

RECLAMATION

Managing Water in the West

Environmental Assessment

Langell Valley Irrigation District Tree Removal Project

2016-EA-003



U.S. Department of the Interior
Bureau of Reclamation
Klamath Basin Area Office
Mid-Pacific Region

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Mission Statements

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

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

List of Acronyms and Abbreviations

| | |
|-------------------|--|
| APE | Area of Potential Effect |
| BGEPA | Bald and Golden Eagle Protection Act |
| EA | Environmental Assessment |
| EPA | Environmental Protection Agency |
| GHG | Greenhouse Gases |
| ITA | Indian Trust Asset |
| ITAs | Indian Trust Assets |
| KBAO | Klamath Basin Area Office |
| LVID | Langell Valley Irrigation District |
| MTBA | Migratory Bird Treaty Act |
| National Register | National Register of Historic Places |
| NHPA | National Historic Preservation Act |
| O&M | Operation and Maintenance |
| ODEQ | Oregon Department of Environmental Quality |
| Project | Klamath Project |
| Reclamation | Bureau of Reclamation |
| RO&M | Review of Operations and Maintenance |
| ROW | Right-of-Way |
| SIP | State Implementation Plan |
| USFWS | United States Fish and Wildlife Service |

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Chapter 1 Introduction and Background Information

1.1 Introduction

The Bureau of Reclamation's Klamath Basin Area Office (KBAO) is proposing to approve Langell Valley Irrigation District's (LVID) proposal to remove mature trees on approximately 7.47 miles of Klamath Project (Project) facilities within LVID boundaries. Due years of deferred operation and maintenance (O&M), hundreds of mature trees are causing loss of facility integrity where bank destruction is occurring, breaking away, and loosening large areas of soils causing a widening of the channels. Removal of the trees was identified in a 2012 Review of Operation and Maintenance Report (RO&M) stating that:

“The establishment of mature stands of trees throughout LVID is a matter of concern as their growth threatens the integrity of numerous structures throughout the system. With some trees having been growing for 50 years or more, the cutting of trees, removal of all tree roots, and restoration of all tree root voids is no longer a simple maintenance item. Therefore, recommendation 2012-2-AL is issued for establishment of a recurring program to cover phased tree removal throughout LVID. LVID will need to submit to KBAO a list of planned tree removal activities on an annual basis that can then be permitted prior to removal of the trees, the tree roots, and repair of the tree root voids.”

This Environmental Assessment (EA) analyzes the potential environmental impacts of removing trees along Project irrigation delivery facilities in LVID. The EA has been prepared in accordance with the *National Environmental Policy Act (NEPA)* (42 U.S.C. §4321 *et seq.*), the Council on Environmental Quality Regulations for implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations (CFR) Parts 1500-1508), and the Department of the Interior regulations for the Implementation of the NEPA (43 CFR Part 46). If there are no significant environmental impacts identified as a result of the analyses, a Finding of No Significant Impact can be signed to complete the NEPA compliance process.

1.2 Need for the Proposal

The need for LVID's proposal is to: 1) ensure Project facilities are maintained in a manner consistent with Reclamation engineering and O&M standards by addressing the RO&M recommendation; and 2) ensure LVID has adequate access such that regular O&M of the facilities can be conducted on a routine basis by providing clear and unobstructed access routes, free of obstruction from trees, allowing safe passage of vehicles and machinery used to perform regular and required O&M by LVID.

1.3 Authority and Regulatory Compliance Laws

Compliance with the following laws and regulations would be required prior to and during implementation of the proposed project.

NEPA (42 USC, Section 4321 et seq.)

Under NEPA, federal agencies must consider the environmental consequences of proposed major actions. The spirit and intent of NEPA is to protect and enhance the environment through well-informed federal decisions, based on sound science. NEPA is premised on the assumption that providing timely information to the decision maker about the potential environmental consequences of proposed action alternatives would improve the quality of federal decisions. Thus, the NEPA process includes the systematic interdisciplinary evaluation of potential environmental consequences expected to result from implementing a proposed action.

Reclamation O&M Contract

Under its various contracts with Reclamation, LVID is obligated to satisfactorily perform O&M of transferred facilities including the distribution and drainage facilities included in this EA's Proposed Action Alternative. The proposed tree removal activities are proposed by and would be undertaken by LVID to comply with its contractual obligations.

MP-620 Permit

In determining whether or not to approve the proposed tree removal activities, Reclamation may request, review, and approve engineering designs and specifications, pursuant to a MP-620 permit (a Reclamation Mid-Pacific Region-specific document issued for additions or alterations to Reclamation-owned conveyance and distribution facilities). Reclamation's prior approval (with and without an MP-620 document) is required for all work to be performed by LVID under this proposal. Reclamation would inspect all completed work to determine it is consistent with authorized designs and specifications.

Clean Air Act (CAA) (42 USC, Section 7401 et seq.)

The principal federal law protecting air quality is the CAA. The CAA is enforced by the Environmental Protection Agency (EPA), and in Oregon, is administered by the Oregon Department of Environmental Quality (ODEQ). Section 176 (C) of the CAA (CAA; 42 U.S.C. 7506 [C]) requires any entity of the Federal Government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the Federal CAA (42 U.S.C. 7401 [a]) before the action is otherwise approved.

Federal Migratory Bird Treaty Act (MBTA) of 1918 and Amendments (16 USC, Sections 703-712)

The MBTA prohibits the take, harm, or trade of any migratory bird species and requires that an agency must have a policy in place to prevent harm to such species as a result of that agency's actions. The United States Fish and Wildlife Service (USFWS) is the agency charged with administering and enforcing the MBTA. A 1972 amendment to the act included owls, hawks, and other birds of prey.

Endangered Species Act (ESA) (16 USC. 1531 et seq.; 50 CFR Parts 17 and 222)

The ESA requires Federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species (according to the lists maintained by USFWS and the National Marine Fisheries Service (NMFS)) or result in the destruction or adverse modification of habitat critical to such species' survival. To ensure against jeopardy, each Federal agency must consult with the USFWS and/or NMFS.

Bald and Golden Eagle Protection Act (BGEPA) (16 U.S.C. 668-668c)

The BGEPA, enacted in 1940, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The BGEPA provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." "Take" is defined as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

National Historic Preservation Act (NHPA) (P.L. 89-665), as amended (Public Law 95-515) (54 USC § 300101 et seq.)

The NHPA requires federal agencies to consider historic preservation values when planning their activities. Each federal agency must establish a preservation program for identifying, evaluating, and protecting properties under its ownership or control that are eligible for listing on the National Register of Historic Places. In the Section 106 process, a federal agency must identify historic properties that may be affected by its actions, must evaluate the proposed action's effects, and then must explore ways to avoid or mitigate those effects.

Canal Act of 1890

Reclamation developed water conveyance facilities (e.g., canals, laterals, and drains) over and across many of the privately owned properties within LVID boundaries as provided for in the Act of August 30, 1890 (26 Stat. 391, 43 U.S.C. §945, commonly referred to as the 1890 Canal Act). The 1890 Canal Act provided that, in all land patents issued under public land laws for lands west of the one hundredth meridian, rights-of-way would be reserved for ditches or canals constructed by the authority of the United States. The main purpose of the 1890 Canal Act was to reclaim the arid lands in the western United States by conducting water upon them. The locations of the canals, laterals, and drains in LVID were determined by irrigation needs and topography at the time of construction, and the width of the facilities was engineered for the volume of water being conveyed. Facilities often were constructed without adjacent road access and travel routes are necessary for Reclamation and LVID O&M activities.

At one time, the Federal Government owned much of the land in the western United States. When the Government issued a patent, it conveyed fee ownership from the Government to the private landowner. The patents issued after the 1890 Canal Act went into effect contained language that reserved rights to the Government, namely, the right to construct, operate, and maintain ditches or canals to be built under the authority of the United States. The reservation was a blanket reservation that covered the entire parcel. The Government may exercise the right to construct, operate, and maintain ditches and canals anywhere on the parcel and legislation from the 1960s provided for compensation to the landowner when this right is first exercised.

Current landowners have rights to their land, however, the Government reserved certain rights that allow the Government and its agents to operate and maintain constructed canals and ditches.

Chapter 2 Alternatives

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve LVID's request to remove hundreds of encroaching mature and sapling juniper, willow, and poplar trees from approximately 7.47 miles of Project canals and laterals within LVID. LVID would continue to have impeded access and reduced ability to operate and maintain Project facilities. Facility channel banks would continue to erode and further threaten the integrity of the facilities' ability to convey Project water. Reclamation's recommendation 2012-2-AL in the 2012 RO&M Report would not be addressed.

2.2 Proposed Action Alternative

Under the Proposed Action Alternative Reclamation would approve LVID's proposal to remove hundreds of mature and sapling trees encroaching on approximately 7.47 miles of Project facilities within LVID. Table 1, Figures 1-4, and Appendix A detail the specific locations and land ownership (e.g., fee title, 1890) for which the proposed tree removal activities would occur. Project features located in these areas would be reconstructed back to their original design as directed by Reclamation. Removal of various juniper, willow, and poplar trees by LVID would prevent further erosion and widening of the channels and allow LVID to operate and maintain Project facilities pursuant to various contracts with Reclamation.

According to Reclamation's Engineering and O&M Guidelines for Crossings: "Should trees and/or other significant vegetation become established, proper O&M of earth embankment dams, dikes, and conveyance features, may require their removal" (Reclamation 2008). Additionally, trees and detrimental vegetation growth should be prevented from becoming established on the surface of all earth dam and conveyance feature embankments. A clearance zone of 25 feet beyond each contact (groins and toe) of earth dam embankments should be maintained of all trees and detrimental vegetation. Similarly, a clearance zone of 15 feet should be maintained beyond the outside toe of all fill sections/embankments for open canals and laterals. A small amount of shallow rooted vegetation may be acceptable to aid in erosion protection and slope stabilization. Mowing of grass and small vegetation is desirable and may be necessary to allow surveillance of the surfaces. Generally, sizable root systems of large trees should be excavated out and the embankment replaced and compacted to prevent the development of piping action or erosion.

Tasks associated with the Proposed Action Alternative are proposed by, and would be conducted by LVID staff. Tasks associated with the proposal are expected to take place during the off-irrigation season (November-March) potentially beginning in February of 2016 with activities expected to end in the fall of 2018. Additional work may take place during the spring/summer

months in 2016, 2017, and 2018 if irrigation water, due to limited supply, is not delivered. Tree removal activities would only occur when Reclamation facilities within LVID are dewatered.

As tree removal is proposed on various land ownerships, the process for approval of tree removal activities would be as follows:

Tree Removal on Reclamation Fee-Ownership Land

1. LVID identifies a maintenance need on a specific reach of a facility and confirms proposed actions with Reclamation.
2. LVID confirms the land rights with Reclamation.
3. Reclamation identifies any necessary cultural resources monitoring through coordination with Reclamation's Mid-Pacific cultural resources staff on the specific reaches deemed potentially sensitive by Reclamation archeologists.
4. LVID coordinates with KBAO engineering on specific requirements for each reach and may be required to submit engineering designs and specifications for the specific reach of a facility.
5. Reclamation would provide written communication on when and how tree removal activities would occur.

Landowners or those who have an interest in lands adjacent to Reclamation's fee-ownership lands and who are concerned about LVID's proposed tree removal activities should contact LVID using the below contact information:

Address: Langell Valley Irrigation District
9878 E. Langell Valley Road
Bonanza, Oregon 97623

Phone: 541-545-6344

Tree Removal on Other Land Rights (Easements, Reservations, and 1890 Canal Act Reservations)

Reclamation acquired easements and reservations for water conveyance facilities and their boundaries were well defined in the acquisition documents. However, because the 1890 Canal Act reservations for water conveyance facilities are unbounded, uncertainty about the exact scope and extent of Reclamation's rights has the potential to create conflict between LVID management objectives and those of the landowners. Reclamation proposes LVID take the following approach in coordinating with landowners. LVID is responsible for all tree removal activities and Reclamation may become involved if requested by the landowner and or LVID:

1. LVID identifies a maintenance need on a specific reach of a facility and confirms the proposed actions with landowners and Reclamation.
2. LVID confirms the land rights with Reclamation and notifies the landowner of land status.
3. If requested by KBAO, LVID would submit any engineering designs and specifications required for reconstruction of each facility.
4. LVID notifies the landowner in writing (prior to activities taking place) of the maintenance need, the type of maintenance to be performed, and the estimated dates the maintenance activities would take place. The landowner is asked to respond to LVID and Reclamation

- with any concerns or needs (such as a need to move livestock from area) within 30 days of the notification letter.
5. If the landowner has continuous concerns about the need, type, or dates of the maintenance activity and requires more than verbal communication with LVID, LVID may schedule a date to meet with the landowner to resolve any outstanding issues or concerns. Reclamation staff would be available for this meeting, if needed and requested by LVID and or the landowner.
 6. If there is disagreement between LVID and the landowner about a maintenance need that cannot be resolved, Reclamation would review the issue and make the final determination based on Reclamation facility needs.
 7. Reclamation would provide the determination using written communication to both LVID and the landowner.

Landowners whose lands are encumbered with the above types of land rights and who are concerned about LVID's proposed tree removal activities should contact LVID using the below contact information:

Address: Langell Valley Irrigation District
9878 E. Langell Valley Road
Bonanza, Oregon 97623

Phone: 541-545-6344

Tasks integrated into the Proposed Action Alternative to mitigate potential impacts to birds protected under the MBTA, BGEPA, and in accordance with the *National Bald Eagle Management Guidelines* (May 2007):

In order to comply with the MTBA, BGEPA, and in accordance with the *National Bald Eagle Management Guidelines* (May 2007), removal of trees in potential bird breeding habitat areas in the project vicinity would occur between September and the end of January, when birds are not expected to be nesting. As construction activities must occur during the breeding season for birds protected under the MBTA (February 1 to August 31), Reclamation Natural Resource Specialists would conduct preconstruction field visits within one week prior to initiation of tree removal and reconstruction activities in and adjacent to the project area for nesting migratory birds. If no nests are found during the surveys, tree removal and canal reconstruction may proceed. If nests are found, tree removal and associated activities implementation within the nest area would be coordinated with the USFWS.

As the Proposed Action Alternative includes an area where an active bald eagle nest has been identified (reach No 6. Shown in Table 1 and Appendix A-Tree Removal #6). The following measures in accordance with the *National Bald Eagle Management Guidelines* would be followed:

1. During the breeding season of bald eagles (January 1 to August 31), timber harvesting operations including road construction and chainsaw, and yarding operations must be avoided within 660 feet of a nest.

2. The distance of timber harvesting operations may be decreased to a distance of 330 feet around alternate nests within a particular territory, including nests that were attended during the current breeding season but not used to raise young, after eggs laid in another nest within the territory have hatched.
3. Removal of clear cutting or removal of overstory trees within 330 feet of a nest should be avoided at any time.
4. The active bald eagle nest and buffer area would be marked with flagging.

Further implementation of project activities within the nest area would depend on the level of noise or construction disturbance, line of site between the nest/roost and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. These factors would be analyzed and used to assist Reclamation and the USFWS in making an appropriate decision on buffer distances and avoidance timeframes, as necessary.

Tasks integrated into the Proposed Action Alternative to mitigate potential air quality impacts from fugitive dust emissions:

LVID is required to comply with the following reasonable precautions to reduce fugitive dust emissions as prescribed in the State of Oregon SIP as adopted by the Environmental Quality Commission under OAR 340-200-0040. LVID may contact ODEQ for any questions or concerns regarding the below listed precautions.

- Use, where possible, of water for control of dust during construction operations, the grading of roads or the clearing of land such as removal of trees.
- Application of water on unpaved roads, materials stockpiles, and other surfaces which can create airborne dusts.
- Full or partial enclosure of materials stockpiles in cases where application of water is not sufficient to prevent particulate matter from becoming airborne.
- Covering, at all times when in motion, open bodied trucks transporting materials likely to become airborne.

KBAO engineering and environmental compliance staff would perform periodic onsite inspections to ensure that all fugitive dust control measures are in place during tree removal activities and work completed by LVID is consistent with authorized designs, specifications, and environmental commitments outlined in this EA.

Table 1. Proposed LVID Tree Removal Locations and Land Rights

Note: An 1890 Canal Act reservation of rights are over a parcel/area and boundaries of the constructed facility are not defined. In general, the width of the facility is implied to be the constructed width, with additional width for access to and along the facility for standard maintenance vehicle passage, and supplemental width as necessary for maintenance equipment to operate safely.

| Reach | Township | Range | Section | Land Rights | Right-Of-Way Width |
|-------------------|----------|-------|---------|------------------|---|
| 1 | 39 | 12 | 30 | 1890 Canal Act | Undefined |
| 1A | 39 | 11 | 24, 25 | 1890 Canal Act | Undefined |
| 2 | 39 | 12 | 35 | Ownership in Fee | 20' each side of centerline |
| 4 | 39 | 12 | 26 | 1890 Canal Act | Undefined |
| 4 | 39 | 12 | 26 | Ownership in Fee | 30' on northeasterly side and 50' on southwesterly side |
| 4 | 39 | 12 | 35 | Ownership in Fee | 30' on northeasterly side and 50' on southwesterly side |
| 4 | 39 | 12 | 35 | 1890 Canal Act | Undefined |
| 4 | 39 | 12 | 26 | ROW Reservation | 50' on south side and 30' on north side |
| 5 | 40 | 13 | 15 | Ownership in Fee | 25' on easterly side and 20' on westerly side |
| 6 | 39 | 12 | 31 | Ownership in Fee | 25' on easterly side and 20' on westerly side |
| 6 (Eagle Nest) | 39 | 12 | 31 | Ownership in Fee | 25' on northerly side and 20' on southerly side |
| 6 | 40 | 13 | 6 | 1890 Canal Act | Undefined |
| 6 | 40 | 13 | 6 | Ownership in Fee | 25' on northerly and 20' on southerly side |
| 7 | 39 | 12 | 28 | 1890 Canal Act | Undefined |
| 7 | 39 | 12 | 32 | Ownership in Fee | 15' on easterly side and 30' on westerly side |
| 7 | 39 | 12 | 32 | 1890 Canal Act | Undefined |
| 8 | 41 | 13 | 13 | Ownership in Fee | 40' on southerly side and 60' on northerly side |
| 8 | 40 | 14 | 18 | Ownership in Fee | 40' on southwesterly side and 60' on northeasterly side |
| 8 | 40 | 14 | 18 | 1890 Canal Act | Undefined |

Figures 1-4. Photographs of encroaching trees on canals and laterals identified in Table 1.



Figure 1.



Figure 2.



Figure 3.



Figure 4.

Chapter 3 Affected Environment & Environmental Consequences

This chapter describes the affected environment and evaluates the environmental consequences associated with implementation of the Proposed Action Alternative. The No Action Alternative describes the conditions most likely to occur if the Proposed Action Alternative were not implemented and provides the basis for comparison to describe the environmental consequences of implementing the action alternative.

Cumulative impacts are described for each resource. Cumulative impacts result from the incremental impact of the action, when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

3.1 Resources Not Analyzed in Detail

Effects on several environmental resources were examined and found to be minor. For the reasons noted below, the following resources were eliminated from further review in this EA.

3.1.1 Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. As indicated in Appendix B, there are no Indian reservations, Rancherias or allotments in the project area, the nearest Indian Trust Asset (ITA) is a public domain allotment approximately 35 miles southeast of the project site, and on May 5, 2015, Reclamation's Mid-Pacific ITA Coordinator stated that, "I have examined the project description for 2015_EA_004 [renamed 2016-EA-003], Langell Valley Irrigation District Tree Removal and have determined that the nearest ITA is in excess of 25 miles from the proposed tree removal sites. There is no adverse impact to ITAs caused by this work."

3.1.2 Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." The Proposed Action Alternative would not affect and/or prohibit access to and ceremonial use of Indian sacred sites.

3.1.3 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 as a result of implementing the Proposed Action Alternative. Since there would be no impact to any populations, there would be no adverse human health or environmental effects to minority or low-income populations as a result of the Proposed Action Alternative.

3.1.4 Climate Change and Greenhouse Gases

Climate change refers to significant change in measures of climate (e.g., temperature, precipitation, or wind) lasting for decades or longer. Many environmental changes can contribute to climate change (e.g., changes in sun's intensity, changes in ocean circulation, deforestation, urbanization, burning fossil fuels) (EPA 2015). Climate change implies a significant change having important economic, environmental, and social effects in a climatic condition such as temperature or precipitation. Climate change is generally attributed directly or

indirectly to human activity that alters the composition of the global atmosphere, additive to natural climate variability observed over comparable time periods.

There would be no impacts contributing to climate change or greenhouse gases (GHG) under the No Action Alternative. Under the Proposed Action Alternative Reclamation would approve LVID's proposal to remove encroaching trees thus preventing further erosion and widening of the channels. Potentially minor and temporary impacts to climate change or GHG could result from the use of excavators, chainsaws, backhoes, and dozers for intermediate periods over the course of February 2016 to December 2018. Any impacts to climate change or increases in GHG would be expected to be insignificant due to the size and scope of the project, small change from current conditions, duration of use that is limited to the project construction, and compliance with pollution related laws and regulations. Furthermore, LVID would comply with applicable Federal, state, or local air pollution laws and regulations.

3.1.5 Noise

Implementation of the Proposed Action would result in construction activities that would temporarily dominate the rural noise environment in the project area. Construction noise would be temporary and would be minimized by limiting the construction work hours between 7:00 am and 6:00 pm Monday through Friday. Noise impacts resulting from the Proposed Action Alternative would be temporary and insignificant.

3.2 Resources Analyzed in Detail

3.2.1 Water Resources

3.2.1.1 Affected Environment

The water resources potentially affected would be surface waters within the canals and laterals proposed for tree removal. In order to minimize water loss and ensure structural integrity, it is imperative the canals and laterals that convey irrigation water to LVID water users are structurally sound and operated and maintained consistent with Reclamation standards.

3.2.1.2 Environmental Consequences

No Action Alternative:

Under the No Action Alternative, Reclamation would not approve LVID's request to remove encroaching juniper, willow, and poplar trees on approximately 7.47 miles of Project canal and laterals. The tree's root systems would continue to wear and erode the existing banks widening and lowering the bank elevation allowing water to spill out into the adjacent lands. Potential for trees falling into the canal would continue to be present thus allowing sediments to fall into the canal increasing turbidity. Falling trees would also likely damage adjacent canal banks and allow for future erosion potential.

Proposed Action Alternative:

Under the Proposed Action Alternative, impacts to surface water quality would not occur as the Proposed Action Alternative activities would take place during the off irrigation season, and/or when no water is present in the canals and laterals. After project completion, it is anticipated that reconstruction of the canal and lateral embankments would reduce the quantity of water

currently being lost as a result of root intrusion or decay within the facility. Implementation of this project has the potential to conserve water that is currently being lost during irrigation season due to the lowered bank elevations and overall existing facility conditions. As such, the Proposed Action Alternative would not result in impacts to surface water quality but may increase some unquantifiable amount of Project water in Project facilities as a result of conservation through facility repairs.

3.2.1.3 Cumulative Impacts

No impacts to surface water quantity are anticipated to occur; negligible impacts to surface water quantity would result from implementation of the Proposed Action Alternative; therefore, the Proposed Action Alternative would not contribute significantly to cumulative impacts to the resource.

3.2.2 *Biological Resources*

3.2.2.1 Affected Environment

The list of federally listed, proposed, and candidate species potentially occurring within the LVID tree removal areas are shown in Table 2. This list was generated by accessing and querying the U.S. Fish and Wildlife Service database for endangered, threatened or candidate species that may occur in Klamath County, Oregon (<http://www.fws.gov/klamathfallsfwo/es/es.html>).

Table 2. Listed, Proposed, and Candidate Species that May Occur in Klamath County, Oregon (as of October 8, 2015)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Klamath Falls Fish and Wildlife Office
1936 California Avenue, Klamath Falls, Oregon 97601
(541) 885-8481 FAX (541) 885-7837
kfalls@fws.gov



LISTED, PROPOSED, AND CANDIDATE SPECIES THAT MAY OCCUR IN KLAMATH COUNTY, OREGON

Status: Endangered

| Phylum | Common Name | Scientific Name | Critical Habitat |
|--------|------------------------|--------------------------------|------------------|
| Fish | Lost River sucker | <i>Deltistes luxatus</i> | Designated |
| Fish | Shortnose sucker | <i>Chasmistes brevirostris</i> | Designated |
| Mammal | Gray wolf | <i>Canis lupus</i> | |
| Plant | Applegate's milk-vetch | <i>Astragalus applegatei</i> | |
| Plant | Green's tuctoria | <i>Tuctoria greenei</i> | Designated |

Status: Threatened

| Phylum | Common Name | Scientific Name | Critical Habitat |
|-----------|------------------------------------|---|------------------|
| Bird | Northern spotted owl | <i>Strix occidentalis caurina</i> | Designated |
| Bird | Yellow-billed cuckoo (Western DPS) | <i>Coccyzus americanus occidentalis</i> | Proposed |
| Fish | Bull trout (Klamath River DPS) | <i>Salvelinus confluentus</i> | Designated |
| Amphibian | Oregon spotted frog | <i>Rana pretiosa</i> | Proposed |
| Mammal | Canada lynx | <i>Lynx canadensis</i> | |
| Plant | Slender Orcutt grass | <i>Orcuttia tenuis</i> | Designated |

Status: Proposed

| Phylum | Common Name | Scientific Name | Critical Habitat |
|--------|-------------------------|-------------------------|------------------|
| Mammal | Fisher (West Coast DPS) | <i>Pekania pennanti</i> | |

Status: Candidate

| Phylum | Common Name | Scientific Name |
|--------|----------------|-------------------------|
| Plant | Whitebark Pine | <i>Pinus albicaulis</i> |

Updated October 8, 2015

3.2.2.2 Environmental Consequences

No Action Alternative:

Under the No Action Alternative, Reclamation would not approve LVID's request to remove encroaching juniper, willow, and poplar trees on approximately 7.47 miles of Project canal and laterals. Current conditions would remain the same as existing condition if no action were taken. There would be no new effect to fish and wildlife including Endangered, threatened, proposed and candidate, or their critical habitat.

Proposed Action Alternative:

ESA Listed Species

A list of Federally Listed, Proposed, and Candidate species that may occur within Klamath County is shown in Table 2. The potential impacts to all species included on this list as a result of the Proposed Action Alternative, have been considered and it has been determined that the Proposed Action Alternative would have no effect on these species or their habitats as the tree removal project is occurring in the previously disturbed context of facility embankments during the non-irrigation season when the canals are dry. This decision is based on analysis of current information on the potential effects of the action, known existing populations, and habitat requirements for the species.

Bald and Golden Eagles

During a site visit on June 26, 2015, Reclamation Natural Resources Specialists, the LVID District Manager, and Elizabeth Willy, from the Klamath Falls USFWS office, confirmed an active bald eagle nest located in a section of Reach No. 6 (*see* Table 1 and Appendix A—*LVID Tree Removal #6*).

According to the *National Bald Eagle Management Guidelines*, Timber Operations and Forestry Practices (*May 2007; Category C; Appendix C*), clear cutting or removal of overstory trees within 330 feet of a nest should be avoided at any time. During the breeding season, timber harvesting operations including road construction and chainsaw, and yarding operations must be avoided within 660 feet of a nest. The distance of timber harvesting operations may be decreased to a distance of 330 feet around alternate nests within a particular territory, including nests that were attended during the current breeding season but not used to raise young, after eggs laid in another nest within the territory have hatched. The breeding season (including nesting, egg laying/incubation, hatching/rearing and fledging young) for bald eagles is January 1 to August 31.

LVID would leave the active bald eagle nest in Reach #6 and would follow the buffer of 660 feet from January 1 – August 31. LVID would also leave surrounding trees that are suspected bald eagle habitat as identified by USFWS during the site visit conducted on June 26, 2015. The active bald eagle nest and buffer area would be marked with flagging.

Based on geographical information provided by the USFWS on May 29, 2015, other than Reach #6, no other bald eagles were determined to be present in the proposed project locations.

Bird Species Protected Under the MBTA

Impacts to bird species protected under the MBTA are not anticipated as mitigation measures have been incorporated into the Proposed Action Alternative that includes avoidance measures during the breeding season (February 1 – August 31) (see section 2.2). If construction activities must occur during the breeding season for birds protected under the MBTA, Reclamation Natural Resource Specialists would conduct preconstruction field visits within one week prior to initiation of tree removal and reconstruction activities in and adjacent to the project area for nesting migratory birds. If no nests are found during the surveys, tree removal and canal reconstruction may proceed. If nests are found, tree removal and associated activities implementation within the nest area would be coordinated with the USFWS.

3.3.2.3 Cumulative Impacts

The Proposed Action Alternative is not expected to result in effects to biological resources, therefore would not contribute to cumulative impacts.

3.2.3 Cultural Resources

3.2.3.1 Affected Environment

The term “cultural resources” broadly refers to prehistoric and historic sites, districts, buildings, structures, objects, cultural landscapes, sacred sites, and traditional cultural properties. Title 54 U.S.C. § 300101 et seq., formerly and more commonly known as the NHPA, is the primary Federal legislation that defines the Federal government’s policy and responsibility to cultural resources. Section 106 of the NHPA (54 U.S.C. § 306108) requires Federal agencies to take into consideration the effects of their actions on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are listed on or eligible for inclusion on the National Register are referred to as historic properties. Other Federal cultural resources laws that apply on Federal lands include the Archaeological Resources Protection Act and the Native American Graves Protection and Repatriation Act (NAGPRA).

As Reclamation only has authority on Reclamation land for this proposed action, the undertaking for Section 106 of the NHPA is limited to those tree removal locations where Reclamation’s approval is required. The Area of Potential Effects (APE) for cultural resources for the Proposed Action Alternative is defined as the areas on Reclamation land around and beneath each tree needed to remove the tree and its roots. The actual APE is smaller than the approximate 7.47 miles of canals and laterals and is restricted only to the area needed to remove individual trees based on the size and ground disturbing impacts from removal methods. Efforts to identify historic properties in the APE included a record search at the Oregon State Historic Preservation (Oregon Archaeological Records Remote Access); searches of Reclamation cultural resources records, consultation records, project histories, and Geographic Imaging System maps; and a reconnaissance-level survey. The only identified historic properties in the APE include the Klamath Project water conveyances along which the trees would be removed.

Approved in 1905 under the 1902 *Reclamation Act*, the Klamath Project was one of the first large-scale Federal irrigation projects intended to reclaim the West by providing water for agriculture in promotion of settlement and economic development. Project features include three storage dams, five diversion dams, and five major pumping plants. The distribution system consists of 18 canals that measure 185-miles, 516-miles of laterals and 728-miles of drains. All

water for the Langell Valley (Valley) parts of the Klamath Project come from Clear Lake Reservoir and Gerber Reservoir. The Valley is serviced by two primary conveyance systems: the North Canal diverted out of Miller Creek and the Miller Creek Diversion Dam on the north side of the Valley; and the West Canal that diverts water at Malone Dam on the Lost River, servicing the south and west portions of the Valley. The canals and laterals identified in the Proposed Action Alternative are part of these conveyance systems. The Klamath Project is eligible for listing on the National Register for its association with the development and promotion of irrigation agriculture and economic development in the Klamath Basin. For the purposes of this project, Reclamation is assuming that the water conveyances identified in the APE are contributing components to the larger Klamath Project which is treated as a historic property, eligible for listing on the National Register of Historic Places.

3.2.3.2 Environmental Consequences

No Action Alternative:

Under the No Action Alternative, Reclamation would not approve LVID's request to remove encroaching juniper, willow, and poplar trees on approximately 7.47 miles of Project canal and laterals. There would be no change to existing facilities other than ongoing and future damages to channels from factors such as: erosion; undercutting banks; and blockage and damage from falling trees and growing root systems. The No Action Alternative consists of the continued operation of Project facilities within LVID. Therefore, there would be no change in impacts to cultural resources from current conditions under the No Action Alternative.

Proposed Action Alternative:

The Proposed Action Alternative would have no significant impact on historic properties as damages from tree growth and tree removal would be repaired to restore the channels to previous functional forms. These conveyance features are earthen channels that have varied in width, depth, and slightly in course through years of use and routine maintenance. They generally remain in their original locations, retaining their original purposes within the larger Klamath Project system. Any prehistoric or archaeological sites that might be present beneath the surface in tree root systems would be heavily disturbed from those roots. An archaeological monitor would be present during tree removal to watch for significant cultural resources that could not be identified prior to approval during project implementation. Reclamation would consult on any discovered historic properties under Federal cultural resources laws as needed and as applicable.

3.2.3.3 Cumulative Impacts

Under the Proposed Action Alternative, the existing Klamath Project channels (historic properties) would be restored to pre-tree removal conditions as the project progresses. As the Proposed Action Alternative is not expected to result in any significant direct or indirect impacts to cultural resources, there would be no significant cumulative impacts resulting from implementation of the Proposed Action Alternative.

3.2.4 Air Quality

3.2.4.1 Affected Environment

Air quality in the State of Oregon is regulated by the EPA and administered by ODEQ. The National Ambient Air Quality Standards (NAAQS), established by the EPA under the CAA, specify limits of air pollutants levels for seven criteria pollutants: carbon monoxide, particulate matter (PM) 10, PM 2.5, ozone, sulfur dioxide, lead, and nitrogen. The proposed project vicinity is outside the Klamath Falls non-attainment area for PM2.5.

3.2.4.2 Environmental Consequences

No Action Alternative:

Under the No Action Alternative, Reclamation would not approve LVID's request to remove encroaching juniper, willow, and poplar trees on approximately 7.47 miles of Project canals and laterals. Current conditions would remain and no air quality impacts would be anticipated as no activities potentially causing fugitive dust emissions would take place.

Proposed Action Alternative:

Under the Proposed Action Alternative potential impacts from fugitive dust emissions resulting from tree removal and re-construction activities would be minimized as reasonable precautions are integrated into the Proposed Action Alternative. These mitigation measures are consistent with the ODEQ Visible Emissions and Nuisance Requirements, Division 208 and the Oregon SIP which identifies how the State will attain and/or maintain the primary and secondary NAAQS set forth in section 109 of the CAA and 40 Code of Federal Regulations 50.4 through 50.12 and which includes federally-enforceable requirements (EPA 2015).

3.2.4.3 Cumulative Impacts

Due to the scope of the Proposed Action Alternative, duration, and nature of activities, the extent of the potential impacts would be minimal and temporary. As a result the potential cumulative impacts would be minimal and temporary in nature and the Proposed Action Alternative is not expected to result in significant impacts to air quality within or adjacent to the proposed tree removal locations.

Chapter 4 Environmental Commitments

The following environmental commitments would be implemented before, during, and after construction to prevent and reduce the impacts of the Proposed Action Alternative.

- **Environmental Permitting** – LVID would be responsible for complying with all environmental requirements identified in this environmental assessment (EA) and any other applicable Federal, State, and local permits.
- **Water Resources** – LVID would perform all work when the facilities are dewatered to avoid contributing to surface water quality impacts.

- **Biological Resources/Migratory Birds** – All necessary vegetation removal would be completed before nesting season begins (February 1) or after nesting season is completed (August 31) to reduce nest losses. If tree removal must occur during the breeding season, the process outlined in the MBTA mitigation incorporated into the Proposed Action Alternative would be followed.
- **Biological Resources/Bald and Golden Eagle Protection** – The National Bald Eagle Guidelines (Appendix C) would be followed when working near the bald eagle nest identified in Reach No. 6. A buffer zone of 660 feet for all equipment and tree removal practices would be followed during eagle nesting period. When not in the nesting period, a buffer zone of 330 feet would be met.

Cultural Resources – A Reclamation Archeologist would be present to monitor tree removal activities within the APE to identify any exposed or discovered cultural resources and to determine whether or not additional consultations under Section 106 of the NHPA would be required. In the case that any cultural resources, either surface or subsurface, are inadvertently discovered during construction, construction in the area of the inadvertent discovery will cease, and either Reclamation's Archaeologist, if on site, or Reclamation's Mid-Pacific Regional Archaeologist would be notified. Reclamation's Archaeologist would make an assessment of the resource and conduct additional consultations as required. Any person who knows or has reason to know that he/she has inadvertently discovered possible human remains on Federal land, must immediately provide telephone notification of the discovery to a Reclamation official and to Reclamation's Mid-Pacific Regional archaeologist. If applicable, Reclamation would consult under NAGPRA for a discovery of Native American human remains or NAPGRA objects. Work will not resume at that location until notified by Reclamation to proceed.

- **Air Quality** – Reasonable precautions for air quality would be implemented by LVID to control fugitive dust during tree removal and re-construction activities. LVID would follow ODEQ, Division 208 Quality Visible Emissions and Nuisance Requirements to control methods for aggregate storage pile emissions to minimize dust generation, including periodic watering of staging areas, and dirt/gravel roads. All loads that have the potential of leaving the bed of the truck during transportation would be covered or watered to prevent the generation of fugitive dust.
- **Disturbed Areas** – Areas disturbed during construction would be contoured and restored to as near their pre-project condition as practicable.
- **Noise Impacts** – Tree removal activities would be conducted 7:00 a.m. to 6:00 p.m. Monday through Friday. LVID would contact adjacent landowners approximately one week prior to construction activities commencing, notifying landowners of the potential noise disturbance.
- **Re-Construction Standards** – Minimum compaction standards and monitoring requirements would be established by Reclamation. LVID would be responsible for ensuring adequate compaction standards are followed to prevent future erosion and bank dilapidation. All equipment and machinery used on the site would be operated and maintained in such a

manner as to minimize dust, noise, vibration, smoke, hazardous material spill, lights, and odor.

- **Monitoring** – Reclamation would monitor the proposed project locations both pre and post tree removal and re-construction activities ensuring compliance with the criteria noted within this EA, adjacent landowner coordination, Reclamation, USFWS, and others, if necessary.

Chapter 5 Consultation and Coordination

This section presents the agencies and parties that were coordinated or consulted with during development of the document.

5.1 Public Involvement and Review Period

The public review period for the LVID Tree Removal Project EA was held from November 24, 2015 to December 8, 2015. Two comments were received (Appendix D) and are summarized below:

by Ms. Lilliann Watah, Cultural Resource Protection Specialist with the Klamath Tribes submitted a comment via electronic mail on December 3, 2015, stated that: "a cultural resource survey must be completed for the project by a qualified archaeologist if one hasn't already been done, and a certified cultural monitor would need to be present while all ground disturbing activities are taking place." Reclamation notified Ms. Watah of the historic properties identification efforts and invited the tribe's participation in the monitoring within the APE. Reclamation will continue to work with The Klamath Tribes to address their concerns in accordance with 36 CFR Part 800. Any discovery of buried cultural resources during project implementation will require compliance with 36 CFR § 800.13(b)(3), to include consultation with The Klamath Tribes and the further consultation with the SHPO. The inadvertent discovery of Native American human remains on Reclamation land during construction will be subject to the NAGPRA and handled in close consultation with The Klamath Tribes.

A second comment on the EA was received from a LVID patron who on December 8, 2015, delivered a letter to KBAO stating: this "project must be of very high priority," that the existing condition of the canal and lateral reaches in this project "are not in a condition that can serve the water users," and that "if this project is not mandated by the Klamath Basin Office ... it will not be implemented immediately to relieve the change of severe failures of the project facilities."

The EA is available online at: http://www.usbr.gov/mp/nepa/nepa_base.cfm?location=kbao, and in hardcopy at the following locations:

- Bureau of Reclamation, Klamath Basin Area Office
6600 Washburn Way
Klamath Falls, Oregon 97603

- Langell Valley Irrigation District
9787 E Langell Valley Road
Bonanza, OR 97623

5.2 Persons or Agencies Consulted During Development of EA

- Elizabeth Willy, Klamath Falls USFWS Office
- Oregon Department of Environmental Quality
- LVID

Chapter 6 References

Bureau of Reclamation. Engineering and O&M Guidelines for Crossings. 2008. Pg. B-1 – B-3.
Website: https://www.usbr.gov/mp/ccao/rec_land_use_forum/docs/Guidelines_for_Canals_2008.pdf

Environmental Protection Agency. Climate Change – Basic Information. 2015. Website: <http://www.epa.gov/climatechange/basicinfo.html>

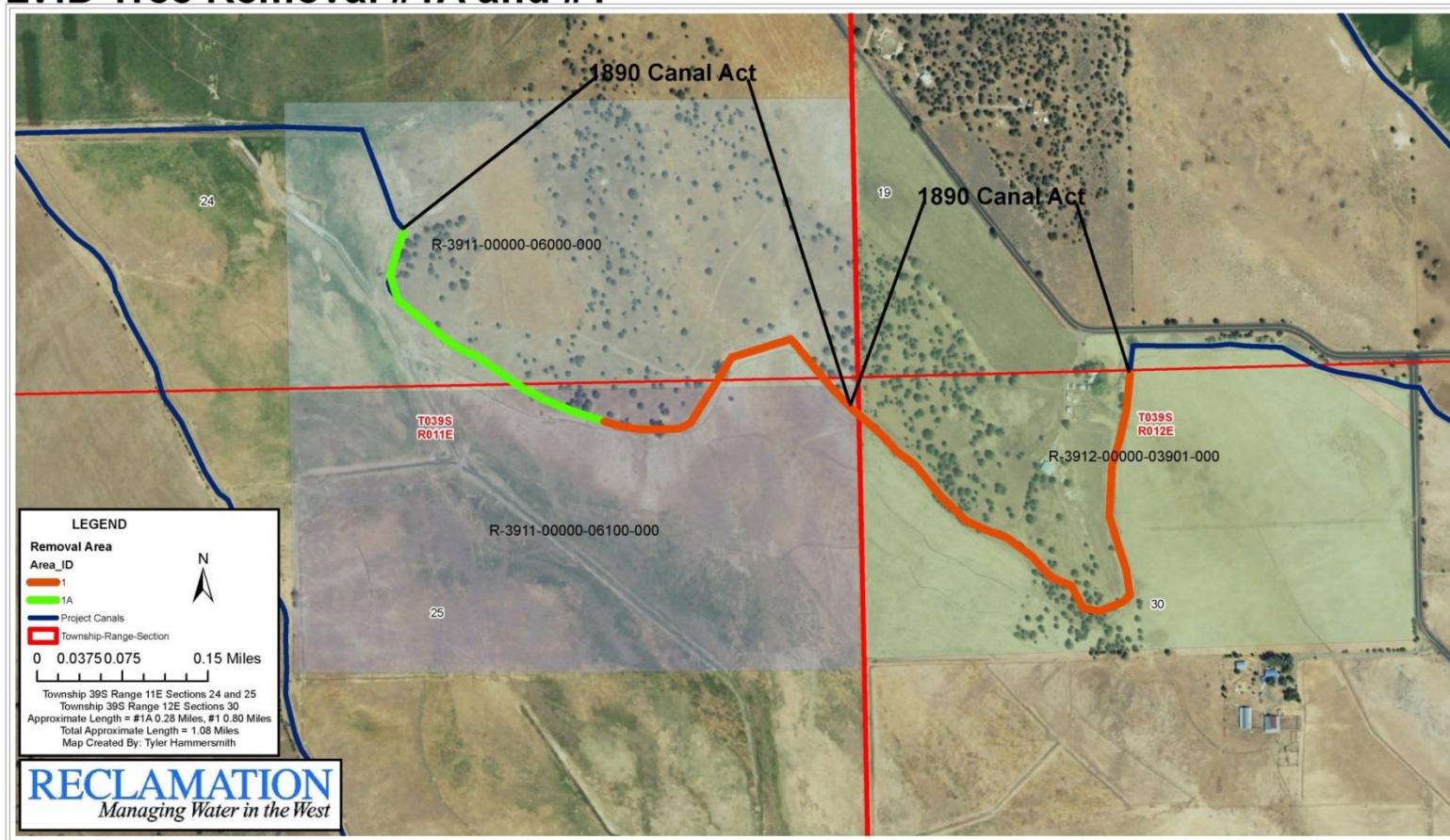
U.S. Fish and Wildlife Service. Information Resources: Listed, proposed, and Candidate Species Lists (Klamath County, Oregon). 2015. Website: <http://www.fws.gov/klamathfallsfwo/es/es.html>

U.S. Fish and Wildlife Service. National Bald Eagle Management Guidelines. 2007. Pg. 13.
Website: <http://www.fws.gov/southdakotafieldoffice/NationalBaldEagleManagementGuidelines.pdf>

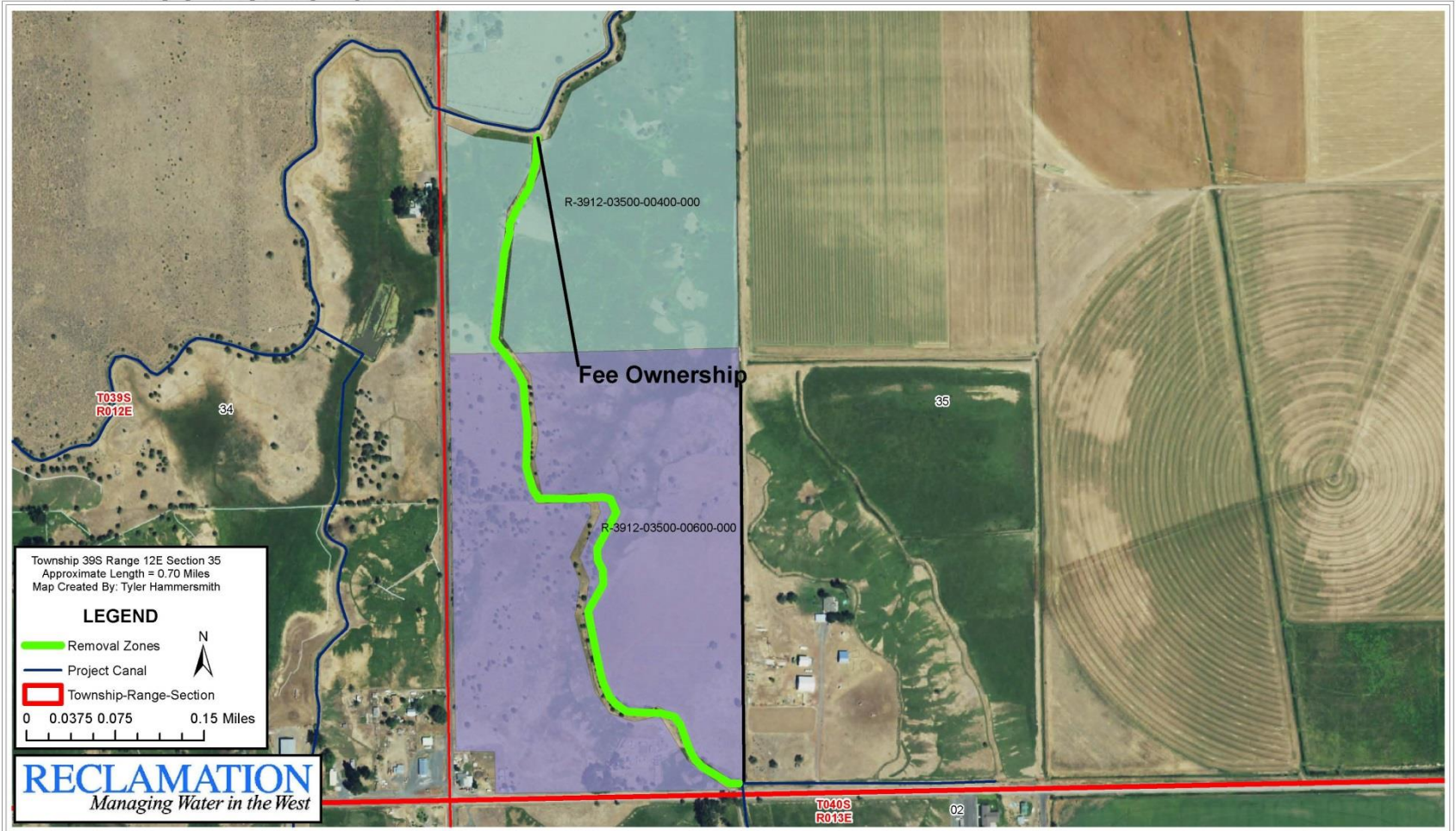
Appendices

Appendix A. Proposed Site Location Maps (note: corresponds to table 1, pg. 12)

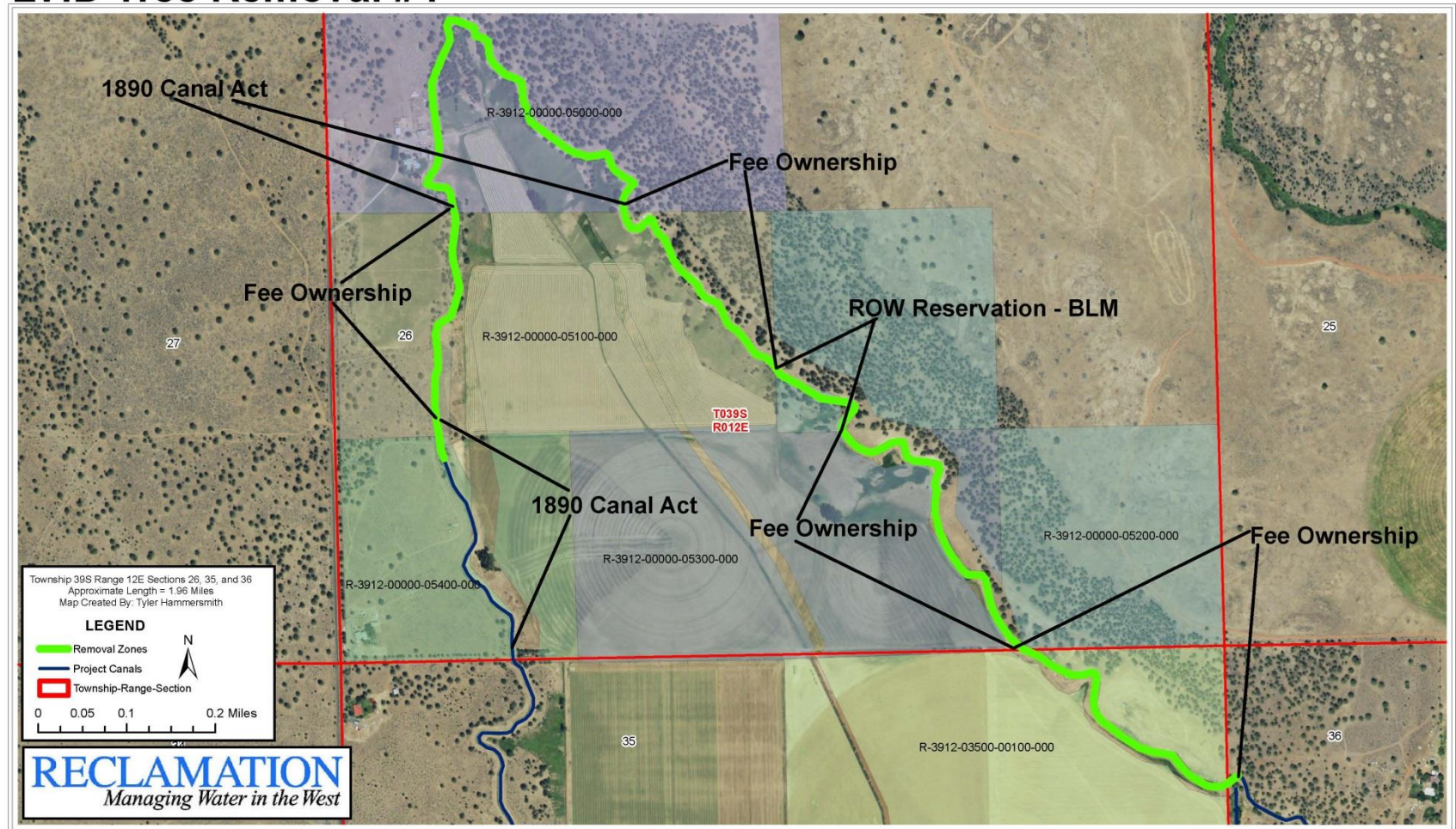
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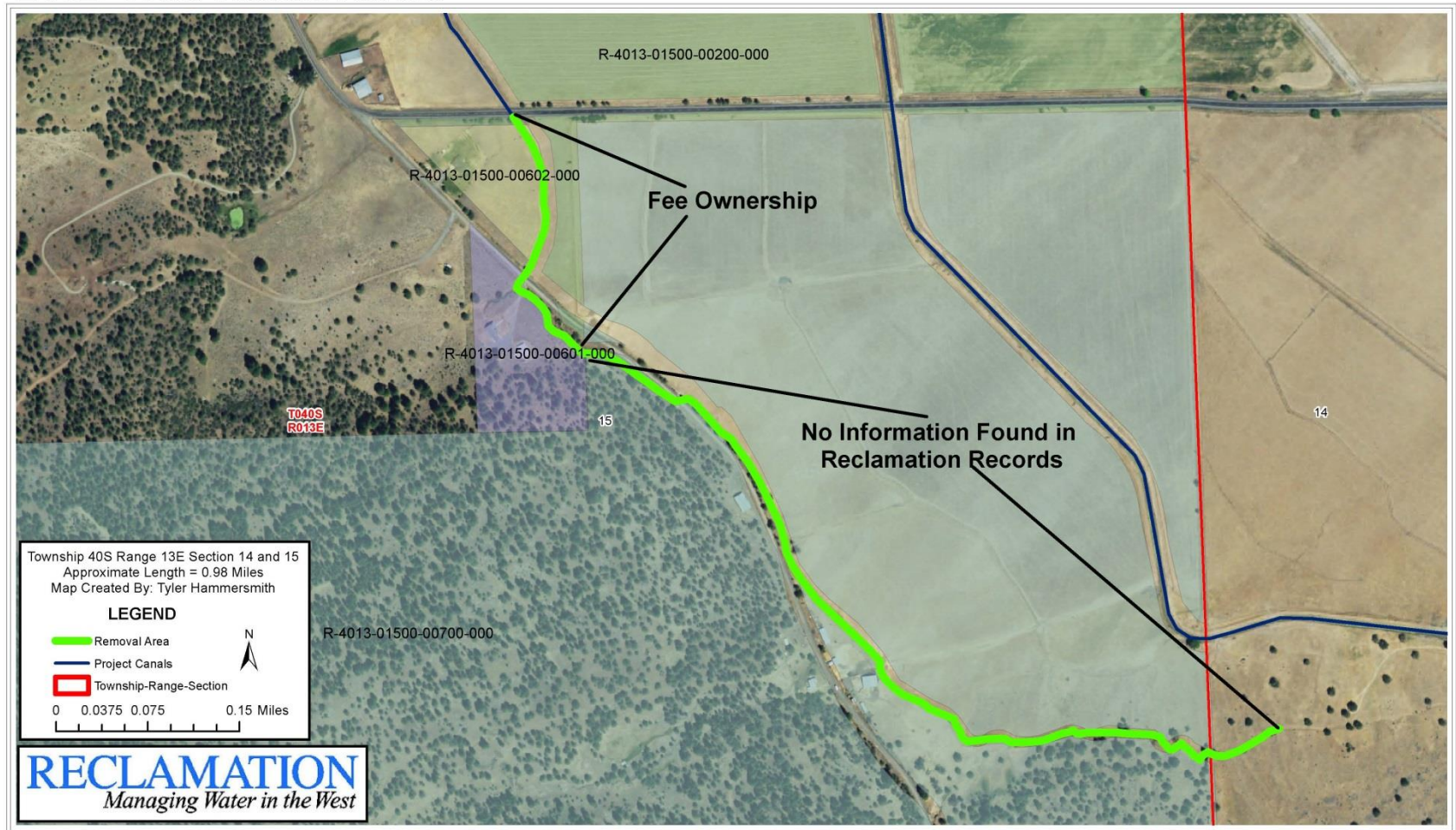
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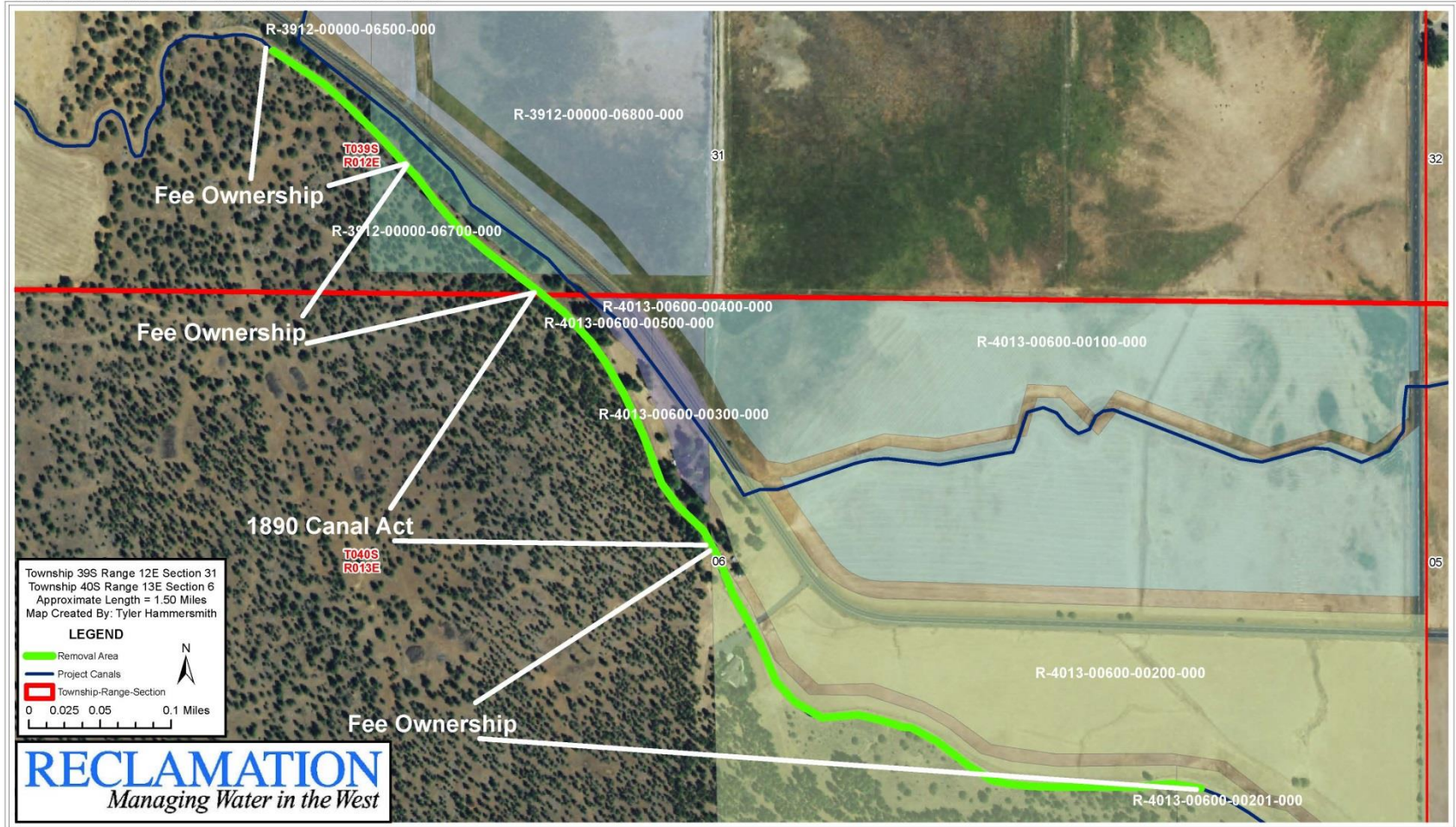
LVID Tree Removal #4



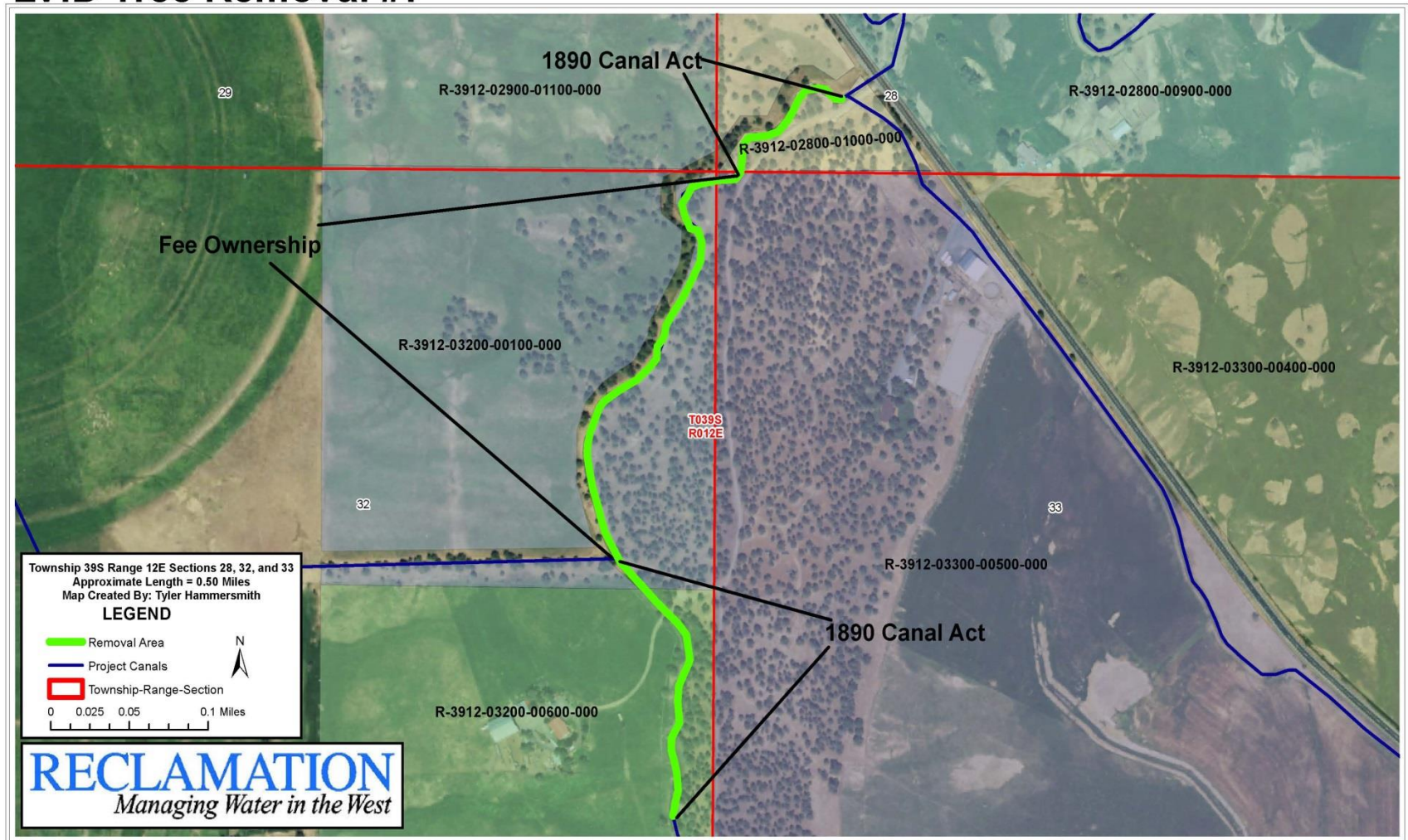
LVID Tree Removal #5



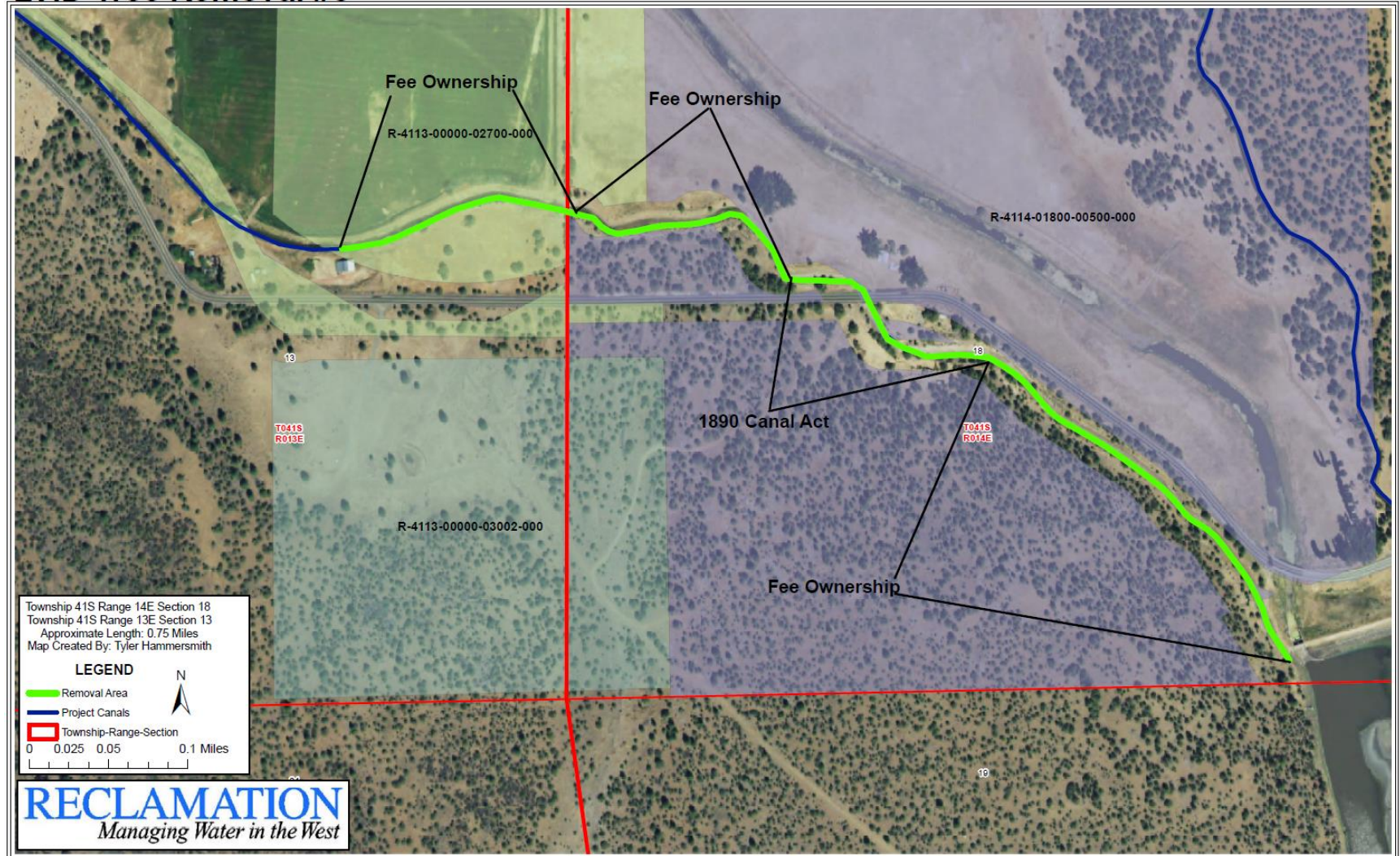
LVID Tree Removal #6



LVID Tree Removal #7



LVID Tree Removal #8



Appendix B. Reclamation Mid-Pacific Regional Indian Trust Assets Request and Coordination Correspondence

11/19/2015

DEPARTMENT OF THE INTERIOR Mail - Langell Valley Irrigation District Tree Removal ITA Request



Hammersmith, Tyler <thammersmith@usbr.gov>

Langell Valley Irrigation District Tree Removal ITA Request

STEVENSON, RICHARD <rstevenson@usbr.gov>
To: "Hammersmith, Tyler" <thammersmith@usbr.gov>

Tue, May 5, 2015 at 11:21 AM

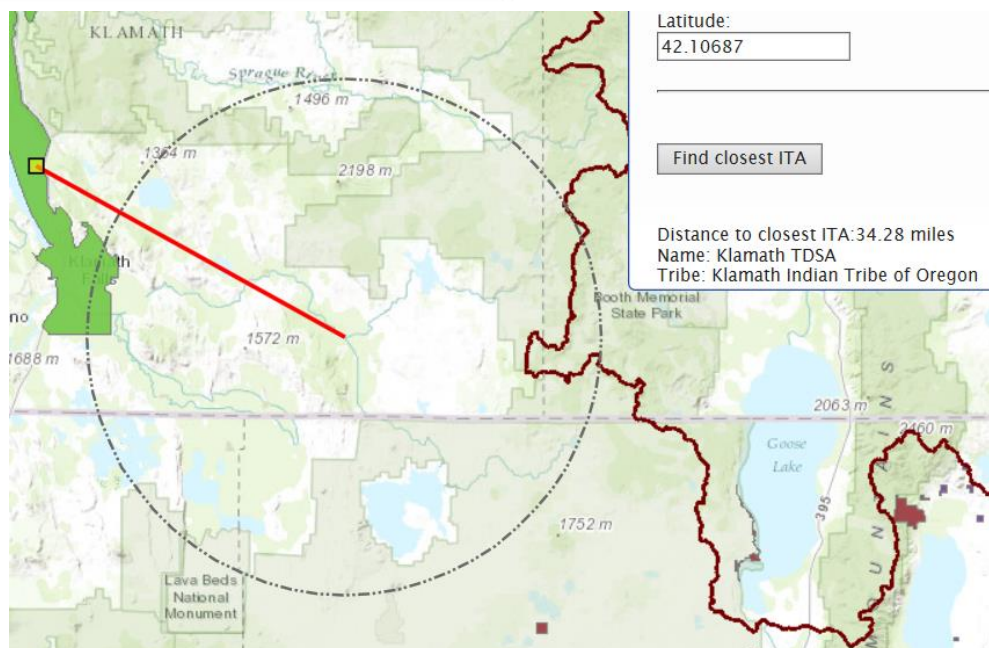
Tyler,

I have examined the project description for 2015_EA_004, Langell Valley Irrigation District Tree Removal and have determined that the nearest Indian Trust Asset is in excess of 25 miles from the proposed tree removal sites. There is no adverse impact to Indian Trust Assets caused by this work. See attached map.

Richard Stevenson Deputy Regional Resources Manager

[Quoted text hidden]

Richard M. Stevenson
Deputy Regional Resources Manager
2800 Cottage Way, MP-400
Sacramento, CA 95825-1898
(916) 978-5264
(916) 396-3380 iPhone
rstevenson@usbr.gov



Appendix C. National Bald Eagle Management Guidelines

NATIONAL BALD EAGLE MANAGEMENT GUIDELINES

U.S. Fish and Wildlife Service

May 2007

Category C. Timber Operations and Forestry Practices

- Avoid clear cutting or removal of overstory trees within 330 feet of the nest at any time.
- Avoid timber harvesting operations, including road construction and chain saw and yarding operations, during the breeding season within 660 feet of the nest. The distance may be decreased to 330 feet around alternate nests within a particular territory, including nests that were attended during the current breeding season but not used to raise young, after eggs laid in another nest within the territory have hatched.
- Selective thinning and other silviculture management practices designed to conserve or enhance habitat, including prescribed burning close to the nest tree, should be undertaken outside the breeding season. Precautions such as raking leaves and woody debris from around the nest tree should be taken to prevent crown fire or fire climbing the nest tree. If it is determined that a burn during the breeding season would be beneficial, then, to ensure that no take or disturbance will occur, these activities should be conducted only when neither adult eagles nor young are present at the nest tree (i.e., at the beginning of, or end of, the breeding season, either before the particular nest is active or after the young have fledged from that nest). Appropriate Federal and state biologists should be consulted before any prescribed burning is conducted during the breeding season.
- Avoid construction of log transfer facilities and in-water log storage areas within 330 feet of the nest.

Category D. Off-road vehicle use (including snowmobiles). No buffer is necessary around nest sites outside the breeding season. During the breeding season, do not operate off-road vehicles within 330 feet of the nest. In open areas, where there is increased visibility and exposure to noise, this distance should be extended to 660 feet.

Category E. Motorized Watercraft use (including jet skis/personal watercraft). No buffer is necessary around nest sites outside the breeding season. During the breeding season, within 330 feet of the nest, (1) do not operate jet skis (personal watercraft), and (2) avoid concentrations of noisy vessels (e.g., commercial fishing boats and tour boats), except where eagles have demonstrated tolerance for such activity. Other motorized boat traffic passing within 330 feet of the nest should attempt to minimize trips and avoid stopping in the area where feasible, particularly where eagles are unaccustomed to boat traffic. Buffers for airboats should be larger than 330 feet due to the increased noise they generate, combined with their speed, maneuverability, and visibility.

Category F. Non-motorized recreation and human entry (e.g., hiking, camping, fishing, hunting, birdwatching, kayaking, canoeing). No buffer is necessary around nest sites outside the breeding season. If the activity will be visible or highly audible from the nest, maintain a 330-foot buffer during the breeding season, particularly where eagles are unaccustomed to such activity.

Appendix D. Public Comments on EA during Public Comment Period (November 24- December 8, 2015)

1/26/2016

DEPARTMENT OF THE INTERIOR Mail - Langel Valley Tree Removal



Campbell Miranda, Tara Jane <tcampbellmiranda@usbr.gov>

Langel Valley Tree Removal

1 message

Lilliann Watah <lilliann.watah@klamathtribes.com>

Thu, Dec 3, 2015 at 9:55 AM

To: "tcampbellmiranda@usbr.gov" <tcampbellmiranda@usbr.gov>

Tara; What we would require is a cultural resource survey must be completed for the project by a qualified archaeologist if one hasn't already been done, and a certified cultural monitor

Would need to be present while all ground disturbing activities are taking place. If you have any questions, please feel free to contact me at the numbers listed below.

Thank you

Lilliann Watah

Cultural Resource Protection Specialist

501 Chiloquin Blvd.

541) 783-2219 Ext 159

Cell 541) 591-5825

Fax 541) 783-2095

<https://mail.google.com/mail/u/0/?ui=2&ik=5f864f26ef&view=pt&cat=LVID%20Trees&search=cat&th=15168fc345865891&siml=15168fc345865891>

1/2

Frank Hammerich
15666 E. Langell Valley Rd.
Bonanza, OR 97623
11-08-2015

Tara Jane Campbell Miranda
Bureau of Reclamation
6600 Washburn Way
Klamath Falls OR 97603
541-880-2540

Dear Tara Jane, These comments are as a patron of the Langell Valley Irrigation District and not as Manager of the District.

My concerns deal with implementing the tree removal project.

I am concerned that the KBAO will not insist that in order to fulfill LVID's contractual obligations this project must be of a very high priority.

As a patron of the District I am quite concerned that many of the reaches in this project are not in a condition that can serve the water users.

I feel that if this project is not mandated by the Klamath Basin office in a very forceful way it will not be implemented immediately to relieve the chance of severe failures of the project facilities.

I do not want Langell Valley Irrigation District to endure the costs of a Fernley Nevada type lawsuit due to years of deferred maintenance.

Sincerely,



Frank H Hammerich

| Official File Copy | | | |
|--------------------|---------|------------|--------|
| Received | | | |
| Date Received: | Initial | Date | Action |
| 12-8-2015 | | | |
| Date of Letter: | | | |
| 12-8-2015 | | | |
| Control Number: | | | |
| 15029963 | | | |
| File Code: | | | |
| ENV-6.00 | | | |
| Folder I.D.: | | | |
| 1013645 | | | |
| Project: | | | |
| 12 | | | |
| Code | Initial | Date | Action |
| 30015cm | JRM | 12/10/15 | |
| 300KH | JRM | 12/10/15 | |
| 300TH | JRM | 12/10/15 | |
| 100TRG | JRM | 12/10/15 | |
| 100TOB | JRM | 12/10/15 | |
| Note: hand deliver | | | |
| 400JG | JRM | 12/14/15 | |
| 300GP | JRM | 12/10/2015 | |
| 300GP | | | |