been shown to be the main cause of global climate change. Therefore, the analysis of the environmental effects of greenhouse gas emissions is inherently a cumulative impact issue. Within the discussion of concerns related to climate change, carbon dioxide (CO_2) is now being tracked as one of the contributors to greenhouse gas emissions. The proposed action would results in a short-term increase in CO_2 emissions from equipment vehicles that would be used over a four year period. Construction-related CO_2 emissions would be temporary and finite in nature. There would be no long-term operation or maintenance emissions associated with the Proposed Action.

It should be noted that MCAQMD has no threshold for construction emissions of CO_2 and there are no Federal regulations regarding climate change that apply to the Proposed Action. Due to the size and nature of the project, the Proposed Action would not add considerable contribution of CO_2 to the cumulative global impact.

Section 4 Consultation and Coordination

Reclamation consulted and coordinated with the RVIT, the Tribal Historic Preservation Officer, and the USFWS.

Section 5 References

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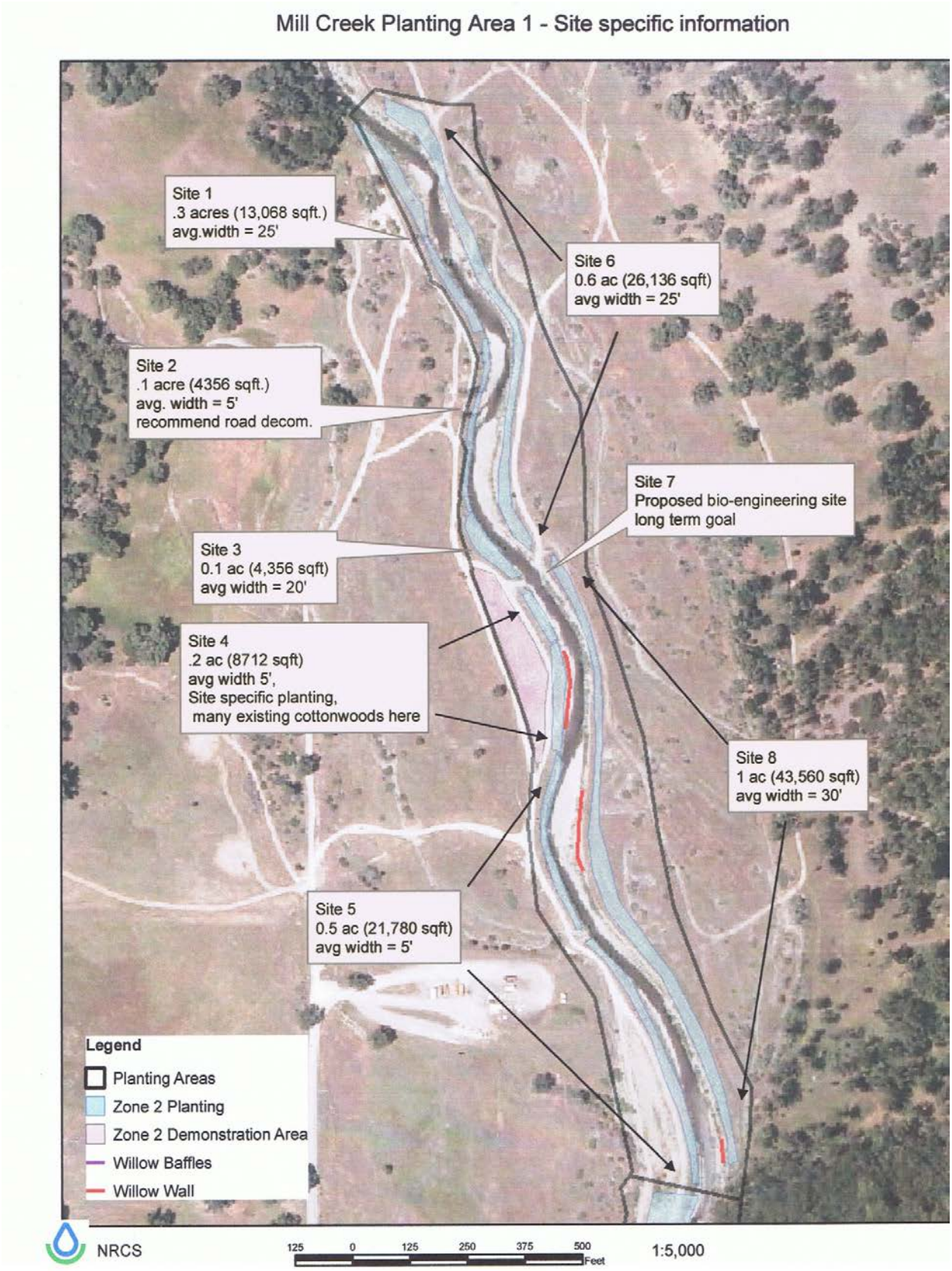
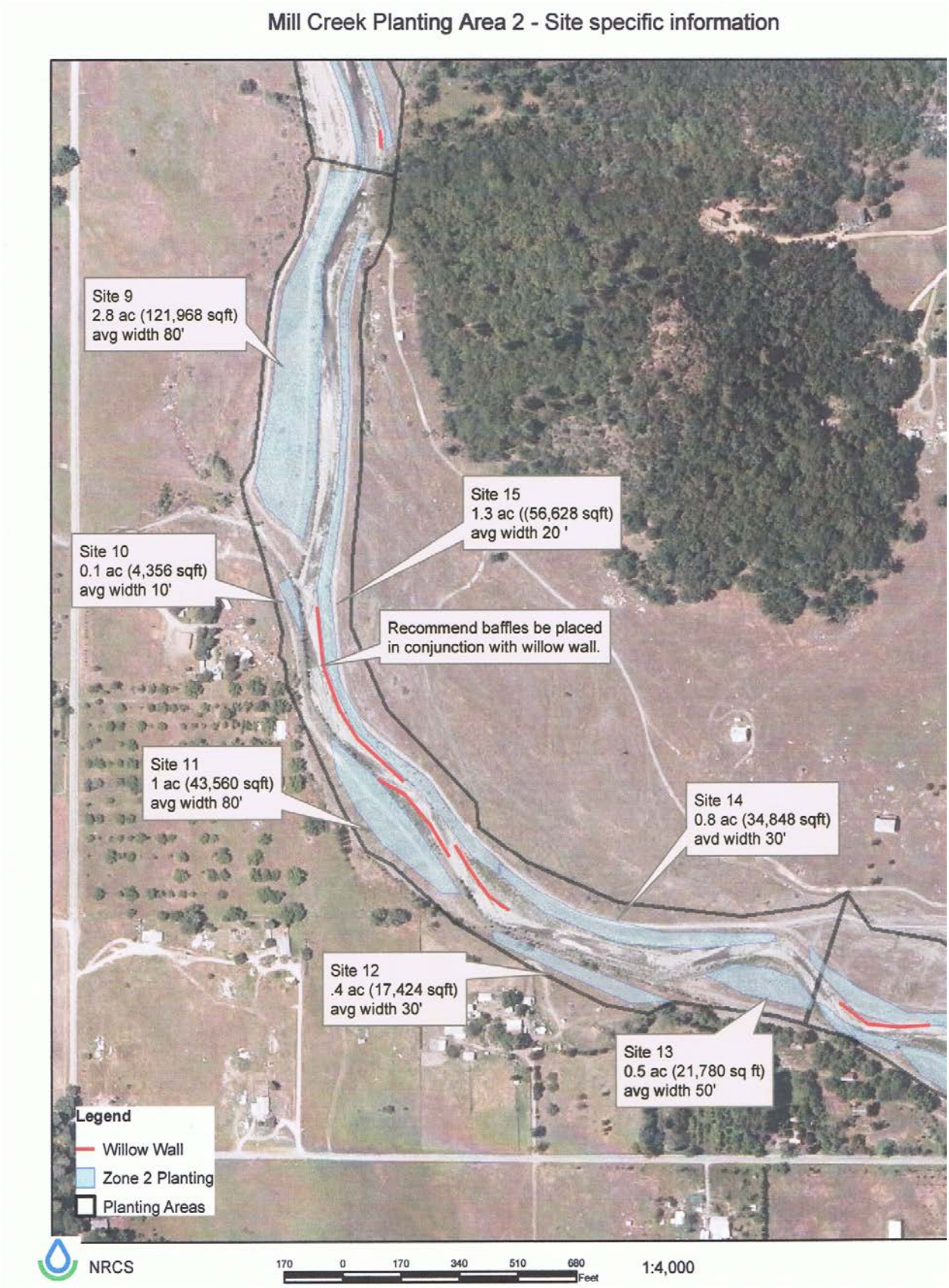
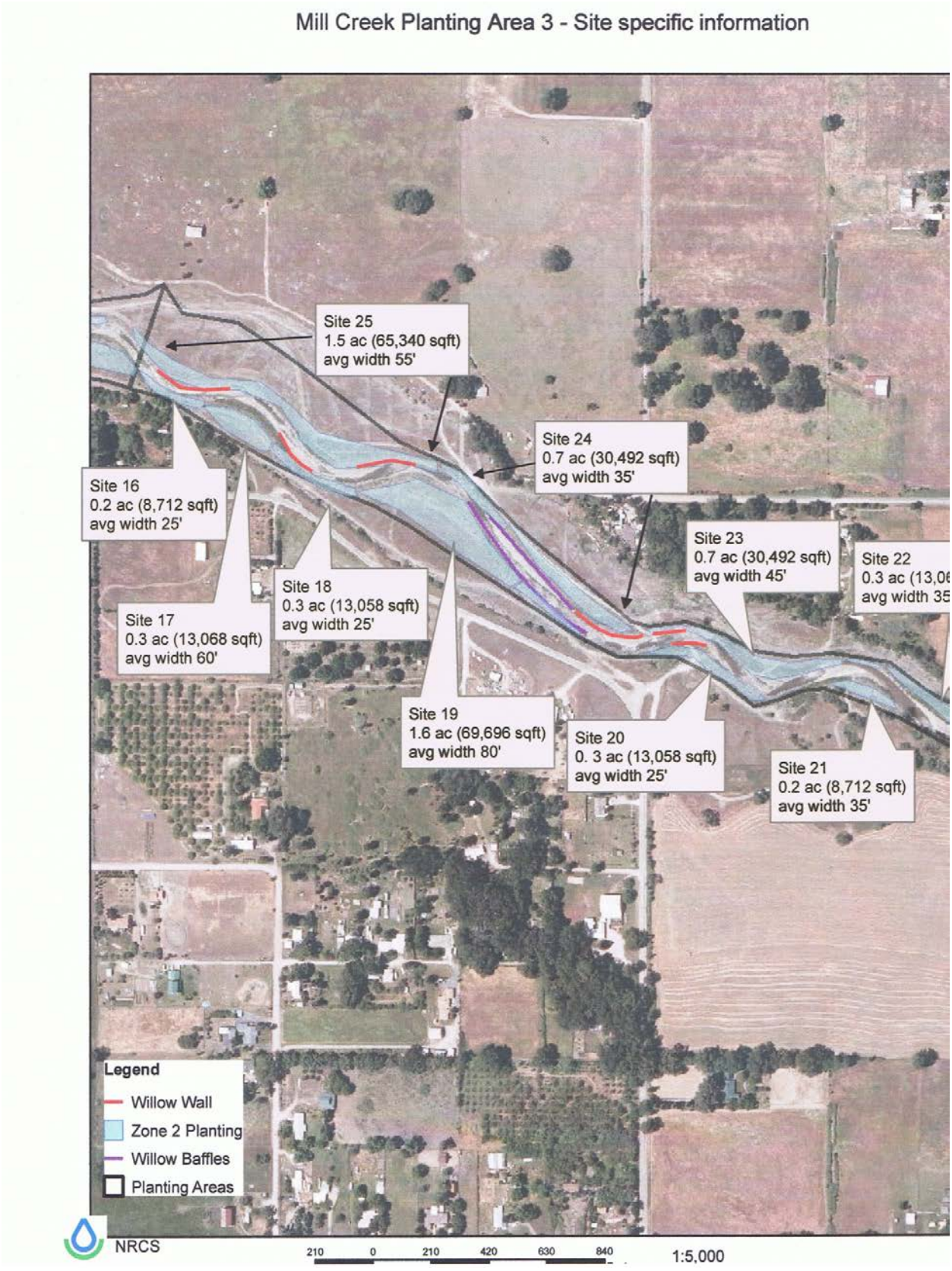
Appendix A. Vegetation Planting Area Designations


Mill Creek Planting Area 1 - Site specific information
Site 1
.3 acres (13,068 sqft.)
avg.width = 25'
Site 6
0.6 ac (26,136 sqft)
avg width = 25'
Site 2
.1 acre (4356 sqft.)
avg. width = 5'
recommend road decom.
Site 7
Proposed bio-engineering site
long term goal
Site 3
0.1 ac (4,356 sqft)
avg width = 20'
Site 4
.2 ac (8712 sqft)
avg width 5',
Site specific planting,
many existing cottonwoods here
Site 8
1 ac (43,560 sqft)
avg width = 30'
Site 5
0.5 ac (21,780 sqft)
avg width = 5'
Legend
Planting Areas
Zone 2 Planting
Zone 2 Demonstration Area
Willow Baffles
Willow Wall
NRCS
125 0 125 250 375 500
Feet
1:5,000

Mill Creek Planting Area 2 - Site specific information



Mill Creek Planting Area 3 - Site specific information



Appendix B. Cultural Resources Consultation Letter

United States Department of the Interior

BUREAU OF RECLAMATION
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

JUL 22 2019

IN REPLY REFER TO:

MP-153
2.1.1.04

CERTIFED RETURN RECEIPT REQUESTED

Ms. Patricia Rabano
Tribal Historic Preservation Officer
Round Valley Indian Tribes
77826 Covelo Road
Covelo, California 95428

Subject: National Historic Preservation Act (NHPA) Section 106 Compliance for the Round Valley Indian Tribes (RVIT) Mill Creek Streamflow and Riparian Restoration Project, Mendocino County, California (17-NCAO-222.001)

Dear Ms. Rabano:

The Bureau of Reclamation is initiating consultation under Title 54 U.S.C. § 306108, commonly known as Section 106 of the NHP A and its implementing regulations found at 36 CFR Part 800, for the Mill Creek Streamflow and Riparian Restoration Project (Enclosure 1: Figure 1). We propose to award a WaterSMART grant to the RVIT to partially fund restoration of the Mill Creek riparian corridor. We determined that the expenditure of Federal funds is an undertaking as defined in 36 CFR § 800.16(y) and a type of activity that has the potential to cause effects on historic properties under 36 CFR § 800.3(a). We are entering into consultation with you on this undertaking and requesting concurrence on our finding of no historic properties affected.

RVIT proposes to plant approximately 30,000 trees to stabilize and protect 7,150 feet of erosion-prone riverbank. This will result in increased shade along the streambed, which will ultimately reduce water temperature and evaporative losses and help to stabilize water table levels and extend the period of surface flow downstream of the project area. Increased surface flows will benefit a variety of fish and wildlife species in the stream corridor. The RVIT natural resources department staff will collect cuttings of native plants from the project area for greenhouse propagation; drip line irrigation will also be installed in the project areas in advance of the planting effort. Planting will be accomplished using hand labor and limited heavy equipment use (excavator, backhoe, water truck).

We have determined that the area of potential effects (APE) includes an approximately 75.3-acre area that encompasses the streambed and bordering revegetation zone (Enclosure 1: Figure 2). The APE is located in sections 25, 26, and 36, T. 23 N., R. 13 E., Mount Diablo Base and Meridian, as depicted on the Covelo West 7.5' U.S. Geological Survey topographic quadrangle map (Enclosure 1: Figure 2).

In an effort to identify historic properties, we reviewed archaeological site index and project data. A Reclamation archaeologist also searched the cultural resources files located at the Bureau of Indian Affairs. The entire APE was surveyed for this project by Cull (2019). No cultural resources were identified. The Mill Creek corridor has been heavily eroded by extensive natural braiding of the stream. The potential for intact cultural resources in this type of erosional context is extremely low.

Based on the above findings, we have determined that there will be no historic properties affected by the riparian corridor restoration project pursuant to 36 CFR Part 800.4(d)(1). We invite your comments on our delineation of the APE and our efforts to identify historic properties. We also request your concurrence with our finding that the undertaking will result in no historic properties affected. If your office concurs with this determination and these findings, we respectfully request that you sign and date the enclosed Tribal Historic Preservation Officer Section 106 Concurrence Form and return it to us at your earliest convenience (Enclosure 2). Please contact Mr. Jeremy Foin, Archaeologist, at (916) 978-5215, or jfoin@usbr.gov, if you have any questions concerning this project. We look forward to your response.

Sincerely,

Anastasia T. Leigh
Regional Environmental Officer

Enclosures – 2

References

Cull, William H.
2019 *Mill Creek Restoration Archaeological Survey Report (17-NCAO-222.001).* Prepared by William H. Cull for the Bureau of Reclamation, Mid-Pacific Region

Appendix C. Indian Trust Assets Compliance

Date: 11/16/18

Requested by (office/program)	Doug Kleinsmith
Fund	17XRO680A1
WBS	RX33080001150350E
Fund Cost Center	2015200
Region # (if other than MP)	
Project Name	Round Valley Indian Tribes – Mill Creek Streamflow and Riparian Corridor Restoration Project
CEC or EA Number	
Project Description (attach additional sheets if needed and include photos if appropriate)	Under the Proposed Action, Reclamation would award a grant to the Round Valley Indian Tribe to develop and establish a riparian corridor consisting of approximately 30,000 trees and shrubs along barren portions of the 2.4 mile Mill Creek restoration project area. (see below map.)
***Project Location (Township, Range, Section, e.g., T12 R5E S10, or Lat/Long cords, DD-MM-SS or decimal degrees). Include map(s)**	-123.26 longitude 39.81 latitude (see attached map)

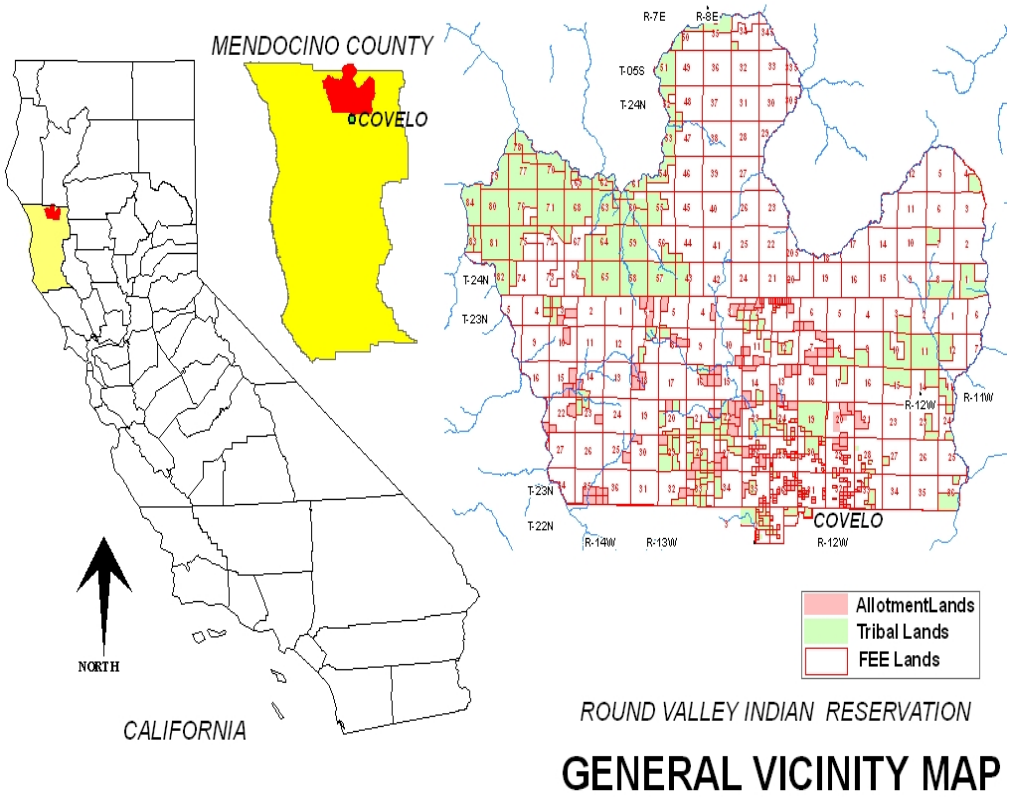
/s/ Doug Kleinsmith	Doug Kleinsmith	11/16/18
Signature	Printed name of preparer	Date

ITA Determination:

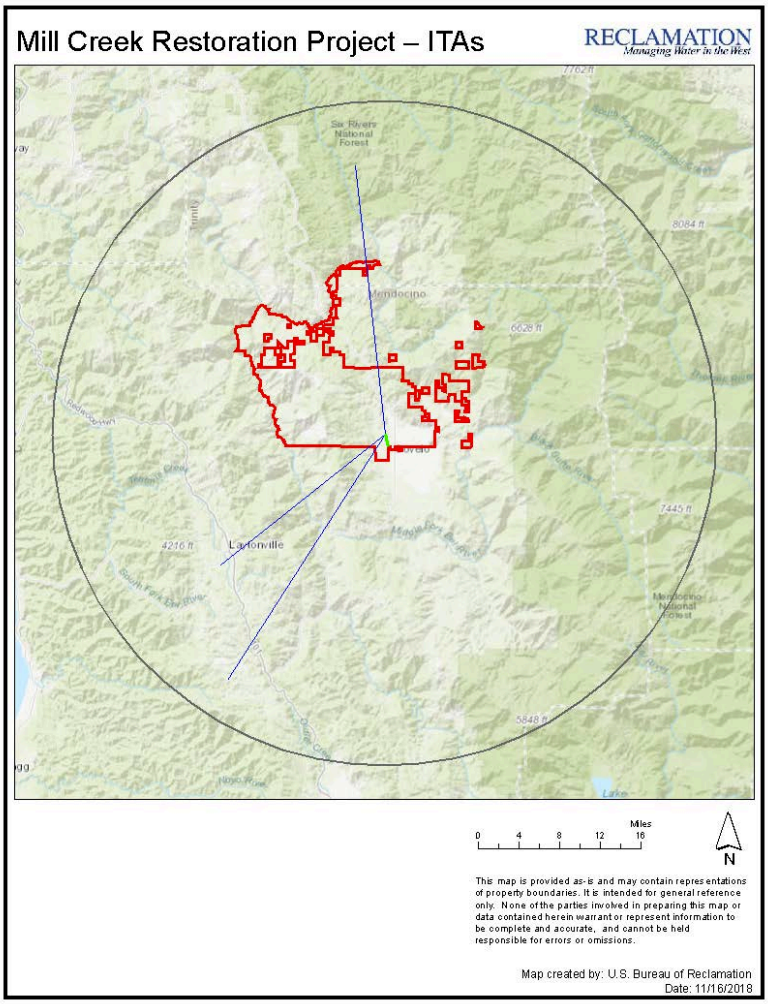
The proposed restoration is on Round Valley Indian Tribe land. (See attached image).

Based on the nature of the planned work it <u>does not</u> appear to be in an area that would impact Indian hunting or fishing resources or water rights. It is reasonable to assume that the proposed action would <u>not</u> have any impacts on ITAs.

K. Clancy	Kevin Clancy	11/20/2018
Signature	Printed name of approver	Date



GENERAL VICINITY MAP


Mill Creek Restoration Project – ITAs
RECLAMATION
Managing Water in the West
Six Rivers National Forest
Mendocino
6628 ft
8084 ft
7445 ft
4216 ft
Laytonville
Mendocino National Forest
5848 ft
Miles
0 4 8 12 16
N
This map is provided as-is and may contain representations of property boundaries. It is intended for general reference only. None of the parties involved in preparing this map or data contained herein warrant or represent information to be complete and accurate, and cannot be held responsible for errors or omissions.
Map created by: U.S. Bureau of Reclamation
Date: 11/16/2018

Appendix D. Special Status Species Potentially Occurring within or Near the RVIT Project Area

Species	Federal Status	State Status	Habitat	Potential for Occurrence
Fish				
Chinook salmon (*Onchorynchus tschawyshaw)*	T	E	Anadromous, Eel River and its tributaries	**None**: All surface waters would have gone subterranean before any in-channel vegetation planting efforts begin.
Steelhead (*Oncorhynchus mykiss)* (California Central Valley DPS*)*	T	None	Anadromous, Eel River and its tributaries	**None**: All surface waters would have gone subterranean before any in-channel vegetation planting efforts begin.
Pacific Lamprey (*Entospenus tridentatus*)	-	CDFW-SSC	Anadromous, Eel River and its tributaries	**None**: All surface waters would have gone subterranean before any in-channel vegetation planting efforts begin.
Amphibians				
Foothill Yellow-legged Frog (*Rana boylii*)	_	CT	Found in or near rocky stream in a variety habitats. Tadpoles require water for at least three or four months while completing their aquatic development.	**Moderate:** Habitat exists when surface waters and wetted habitat conditions are present, but the brevity of surface water limits successful reproduction and presence within the project area.
California Red-legged Frog (*Rana Draytonii)*	T	CDFW-SC	Breeds in aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons, often associated with still or slow moving water and dense, shrubby riparian or emergent vegetation. Upland dispersal areas.	**None:** No suitable habitat exist in the proposed action area.
Birds				
Northern Spotted Owl (Strix occidentalis caurina)	T	T	Northern Spotted Owls prefer habitats that consist of dense, old growth, multi-layered conifer stands of Redwood and Douglas fir habitats.	**None:** No suitable habitat exist in the proposed action area.

Marbled Murrelet (*Brachyramphus marmorata*)	T	E	The Marbled Murrelet nests in old-growth redwood dominated forests and feeds near the ocean shore.	**None:** No suitable habitat exist in the proposed action area.
Western Snowy Plover (*Charardrius nivosus nivosus*)	T	T	The Western Snowy Plover feeds in wet or dry sand for invertebrates among tide cast kelp and within low fore-dune vegetation. Nesting occurs along the shores, peninsulas, offshore islands and river bars.	**None:** No suitable habitat exist in the proposed action area.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	T	E	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape	**None**: No habitat exist in the project area and the CNDDB did not indicate any occurrence within the 9 USGS quadrangle search area.
Reptiles				
Western Pond Turtle (*Emys marmorata*)	--	CDFW - SSC	Associated with suitable aquatic habitats. Require basking sites adjacent to water for escape. Hatchlings subject to rapid death by dessication if exposed to hot, dry conditions.	**Seasonal habitat only:** Stream goes dry every summer, No Western pond turtles have been observed in the project reach for years.
Invertebrates				
None				
Plants				
Burke'sGoldfields (Lasthenia burkei)	E	E	A small annual herb that occurs in vernal pools and swales in Sonoma, Napa, Lake and Mendocino Counties.	**None:** The habitat associated with Mill Creek is rock and gravel dominated and provides no habitat suitable for vernal pool or swale presence.
Contra Costa Goldsfields (Lasthenia conjugens)	E	CNPS 1B.2	Valley grasslands and vernal pools.	**None:** The habitat associated with Mill Creek is rock and gravel dominated and provides no habitat suitable for vernal pool or swale presence.
Showy Indian Clover (*Trifolium amoenum*)	E	CNPS 1B.2	An annual dicot herb endemic to California that is associated with valley grasslands, wetlands and riparian areas.	The habitat associated with Mill Creek is rock and gravel dominated and provides no habitat suitable for vernal pool or swale presence.

T = Threatened **E** = Endangered **SC** = Federal Species of Concern **CSC** = California Species of Concern CT = California Candidate Threatened **MBTA** = Federal Migratory Bird Treaty Act **CNPS** = California Native Plant Society **CDFW SC** = California Department of Fish & Wildlife Species of Special Concern. *Source*: California Department of Fish & Wildlife List for Covelo West and nine adjacent quadrangles and U.S. Fish and Wildlife Service IPaC species list and the National Marine Fisheries Service Species List.