

**Annual Vegetation and Noxious Weed Management Report
Santa Felicia Project
2012/2013 Reporting Period**

Santa Felicia Project FERC P-2153-029

May 2013

Prepared by:



UNITED WATER CONSERVATION DISTRICT

Environmental Planning and Conservation Department

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Abstract

This annual report presents information related to monitoring and control activities conducted between March 1, 2012 and February 28, 2013, in accordance with the “Vegetation and Noxious Weed Management Plan” developed to comply with requirements of United Water Conservation District’s license issued by the Federal Energy Regulatory Commission. Activities during the reporting period included finalizing an eradication plan that outlines a strategy for control and treatment of *Tamarix ramosissima* that was identified within the Vegetation and Noxious Weed Management Area during a prior reporting period and implementation of eradication activities outlined in the eradication plan. During this reporting period, United consulted with the Los Padres National Forest in developing the eradication plan and with the California Department of Fish and Wildlife and the US Army Corps of Engineers to ensure that activities were in compliance with environmental regulations.

1.0 Background

United Water Conservation District (United) owns and operates the Santa Felicia Project (Project) on Piru Creek in Ventura County, California. The Federal Energy Regulatory Commission (FERC) issued a new license (License) to United for the operations of the Project on September 12, 2008 (FERC Project No. 2153-012). Article 405 of the License requires United to file a vegetation and noxious weed management plan for lands within the project boundary that incorporates provisions of United States Forest Service’ (USFS) 4(e) Condition 18(b). United filed the “Vegetation and Noxious Weed Management Plan September 2010” (Plan), on October 12, 2010 and FERC issued an order modifying and approving the Plan on February 14, 2011.

The Plan requires United to produce annual technical reports presenting results of monitoring and control efforts conducted throughout the prior year (reporting period). The Plan specifically identifies that the report must contain the following components:

- Summary of target noxious weed populations including existing and new populations in areas tied-to Project actions or effects.
- Project area map depicting point and polygon data for target noxious weed populations as recorded for the Noxious Weed GIS Data Layer.
- Description of control areas and treatments used over the past year.
- Brief evaluation of priority treatment areas.
- Recommended control measures for each population/treatment area including proposed chemical controls.
- Description of revegetation efforts conducted during the reporting period.
- Evaluation of revegetation efforts conducted prior to (within 3-years) and within the reporting period.
- Summary of proposed revegetation areas.

The first annual report (2011/2012 report) outlined monitoring and control efforts conducted in accordance with the Plan between February 14, 2011 (the date FERC issued the order approving the Plan) and February 28, 2012. This report serves as the second annual report (2012/2013

report), and details monitoring and control efforts conducted between March 1, 2012, and February 28, 2013.

2.0 Vegetation and Noxious Weed Management Activities

In the 2011/2012 annual report, United reported that a baseline inventory survey of targeted noxious weeds had been conducted, and that tamarisk (*Tamarix ramosissima*) was the only targeted noxious weed identified within the Noxious Weed Management Plan Area (Plan Area). United also reported that consultation had been initiated with the Las Padres National Forest (LPNF) to identify priority infestations and develop a strategy for control and treatment of the prioritized tamarisk infestations. Following guidance from LPNF, the strategy was finalized during this reporting period, and is presented in the document, "Strategy for Treatment and Eradication of *Tamarix ramosissima*," (Eradication Plan) in attachment A of this report. United's Board of Directors determined that tamarisk removal activities, as described in the Eradication Plan, are categorically exempt from the California Environmental Quality Act (CEQA) and a Notice of Exemption was filed with the Ventura County Clerk of the Board of Supervisors on December 31, 2012. United consulted with the U.S. Army Corps of Engineers on November 9, 2012, and was informed that the proposed activities would not require a permit under section 404 of the Clean Water Act. United submitted the Eradication Plan along with a streambed alteration notification to the California Department of Fish and Wildlife (CDFW) on December 17, 2012. CDFW responded in a letter dated January 14, 2013, with a determination that the project would not substantially adversely affect any existing fish or wildlife resource, and therefore, a lake or streambed alteration agreement was not required. The activities outlined in the Eradication Plan were implemented between January 30 and February 6, 2013.

2.1 *Summary of target noxious weed populations including existing and new populations in areas tied-to Project actions or effects*

A total of 296 tamarisk plants were identified within the Plan Area during the baseline inventory survey conducted in April of 2011. Results of the baseline inventory survey were presented in the 2011/2012 annual report, and are included in appendix B of the attached Eradication Plan. None of the identified tamarisk populations are located on USFS property. The priority infestations that were targeted for removal during this reporting period include all tamarisk populations shown in map tiles 1 and 2 (presented in appendix B of the attached Eradication Plan) with the exception of the plants identified as polygon 11, which is not located within the Plan Area boundary.

Approximately two-thirds of tamarisk plants observed during the baseline inventory are located in the northern portion of the Plan Area (shown on map tiles 4 and 5 in appendix B of the attached Eradication Plan). This area is known to support an active breeding population of the federally endangered arroyo toad (*Bufo californicus*) and is within or directly adjacent to designated critical habitat. Because of the potential for removal activities to affect the arroyo toad, these plants were excluded from the priority infestations targeted for removal.

In November of 2012, prior to eradication efforts, United staff inspected the infestation sites prioritized for removal activities. New growth present at the sites indicated an increase in biomass and total number of tamarisk plants since the baseline survey was completed. Between January 30, and February 6, 2013, United conducted removal activities in accordance with the Eradication Plan targeting all tamarisk, including new growth, at priority infestation sites.

Following eradication efforts, United visually inspected the priority infestation sites and observed no untreated tamarisk.

2.2 Project area map depicting point and polygon data for target noxious weed populations as recorded for the Noxious Weed GIS Data Layer

Project area maps depicting point and polygon data for identified target noxious weed populations are presented in appendix B of the attached Eradication Plan.

2.3 Description of control areas and treatments used over the past year

Eradication activities were implemented between January 30, and February 6, 2013. The priority infestations that were targeted for removal include all tamarisk populations shown in map tiles 1 and 2 (shown in appendix B of the attached Eradication Plan), with the exception of the plants identified as polygon 11. The “cut stump treatment” described in the Eradication Plan was implemented to remove tamarisk from the priority treatment areas. Tree stalks or trunks were cut near ground level with loppers or chainsaws, and the remaining stumps were coated with an herbicide mixture. Tamarisk located within 10 horizontal feet of standing water was treated with a dilute concentration of imazapyr MSO Concentrate mixed with a colorant. Plants located further than 10 horizontal feet of standing water were treated with an undiluted concentrate of triclopyr mixed with a colorant. No work was performed in running water. Cut material was removed from the work site and covered and stored for burning at an appropriate time in the future. Burn permits will be obtained prior to the event.

2.4 Brief evaluation of priority treatment areas

The priority treatment areas were visually inspected following eradication activities, and no untreated tamarisk was observed.

2.5 Recommended control measures for each population/treatment area including proposed chemical controls

United will monitor the treatment areas in late spring of 2013 to determine the effectiveness of the control measures and consult with LPNF to develop future strategies. If appropriate, additional treatments may be proposed.

2.6 Description of revegetation efforts conducted during the reporting period

No revegetation activities were conducted during the reporting period.

2.7 Evaluation of revegetation efforts conducted prior to (within 3 years) and within the reporting period

No revegetation activities have been conducted within the last 3 years.

2.8 Summary of proposed revegetation areas

United will monitor the treatment areas in late spring of 2013 to determine the effectiveness of the control measures and consult with LPNF to develop future strategies. If appropriate, revegetation activities may be proposed.

3.0 USFS Consultation

3.1 Development of tamarisk eradication plan

LPNF has developed a draft plan to control tamarisk from Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sisquoc River, and Arroyo Seco River. LPNF’s plan, “Los Padres National

Forest Tamarisk Removal Project,” is currently under environmental review, and an Environmental Impact Statement (EIS) has been filed with the Federal Registry (LPNF 2012). United’s Eradication Plan was developed using LPNF’s plan as a model, and the activities outlined in the Eradication Plan are designed to complement LPNF’s proposed efforts in Piru Creek. United submitted a draft of the Eradication Plan to LPNF for review on March 15, 2012. LPNF provided comments on the draft on May 29, 2012. The original draft proposed eradication activities targeting all identified tamarisk populations within the Plan Area. Approximately two-thirds of the observed tamarisk plants are located in the northern portion of the Plan Area within or directly adjacent to designated critical habitat for arroyo toads. LPNF’s comments focused on eradication activities (both manual removal and herbicide application) proposed to occur within endangered species habitat. In the comment letter, LPNF pointed out that USFS would be performing a detailed analysis of the activities described in their draft eradication plan during the environmental review process. This includes addressing how to minimize effects of removal activities on arroyo toad and its designated critical habitat in Piru Creek. In light of this, United revised the Eradication Plan to exclude as priority plants for removal the tamarisk plants within the Plan Area that fall within critical habitat and areas where arroyo toads may be expected to breed.

In its comments, LPNF also suggested an expansion of manual removal processes, particularly, hand pulling of tamarisk plants and use of a weed wrench. These processes were incorporated into the Eradication Plan.

3.2 *Annual coordination meeting*

USFS’ section 4(e) conditions 2 and 18(b) require that United consult annually with the USFS on issues related to conditions of the license and implementation of the Plan. United met with LPNF on February 6, 2013, to provided an update to LPNF on license activities and the vegetation and noxious weed management planning process as well as anticipated future management activities. Submittal of this annual report will complete consultation for the reporting period.

4.0 Future Activities

United will continue to consult with LPNF to develop treatment methods for tamarisk plants within the Plan Area that fall within arroyo toad critical habitat or in areas where eradication activities have the potential to affect arroyo toads. Upon completion of the USFS’s environmental review and finalization of the “Los Padres National Forest Tamarisk Removal Project,” United will consult with LPNF, USFWS, and CDFW to determine if United can safely remove these tamarisk plants without affecting arroyo toad or its critical habitat using the approach developed by LPNF. Depending on the outcome of that consultation, United will work with the agencies and FERC to determine how to proceed.

In the mean time, United will re-survey the eradication sites in late spring of 2013 to determine the effectiveness of the control measures. Based on the results, United will consult with LPNF to develop future strategies. If appropriate, additional treatments or revegetation activities may be proposed.

References

Los Padres National Forest (LPNF). 2012. *California; Environmental Impact Statement for the Removal of the Noxious Weed Tamarisk on the Los Padres National Forest*. 77 Federal Register 32 (February 16, 2012), pp. 9200-9202.

Attachment A
Strategy for Treatment and Eradication of *Tamarix ramosissima*

**Strategy for Treatment and Eradication of *Tamarix ramosissima*;
Santa Felicia Project**

Santa Felicia Project FERC P-2153-029

December 2012

Prepared by:



UNITED WATER CONSERVATION DISTRICT

Environmental Planning and Conservation Department

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1.0 INTRODUCTION

United Water Conservation District (United) owns and operates the Santa Felicia Project (Project) on Piru Creek in Ventura County, California. The Federal Energy Regulatory Commission (FERC) issued a new license (License) to United for the operations of the Project on September 12, 2008 (FERC Project No. 2153-012). Article 405 of the License requires United to file a *Vegetation and Noxious Weed Management Plan* (Plan) for lands within the project boundary that incorporates provisions of United States Forest Service' (USFS) 4(e) Condition 18(b). United filed the Plan on October 12, 2010 and FERC issued an order approving the Plan on February 14, 2011.

The Plan requires United to control and eradicate targeted noxious weeds in the Project's noxious weed management plan area (Plan Area) (Figure 1). The Plan Area consists of lands within the Project boundary that are reasonably accessible. These lands include the area adjacent to Santa Felicia Dam, the area along the western shore of Lake Piru, and the accessible portion of the eastern shore at the north end of Lake Piru. As the first step in this undertaking, United conducted a baseline inventory in the Plan Area for targeted noxious weeds in April of 2011. The results of this inventory are contained in the annual report filed with FERC on March 19, 2012 and presented in the baseline inventory report in appendix B. The only targeted noxious weed observed during the baseline inventory was *Tamarix ramosissima* (tamarisk). A total of 296 tamarisk plants were detected within the Plan Area during the baseline inventory survey. None of the identified tamarisk populations are located on USFS property. Tamarisk is a nonnative invasive tree-shrub that can grow in dense patches, out-compete native vegetation, change soil chemistry by depositing salts from deep ground water on the soil surface, and remove water from streams and riparian areas through evapotranspiration.

As the next step, the Plan requires that United, in consultation with USFS, identify priority infestations and treatment methods based on the results of the baseline inventory. This document, *Strategy for Treatment and Eradication of Tamarisk* (Eradication Plan), was developed in consultation with the Los Padres National Forest (LPNF). A history of the consultation is presented in appendix A. This Eradication Plan identifies the priority tamarisk for removal and the methods and schedule for removal and monitoring in the Plan Area.

2.0 PRIORITY INFESTATIONS AND ERADICATION GOAL

A total of 296 tamarisk plants were identified within the Plan Area. None of the identified tamarisk populations are located on USFS property. The priority infestations that United will target for removal are all tamarisk populations shown in map tiles 1 and 2 (presented in the baseline inventory report included in appendix B) with the exception of the plants identified as polygon 11, which is not located within the Plan Area boundary.

Approximately two-thirds of the observed tamarisk plants are located in the northern portion of the Plan Area (shown on map tiles 4 and 5 in appendix B). This area is known to support an active breeding population of the endangered arroyo toad (*Bufo californicus*) and is within or directly adjacent to designated critical habitat. Because of the potential for removal activities to affect the arroyo toad, United is excluding these plants from the priority infestations targeted for removal. United will address these plants separately in consultation with FERC, USFS, United States Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG).

The goal of this Eradication Plan is to remove all tamarisk plants identified as priority infestations in the Plan Area. Specifically, all infestations located within the Plan Area and shown in map tiles 1 and 2 of the baseline inventory report.

3.0 ERADICATION ACTIVITIES

3.1 Eradication Protocol

The proposed eradication strategy is modeled after LPNF's draft "Los Padres National Forest Tamarisk Removal Project" (as of November 2012, the draft has not been publicly released, and therefore, no citation is supplied). The strategy consists of a combination of hand treatments and herbicide applications. Seedlings and young plants will be hand-pulled where possible. Immature plants that are moderate in size may be pulled using a weed wrench where possible. More mature plants and moderate-sized plants that cannot be removed with root intact by hand pulling or using a weed wrench will be removed using either a "cut stump treatment" or "frill treatment" as described below. Cut material resulting from the "cut stump treatment" will be removed from site, covered and stored at an appropriate facility until permits are obtained and conditions are appropriate for burning.

Cut Stump Treatment: Tree trunks are cut near ground level with loppers, handsaws, or chainsaws; and the remaining stumps are hand-coated with an herbicide mixture using sponge brushes. The herbicide mixture will be applied immediately after cutting (preferably within 2 minutes, but no longer than 10 minutes following cutting). The mixture should be quickly absorbed by the plant's phloem and transported to the root.

Frill Treatment: With this method, a hatchet is used to cut downward into the water-conducting tissue (phloem) of standing trees. This treatment would be done using a Hypo-Hatchet to directly inject a pre-set amount of herbicide directly into the tree. Usually one injection is made for every inch of stem diameter evenly spaced around the circumference.

Herbicide treatments are the most effective and the most efficient control method currently available. Tamarisk will re-sprout if simply cut down or burned. Herbicide use will be in compliance with all state and federal regulations. Only ground-based hand applications will be implemented.

Tamarisk located within 10 horizontal feet of standing or running water will be treated with a dilute concentration of imazapyr MSO Concentrate (Habitat or similar formulation), a methylated seed oil as surfactant, and HiLight Blue as a colorant. Plants located further than 10 horizontal feet of standing or running water will be treated with an undiluted concentrate of triclopyr (Garlon 4 or similar formulation). Triclopyr is not labeled for use around water. All herbicide application will be performed by trained personnel with pesticide application certification.

3.2 Resource Protection Measures

The following resource protection measures will be implemented for all eradication activities.

3.2.1 Water Quality

Water quality will be protected by implementing the following best management practices designed to control non-point source pollution:

- All pesticide application will be in accordance with label directions and applicable legal requirements;
- The cleaning and disposal of pesticide containers will be done in accordance with federal, state, and local laws, regulations, and directives;
- Only hand application of herbicide will occur in order to minimize the risk of pesticide inadvertently entering water;
- Applicators will carry no more than one gallon of herbicide during project implementation in order to minimize the amount of herbicide that could potentially enter a waterway;
- Tamarisk plants growing on the fringes of ponded water, will be treated with the “cut stump treatment.” In this case, plants will be cut above water surface elevation. Herbicides will not be used on plants located in running water.

3.2.2 *Wildlife and Fisheries*

The best management practices outlined above for controlling non-point source pollution will minimize or eliminate the exposure of wildlife and fisheries to herbicides. The following resource protection measures will be carried out during project implementation:

- In order to avoid impacts to breeding birds, including the least Bell’s vireo and southwestern willow flycatcher, eradication activities are scheduled to occur in the fall outside of nesting season;
- Eradication activities outlined in this Eradication Plan will not be implemented in areas known to be occupied by arroyo toads or within designated critical habitat;
- Applicators will avoid walking or stepping in water to the maximum extent possible. They will also avoid spilling herbicide on footwear and clothing to prevent inadvertent contamination if contact with water occurs;
- In the event that an arroyo toad or California red-legged frog is observed within the treatment sites, all work will cease immediately and work crews will carefully vacate the area. United will contact USFWS and FERC to report the observation as soon as feasibly possible.

3.2.3 *Noxious Weeds*

All tools carried into or out of the Plan Area will be cleaned to reduce the risk of introduction of noxious weeds to new sites.

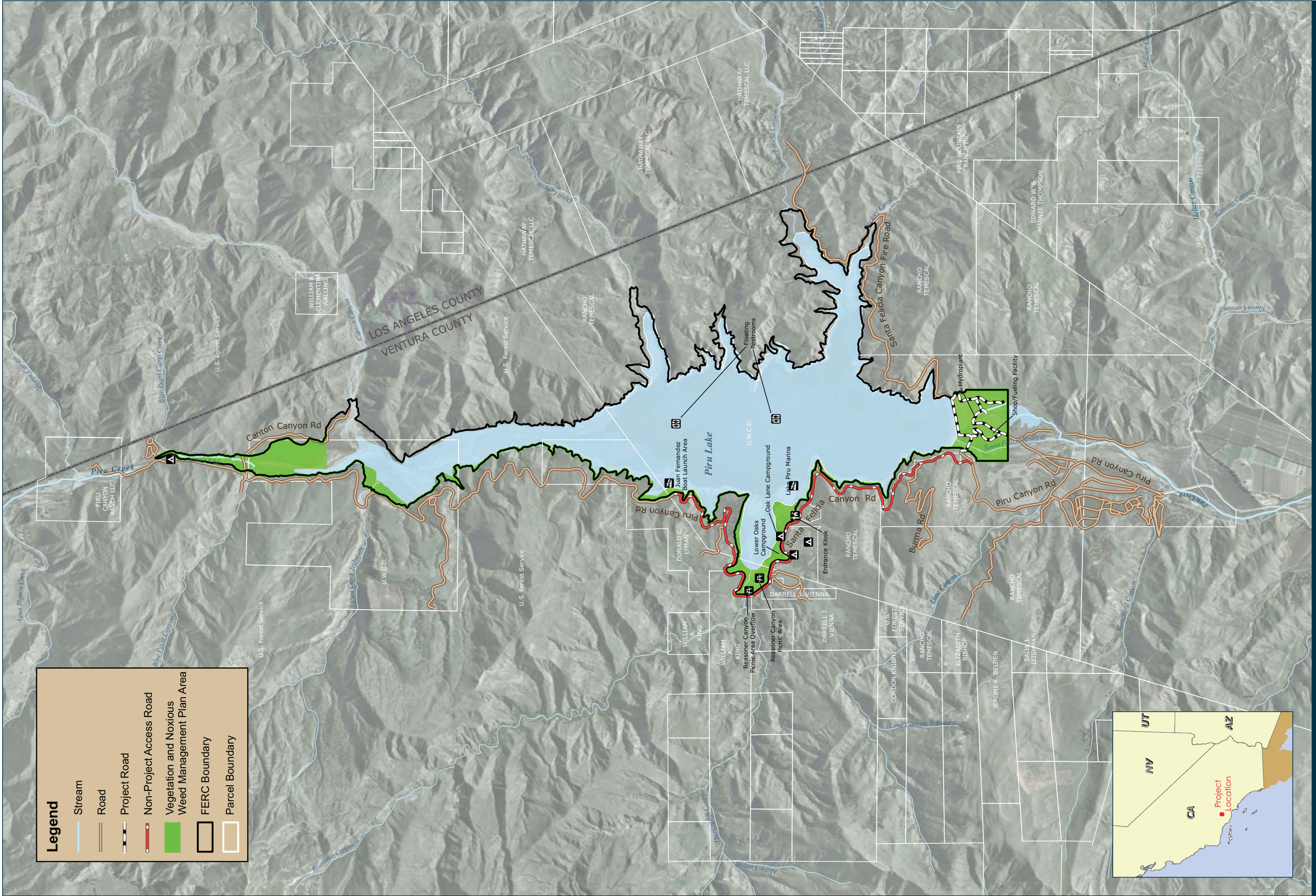
4.0 PERFORMANCE GOALS, MONITORING, AND ADAPTIVE MANAGEMENT

The performance goal of this eradication effort is 100% removal of the priority infestations. The areas of infestation will be visually monitored annually. If appropriate, additional treatments or revegetation activities may be developed in consultation with LPNF. In addition, the Plan requires that United conduct another baseline inventory 5 years following the initial inventory. The next inventory survey is scheduled to occur in spring/summer 2016.

5.0 SCHEDULE

United intends to implement the eradication activities described above in the fall/winter of 2012. United will meet with LPNF in early 2013 to discuss the results and develop future strategies. Monitoring will be performed annually until 2016 when a new baseline inventory will be completed.

Figure 1
Santa Felicia Project Noxious Weed Management Plan Area



Legend

Stream

Road

Project Road

Non-Project Access Road

Vegetation and Noxious Weed Management Plan Area

FERC Boundary

Parcel Boundary

VEGETATION AND NOXIOUS WEED MANAGEMENT PLAN
FOR THE SANTA FELICIA PROJECT

Figure 1 - Project Facilities, FERC Boundary,
and Vegetation and Noxious Weed Management Plan Area

ENTRIX

0 0 2,640 5,280 10,560 Feet

0 0.5 1 2 Miles

Appendix A

Consultation History

Documentation of Consultation History Associated with Development of the “Strategy for Treatment and Eradication of *Tamarix ramosissima*”

The Vegetation and Noxious Weed Management Plan (Plan) for the Santa Felicia Project requires that United “commence controlling target noxious weeds within the first full year after FERC approval and/or before ground-disturbing activities are scheduled to occur. United [is required to] finalize, in consultation with [United States Forest Service (USFS)], the priority infestations and treatment method(s) based on updated information from the baseline inventory survey.”

The baseline inventory survey was conducted in April of 2011. Following completion of the baseline inventory survey, United requested guidance from the Los Padres National Forest (LPNF) to develop a strategy for eradicating the identified tamarisk infestations. LPNF was concurrently developing a plan to eradicate tamarisk from Piru Creek, Lockwood Creek, Cuyama River, Santa Ynez River, Sisquoc River, and Arroyo Seco River. LPNF supplied United with a draft “Los Padres National Forest Tamarisk Removal Project.” As of November 2012, the draft has not been publicly released, and therefore, no citation is supplied.

During the annual consultation meeting held in February of 2012, LPNF recommended that United develop an eradication plan using the draft “Los Padres National Forest Tamarisk Removal Project” as a model. The activities outlined in the “Strategy for Treatment and Eradication of *Tamarix ramosissima*” (Eradication Plan) are based on the draft document and are designed to complement LPNF’s proposed efforts in Piru Creek.

United submitted a draft of the Eradication Plan to LPNF for review on March 15, 2012. LPNF provided comments on the draft on May 29, 2012. The original draft proposed eradication activities to occur on all identified tamarisk populations within the Plan Area. Approximately two-thirds of the observed tamarisk plants are located in the northern portion of the Plan Area within or directly adjacent to designated critical habitat for arroyo toads. LPNF’s comments focused on eradication activities (both manual removal and herbicide usage) proposed to occur within endangered species habitat. In the comment letter, LPNF pointed out that USFS would be performing a detailed analysis of the activities described in the draft “Los Padres National Forest Tamarisk Removal Project” document during an environmental review and compliance process. This includes addressing how to minimize effects of removal activities on arroyo toad and its designated critical habitat in Piru Creek. In light of this, United revised the Eradication Plan to exclude as priority plants for removal the tamarisk plants within the Plan Area that fall within critical habitat and are where arroyo toads may breed. Upon completion of the USFS’s environmental review and finalization of the “Los Padres National Forest Tamarisk Removal Project,” United will consult with LPNF, US Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG) to determine if United can safely remove these tamarisk plants without affecting arroyo toad or its critical habitat using the approach developed by LPNF. Depending on the outcome of that consultation, United will work with the agencies and FERC to determine how to proceed.

In its comments, LPNF also suggested an expansion of manual removal processes, particularly, hand pulling of tamarisk plants and use of a weed wrench. These processes have been incorporated into the Eradication Plan.

Appendix B
Baseline Inventory Report

Baseline Inventory of Targeted Noxious Weeds Santa Felicia Project

Santa Felicia Project FERC P-2153-029

February 2012

Prepared by:



UNITED WATER CONSERVATION DISTRICT

Environmental Planning and Conservation Department

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1.0 Introduction

United Water Conservation District (United) owns and operates the Santa Felicia Project (Project) on Piru Creek in Ventura County, California. The Federal Energy Regulatory Commission (FERC) issued a new license (License) to United for the operations of the Project on September 12, 2008 (FERC Project No. 2153-012). Article 405 of the License required United to file a *Vegetation and Noxious Weed Management Plan* (Plan) for lands within the project boundary that incorporates provisions of United States Forest Service' (USFS) 4(e) Condition 18(b). United filed the Plan on October 12, 2010 and FERC filed approval of the Plan on February 14, 2011. The following baseline inventory is a required component of the Plan.

2.0 Target Noxious Weed Species

The Plan requires United to conduct a baseline inventory of targeted noxious weeds within the Vegetation and Noxious Weed Management Plan Area during the first spring-summer following approval of the Plan. A map of the Plan Area is presented in Appendix A. The Plan Area consists of lands within the Project boundary that are reasonably accessible. These lands include the area adjacent to Santa Felicia Dam, the area along the western shore of Lake Piru, and the accessible portion of the eastern shore at the north end of Lake Piru. Target species are noxious weeds listed as A, B, or Q species by the CDFA *and* identified as weed species of concern by the Los Padres National Forest (LPNF) as indicated by the LPNF Botanist. Target noxious weed species fitting both of the above criteria are listed in Table 1.

Table 1 Target noxious weed species for baseline inventory

Scientific and Common Name	CDFA Rating
<i>Arundo donax</i> (giant reed)	B
<i>Cardaria pubescens</i> (hairy white top)	B
<i>Centaurea maculosa</i> (spotted knapweed)	A
<i>Cortaderia jubata/selloana</i> (pampas grass)	B
<i>Onopordum acanthium</i> ssp. <i>acanthium</i> (scotch thistle)	A
<i>Tamarix ramosissima</i> (tamarisk)	B

3.0 Survey Methods

The baseline inventory survey was conducted on April 26th and 27th of 2011. A team of two botanists traversed the Vegetation and Noxious Weed Management Plan Area by foot and by boat searching for targeted noxious weeds. The survey was conducted in accordance with guidelines recommended by the California Weed Mapping Handbook, published by the CDFA in 2002. Data were collected and recorded using the CDFA weed mapping data standards and standard data collection forms. All observations were mapped by hand and with a Global Positioning System (GPS) unit. Aerial printouts with prior 2003 vegetation survey data were

printed and utilized for hand mapping observations in the field. Data collected through the use of GPS units, field markups, and weed data collection forms were assimilated and digitized into a Geographic Information System (GIS) and incorporated into a shapefile.

4.0 Baseline Inventory

The only targeted noxious weed that was observed during the baseline inventory survey was *Tamarix ramosissima* (tamarisk). A total of 296 tamarisk plants were identified within the Vegetation and Noxious Weed Management Plan Area. The greatest densities of tamarisk plants were observed in the northern portion of the surveyed area, adjacent to middle Piru Creek upstream of Lake Piru. For mapping purposes the surveyed area was divided into five “tiles”. The first tile (Tile 1 S Portion) includes the southernmost portion of the surveyed area. Each following tile (Tile 2 S Portion, Tile 3 NW Portion, Tile 4 NW Portion, and Tile 5 NM Portion) progresses toward the north. Tiles 1 through 5 are presented in Appendix B. Areas of tamarisk observations are identified as polygons in the tiles. Table 2 presents information related to tamarisk plants that were observed during the baseline survey. The information was retrieved from the GIS database file and correlates directly with the attached tiles.

5.0 Next Steps

United, in consultation with the USDA-FS, will use the baseline inventory to evaluate infestation levels and develop site-specific control measures designed to eradicate the identified populations. A follow-up inventory of target noxious weeds will occur in the spring-summer of 2016.

Table 2 Tamarisk observation characteristics

Tile #	Polygon ID	Qty Observed	% Coverage	Latitude	Longitude	Total Plants per Tile
1	11	8	10	34.456437	-118.754693	50
	12	25	8	34.457353	-118.754869	
	13	2	10	34.459013	-118.75202	
	14	12	10	34.459416	-118.751989	
	15	1	1	34.465101	-118.755754	
	16	2	3	34.465906	-118.756588	
2	10	10	20	34.478981	-118.769098	53
	17	4	3	34.478516	-118.767564	
	18	2	1	34.479228	-118.767611	
	19	1	1	34.479163	-118.768366	
	20	10	8	34.47998	-118.767611	
	21	20	10	34.479918	-118.763518	
	22	6	5	34.479317	-118.76955	
4	8	1	1	34.511757	-118.759101	63
	9	8	5	34.512731	-118.760761	
	23	25	10	34.504999	-118.758088	
	24	1	1	34.509658	-118.760615	
	25	8	5	34.512408	-118.759205	
	26	20	15	34.514673	-118.755845	
5	1	8	5	34.519027	-118.757669	130
	2	10	5	34.520538	-118.756979	
	3	6	8	34.521997	-118.75743	
	4	8	5	34.522137	-118.757185	
	5	50	8	34.521791	-118.757385	
	6	10	5	34.52015	-118.757636	
	7	8	5	34.518951	-118.757916	
	27	30	20	34.517715	-118.757451	
Total Plants Observed						296

Appendix A
Project Area Map

Appendix B

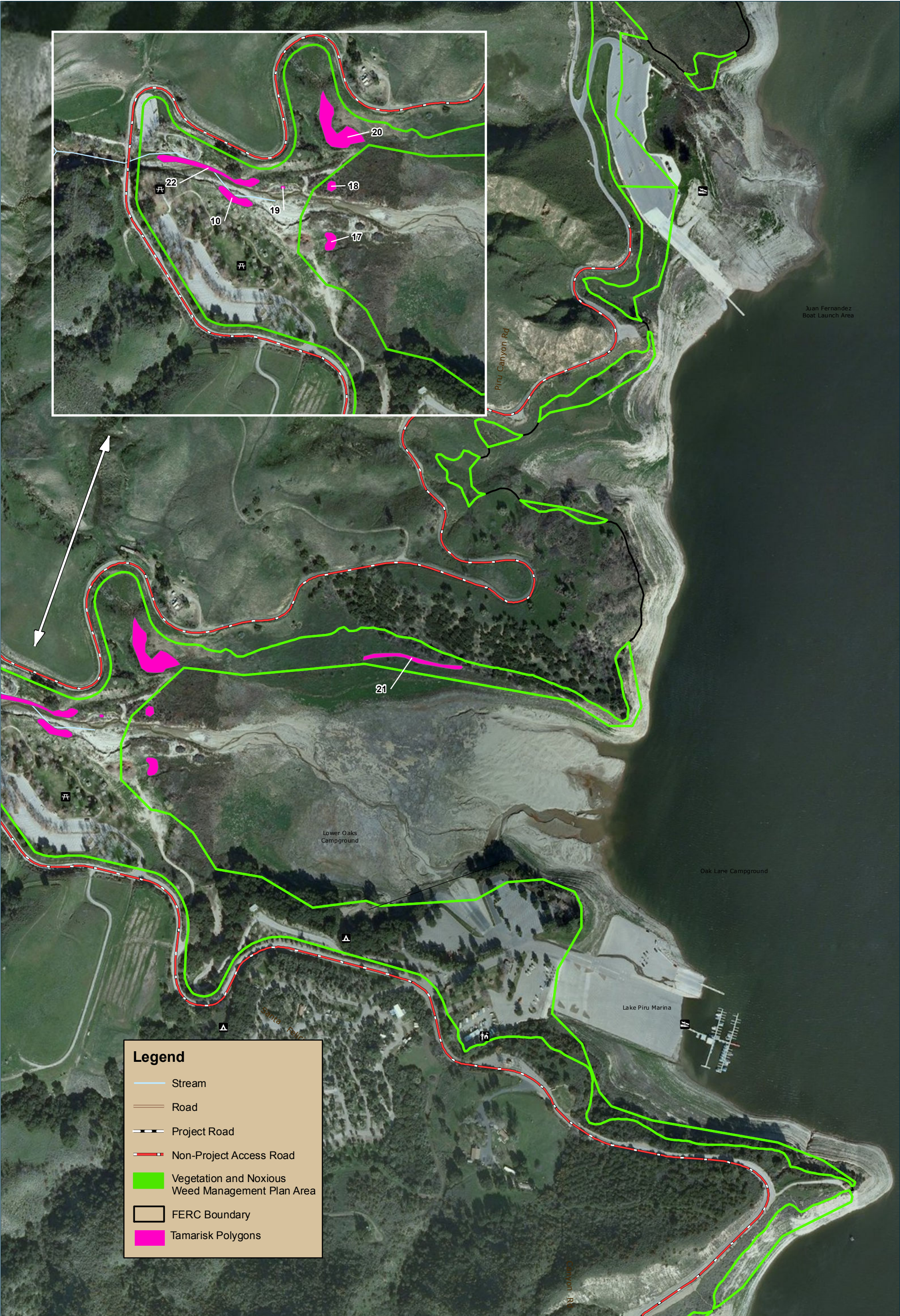
Map Tiles Depicting Identified Tamarisk Populations



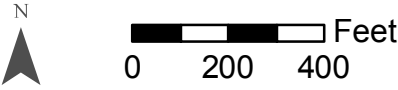
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TILE 1 S PORTION



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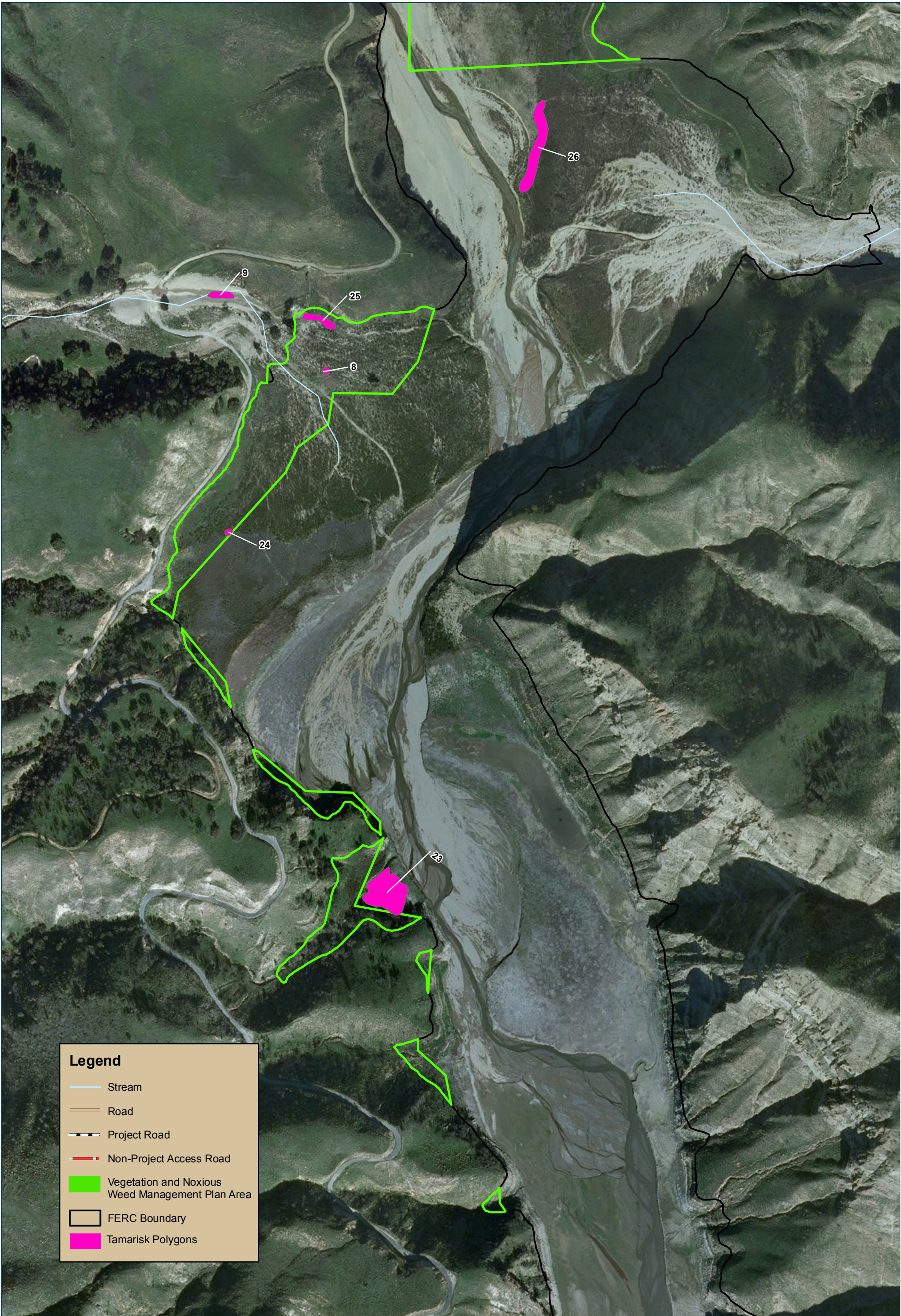


TILE 2 S PORTION



Legend

- Stream
- Road
- Project Road
- Non-Project Access Road
- Vegetation and Noxious Weed Management Plan Area
- FERC Boundary



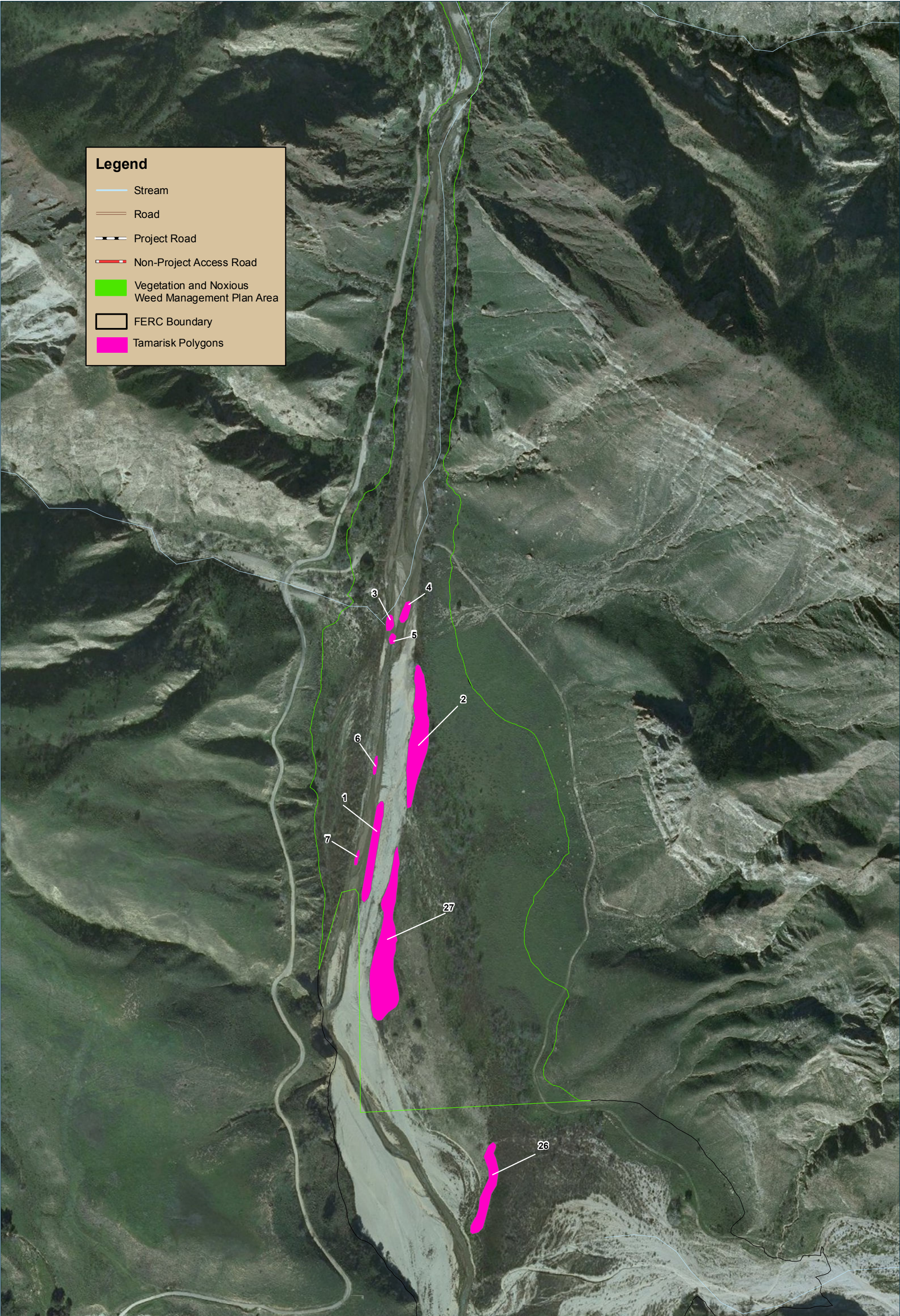
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N
0 200 400 Feet

TILE 4 NW PORTION

Legend

- Stream
- Road
- Project Road
- Non-Project Access Road
- Vegetation and Noxious Weed Management Plan Area
- FERC Boundary
- Tamarisk Polygons



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N

0 200 400 Feet

TILE 5 NW PORTION