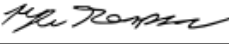


ARIZONA WATER PROTECTION FUND
APPLICATION COVER PAGE
FY 2020

Title of Project: Winkelman Natural Resource Conservation District Riparian Restoration													
Type of Project: <input checked="" type="checkbox"/> Capital or Other <input type="checkbox"/> Water Conservation <input type="checkbox"/> Research	Stream Type: <input checked="" type="checkbox"/> Perennial <input type="checkbox"/> Intermittent <input type="checkbox"/> Ephemeral	Your level of commitment to maintenance of project benefits and capital improvements: <input type="checkbox"/> < 5 years <input type="checkbox"/> 5-10 years <input type="checkbox"/> 11-15 years <input checked="" type="checkbox"/> 16-20 years											
Applicant Information: Name/Organization: Winkelman Natural Resources Conservation District Address 1: PO Box 486 Address 2: City: Kearny State: Arizona ZIP Code: 85137 Phone: 520-560-0721 Fax: Tax ID No.: 86-0932080		Inside an AMA: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, which AMA: <div style="text-align: right;"> <input type="checkbox"/> Phoenix <input type="checkbox"/> Tucson <input type="checkbox"/> Prescott <input type="checkbox"/> Pinal <input type="checkbox"/> Santa Cruz </div>											
Contact Person: Name: Kyle Thompson Title: WNRCD District Coordinator/Ecologist Phone: 928-368-7067 Fax: e-mail: kylewthomp@gmail.com		Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation Any Previous AWPf Grants: <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, please provide Grant #(s):											
Arizona Water Protection Fund Grant Amount Requested: \$205,844 If the application is funded, will the Grantee intend to request an advance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Matching Funds Obtained and Secured: <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left; border-bottom: 1px solid black;"><u>Applicant/Agency/Organization:</u></th> <th style="text-align: right; border-bottom: 1px solid black;"><u>Amount (\$):</u></th> </tr> <tr> <td>1. Applicant</td> <td style="text-align: right;">\$18,414</td> </tr> <tr> <td>2.</td> <td></td> </tr> <tr> <td>3.</td> <td></td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 20px;">Total: \$224,258</td> </tr> </table>		<u>Applicant/Agency/Organization:</u>	<u>Amount (\$):</u>	1. Applicant	\$18,414	2.		3.		Total: \$224,258	
<u>Applicant/Agency/Organization:</u>	<u>Amount (\$):</u>												
1. Applicant	\$18,414												
2.													
3.													
Total: \$224,258													
Has your legal counsel or contracting authority reviewed and accepted the Grant Award Contract General Provisions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A													

Signature of the undersigned certifies understanding and compliance with all terms, conditions and specifications in the attached application. Additionally, signature certifies that all information provided by the applicant is true and accurate. The undersigned acknowledges that intentional presentation of any false or fraudulent information, or knowingly concealing a material fact regarding this application is subject to criminal penalties as provided in A.R.S. Title 13. The Arizona Water Protection Fund Commission may approve Grant Awards with modifications to scope items, methodology, schedule, final products and/or budget.

Kyle Thompson	WNRCD Coordinator/Ecologist 927-368-7067
Typed Name of Applicant or Applicant's Authorized Representative	Title and Telephone Number
	09/05/2019
Signature	Date Signed

EXECUTIVE SUMMARY

The Gila River has been heavily impacted by tamarisk (*Tamarix* spp.) causing increased water loss, increased fire hazards, and the loss of wildlife habitat. The Winkelman Natural Resource Conservation District (WNRCD) is pursuing the creation and implementation of a Tamarisk Management Plan outlining the needs and goals of tamarisk removal and on-the-ground restoration. We propose to 1) Create a Tamarisk Management Plan outlining tamarisk treatment methods, priority restoration sites, revegetation goals, monitoring, long-term maintenance, and site-specific restoration plans; 2) Remove tamarisk and plant native vegetation on 20 acres along the Gila River; and 3) Restore a 105-acre riparian corridor with native trees and shrubs where tamarisk is currently being removed. This plan will have direct benefits by restoring native riparian area vegetation and habitat, restoring proper hydrologic conditions/functions, improving water quality, increasing water quantity, and decreasing severe wildfire hazards adjacent to urban areas. Long-term maintenance will be outlined in the WNRCD Tamarisk Management Plan and long-term maintenance agreements from landowners will be created. Restoration will be completed on three sites totaling 120 acres and retreatment of the sites will be completed within this grant period. The WNRCD, in cooperation with the landowners, will continue maintenance through experience gained in this project with rancher and volunteer cooperation and by seeking funding from additional sources. This project will bring together community members and organizations to improve the local watershed shared by a diverse stakeholder group and provide an opportunity for the WNRCD and community members to learn from on-the-ground work.

PROJECT OVERVIEW

Background

The Gila River has been heavily impacted by non-native, invasive species, especially tamarisk, causing increased water loss, the loss of native habitat for fish and wildlife species, changed hydrologic functioning of the system, and increased severe wildfire danger. The removal of tamarisk from the upper Gila River has led to direct benefits for the watershed through the restoration of native flora and fauna, the increase in habitat for fish and wildlife species, and a decrease in water loss and wildfire hazards. The Winkelman Natural Resource Conservation District, covering 1.6 million acres of the Gila and San Pedro River watersheds, began an informal tamarisk removal program in 2016 to reduce the impacts of tamarisk and implement these benefits seen upstream to the district riparian areas. The program outlined potential areas for restoration and received approval for work on private land. The WNRCD would like to formalize this program by outlining it in a documented WNRCD Tamarisk Management Plan. The priorities of this plan are to outline the best treatment methods, priority restoration sites, revegetation goals, monitoring, long-term maintenance agreements, site-specific restoration plans, and on-the-ground projects including tamarisk removal and native plant restoration.

In both 2013 and 2015, wildfires burned along the Gila River next to the Town of Kearny. The 2015 Kearny River Fire burned over 1,000 acres and resulted in property loss, evacuations and a federal declaration from FEMA. The Town of Kearny, in partnership with the Arizona Department of Forestry and Fire Management (DFFM) will be removing invasive tamarisk from 105 acres along the Gila River in the Town of Kearny by March 2020. This project was funded by the Federal Emergency Management Agency (FEMA) through a Fire Management Assistance Grant (FMAG) to mitigate hazardous fuels. Currently there is no funding to follow this tamarisk removal with native vegetation planting and maintenance. While the tamarisk is not being removed specifically for riparian restoration, this project presents an opportunity to restore native riparian vegetation and maintain the area to keep tamarisk from returning. Endangered Species Act Section 7 consultation with U.S. Fish & Wildlife Service has already been carried out for the purpose of tamarisk removal, biological surveys, and cultural and archaeological clearances have been obtained for the Kearny Site. Planting native vegetation following the removal of tamarisk is imperative to improving watershed conditions that enhance water quality and water quantity, restoring habitat needs for wildlife, and restoring proper hydrologic conditions/functions.

In March 2019 the WNRCD received a grant from the National Association of Conservation Districts (NACD) to implement capacity and programmatic capabilities of the local Oracle Community Learning Garden (OCLG). This grant is, in part, helping construct a hoop house for the community garden as well as helping the OCLG have the ability to grow native plants for restoration projects. Part of the Tamarisk Management Plan that would be created as part of this project would outline strategies for continued development and funding of growing local native plants for restoration efforts in the district and contribute to long-term maintenance of tamarisk removal projects. Maintenance agreements will be created for all tamarisk removal projects carried out in this proposal as well as projects designed in the Tamarisk Management Plan.

Goals

1. Decrease water loss along the Gila River by removing invasive tamarisk.
2. Improve long-term riparian ecosystem functioning and restore native habitat for wildlife.
3. Create a long-term tamarisk management plan for the WNRCD and strengthen on-going collaborative conservation between ranchers, farmers, county and town governments, government agencies, non-government organizations, and public citizens.

Objectives

1. Remove tamarisk on a total of 20 acres—18 acres by grubbing tamarisk with heavy equipment and 2 acres by hand cutting and herbicide stump painting.
2. Restore riparian habitat where tamarisk has been treated through this project and already treated on Town of Kearny property by planting native trees, shrubs, and grass with volunteers and paid contractors and follow up maintenance every year post-treatment.
3. Work with ranchers, farmers, biologists, government agencies, non-profits, and public citizens in the district to create a long-term tamarisk management plan that reduces tamarisk in the district while facilitating the exchange of knowledge across this diverse group of stakeholders.

Statement of Problems/Causes

Problem 1) Invasive tamarisk causes higher than normal water loss in riparian areas, increases the danger of severe wildfires, outcompetes native riparian wildlife habitat, and can change geomorphology and soils along a river. Invasive species removal takes time and sometimes repeat treatments, making ongoing monitoring and maintenance necessary. Problem 2) Invasive tamarisk will be removed along the Gila River on 105 acres of land owned by the Town of Kearny, Arizona, but there is currently no funding for follow-up maintenance or planting of native species to keep tamarisk and other noxious weeds from reestablishing.

Statement of Solutions

Removal of tamarisk by grubbing and hand cutting with herbicide stump painting has been shown to effectively treat tamarisk. Planting and establishing native vegetation in the areas where tamarisk has been removed can reduce and slow the likelihood that tamarisk will return to the area as well as decrease densities of noxious weeds that become established after tamarisk removal. Creating a long-term maintenance plans and landowner agreements where tamarisk treatment occurs will reduce the reestablishment of tamarisk.

Statement of Project Years of Benefit to the Resource and General Public

The WNRCD will create a tamarisk management plan for the district that includes long-term maintenance as one of its primary goals. This management plan will outline agreements with landowners to participate in yearly monitoring and maintenance of treated sites. Through this plan, project benefit is expected to last approximately 20 years and longer with continued maintenance. Revegetation that takes place after non-native vegetation has been removed will not only provide direct benefits to the Gila River, but it will also decrease the chance non-native vegetation will re-establish itself, thereby decreasing the negative impacts associated with non-native vegetation encroachment. Long-term benefits of this proposed project include 1) long-term reduction of tamarisk on 125 acres of riparian habitat; 2) long-term establishment of long-lived native vegetation (e.g., native desert trees); 3) long-term resistance to negative impacts by non-native plant species (e.g., non-native plant encroachment and fire risk); 4) an established management plan that outlines best management practices (BMPs), maintenance agreements, and formally brings together stakeholders for the exchange of knowledge.

PROJECT LOCATION & ENVIRONMENTAL CONTAMINATION
INFORMATION
FY 2020

Project Location Information			
1. County: <u>Pinal County</u>	2. Section(s): <u>28,33,34</u>	3. Township: <u>4S</u>	4. Range: <u>14E</u>
<p>5. Watershed: <u>Gila River</u></p> <p>6. 8 or 10 Digit Hydrologic Unit Code (HUC): <u>15050100</u></p> <p>7. Name of USGS Topographic Map where project area is located: <u>Kearny, AZ</u></p> <p>8. State Legislative District: <u>8</u> (Information available at: https://azredistricting.org/Maps/Final-Maps/default.asp)</p> <p>9. Land ownership of project area: <u>Private: General Kearny's Pinal County Sheriff's Posse, DuBoise Ranch; and Town of Kearny</u></p> <p>10. Current land use of project area: <u>Recreation/none</u></p> <p>11. Size of project area (in acres): <u>125</u></p> <p>12. Stream Name: <u>n/a</u></p> <p>13. Length of stream through project area: <u>n/a</u></p> <p>14. Miles of stream benefited: <u>2 miles</u></p> <p>15. Acres of riparian habitat: <u>125 acres</u> will be:</p> <div style="text-align: right; margin-top: 10px;"> <input checked="" type="checkbox"/> Enhanced <input checked="" type="checkbox"/> Maintained <input checked="" type="checkbox"/> Restored <input type="checkbox"/> Created </div>			

16. General description and/or delineation for the area of impact of the project within the watershed. Located along the Gila River riparian corridor adjacent (to the south) of the town of Kearny, AZ. The project sites are directly along the Gila river, largely within the floodplain.

17. Provide directions to the project site from the nearest city or town. List any special access requirements: The project site is directly south, adjacent to the town of Kearny along the Gila River. From AZ State Highway 177 near Kearny turn south onto Upton Drive. Next, take a right onto Bristol Rd. and follow around to the left onto Tilbury. Follow Tilbury Rd. south until it ends at the north side of the project area. No special access requirements.

Environmental Contaminant Location Information

1. Does your project site contain known environmental contaminants? ☐ YES ☒ NO If yes, please identify the contaminant(s) and enclose data about the location and levels of contaminants:

2. Are there known environmental contaminants in the project vicinity? ☐ YES ☒ NO If yes, please identify the contaminant(s) and enclose data about the location and levels of contaminants:

3. Are you asking for Arizona Water Protection Fund monies to identify whether or not environmental contaminants are present? ☐ YES ☒ NO

SCOPE OF WORK

Tamarisk is widespread in the Gila and San Pedro River watersheds upstream of these project sites. Work is currently being completed by the Gila Watershed Partnership, Salt River Project, The Nature Conservancy, and private landowners in the upper parts of these watersheds and has been eradicated in lower Aravaipa Creek by private landowners. Even though the WNRCD is lower within these watersheds and tamarisk remains upstream, tamarisk removal is a high priority for treatment because of its potential for causing large amounts of water loss and its severe wildfire hazard. To approach this problem, the WNRCD has outlined three objectives to reducing tamarisk within the district including 1) Long-term planning through the WNRCD Tamarisk Management Plan including site-specific restoration plans, maintenance agreements, and monitoring plans; 2) Removal of tamarisk by heavy equipment and hand cutting on 20 acres; 3) Revegetation of treated areas with native vegetation.

This project will begin by the creation of a district-wide tamarisk management plan. This plan will include outlining tamarisk treatment methods, priority restoration sites, revegetation goals, monitoring, long-term maintenance, and site-specific restoration plans. The WNRCD's first steps will be to outline BMPs and create site-specific restoration plans for the 2 sites in this proposal. The WNRCD's next steps will be to work with landowners to lay the groundwork for tamarisk removal on other private parcels including written agreements, discussion of maintenance requirements, and acknowledgements of potential biological and cultural resource survey requirements. Currently, the WNRCD has a list of interested landowners and parcel numbers as well as written agreements for tamarisk removal on 5 of these properties. The largest private landowner on the Gila River in the WNRCD is the mining company Asarco, who is a regular participant in WNRCD meetings and interested in contributing to conservation in the district. Asarco has communicated that they would like to participate in tamarisk treatment on their properties, much of which is leased by equally interested ranchers, but 3-4 months planning and administrative approvals will be required. One of the primary goals of the WNRCD Tamarisk

Management Plan will be to work with the administration of Asarco to identify and approve properties that are good candidates for tamarisk removal many of which already have cultural resource surveys completed and are leased by ranchers in the WNRCD.

On-the-ground work will begin after the detailed site restoration plans are described in the WNRCD Tamarisk Management Plan and permitting approved. Before restoration begins, soil samples will be taken at each site (to check salinity), vegetation transects will be completed, and photographs for repeat photography taken. Work on these sites will primarily involve WNRCD staff, volunteers, and contracted American Conservation Experience (ACE) crews. The Town of Kearny is planning on clearing 105 acres of tamarisk October 2019-March 2020 on Town of Kearny property. The WNRCD will follow this treatment by ACE crews who will be hired to spray tamarisk and other noxious weeds the year following treatment with Garlon 3A (or generic brand Triclopyr 3) + aquatically approved blue dye (spring 2021). Also in the spring of 2021, the WNRCD will use local volunteers, WNRCD ranch cooperators, and a contractor to plant native trees, shrubs, and grass on this 105-acre site. In addition to revegetating the Kearny site, 20 more acres will be cleared by heavy equipment brush contractors and ACE crews on 2 other adjacent private properties along the Gila River followed by revegetation in the winter of 2020 (outside of willow flycatcher nesting periods). Follow up maintenance with herbicide spraying will take place at these sites post-treatment (Spring 2021, 2022).

Long-term maintenance will be a primary objective of the WNRCD Tamarisk Management Plan. The WNRCD, in cooperation with each landowner that participates in tamarisk treatment, will outline a 20-year maintenance plan. The WNRCD has volunteer and staff capacity to perform yearly monitoring of the sites and small-scale maintenance. Several of the landowners will have the capacity to perform yearly maintenance post-treatment, including the project partners involved in these projects—Town of Kearny, DuBois Ranch, and General Kearny's Sheriff's Posse of Pinal County—the Town of Kearny will be able to use staff to spray returning tamarisk and noxious weeds; the DuBois Ranch site is only 3 acres and will be easily maintained with a backpack sprayer; and the Sheriff Posse will be able to provide volunteers in cooperation with the WNRCD to maintain the site. After tamarisk is removed and native vegetation established, maintenance will be reduced greatly because native vegetation will decrease the amount of noxious weeds that can establish and tamarisk from reestablishing. WNRCD staff will be able to monitor the sites yearly with vegetation transects and repeat photography. The WNRCD will pursue grants funds annually to continue support of tamarisk removal and maintenance in the district.

Site	Treatment	Date
Kearny	Tamarisk Removal (other proj.)	Winter 2019/2020
Kearny	Revegetation	Spring 2021
Kearny	Retreatment (Herbicide)	Spring 2021/2022
DuBois Ranch/Sheriff's	Tamarisk Removal	Winter 2020
DuBois Ranch/Sheriff's	Revegetation	Spring 2021
DuBois Ranch/Sheriff's	Retreatment (Herbicide)	Spring 2021/2022

Task 1: Planning WNRCD Tamarisk Management Plan

Task Description: Create detailed document outlining tamarisk management on the 1.6 million acre Winkelman Natural Resource Conservation District including the Lower San Pedro River and Gila River. The plan will include BMPs, restoration goals, build on a priority restoration site list (already created), describe monitoring methods, create long-term maintenance plans and agreements with landowners, and create site-specific restoration plans for on-the-ground work described in this proposal and 2 additional sites. Site-specific plans will include treatment prescriptions, revegetation plans, and retreatment plans. Re-vegetation of native riparian and desert plants will be planned with WNRCD knowledge and in collaboration with the Natural Resource Conservation District (NRCS), Arizona Game and Fish Department (AZGFD), The Nature Conservancy (TNC), and Gila Watershed Partnership (GWP).

Task Purpose/Objective: Clearly outline goals and objectives, plan restoration of two sites in this proposal, streamline future restoration.

Responsible personnel: WNRCD Coordinator/Ecologist, WNRCD Board of Directors

Deliverable Description: Formalized WNRCD Tamarisk Management Plan, site-specific plans for sites including Town of Kearny, DuBois Ranch, and Sheriff's Posse .

Deliverable Due Date: October 1, 2020

Task Cost: \$7,442

Task 2: Permitting, Authorizations, and Contracts

Task Description: Obtain and submit all permits, authorizations, clearances and agreements. Endangered Species Act Section 7 consultation with US Fish & Wildlife Service (USFWS) has already been carried out for the purpose of tamarisk removal, biological surveys, and cultural and archaeological clearances obtained for the Kearny Restoration site (see supplemental material). Consultations will be made to ensure they are carried over to this project. An ADEQ General Pesticide Use Permit will be obtained for the Kearny site. Permitting will be obtained for the Sheriff's Posse and DuBois Ranch sites including USFWS Section 7 consultation, cultural resource clearances, and ADEQ General Pesticide Use Permit. A cultural resource survey request for bids will be advertised and a surveyor hired for the DuBois Ranch and Sheriff's sites. No cultural resources were found on the 105 acre Kearny site and similar results are expected due to the proximity of the other sites as well as their location within a flood area.

Authorizations have already been made by these landowners for tamarisk removal and revegetation. A contract will be made and finalized with ACE and a contract for a native seeding expert will be advertised, hired, and contract finalized. Proof of water rights for revegetation will provide by WNRCD cooperator that donates water for the project.

Task Purpose/Objective: To comply with all local, state and federal permit requirements, environmental laws such as NEPA, and obtain legal access to project area.

Responsible personnel: WNRCD Coordinator/Ecologist

Deliverable Description: Copies of all approved permits, authorizations, subcontracts, clearances, agreements, and proof of water rights for revegetation.

Deliverable Due Date: October 1, 2020

Task Cost: \$10,418

Task 3: Pretreatment Monitoring

Task Description: Monitoring transects outlined by the WNRCD Tamarisk Management Plan will be completed along with accompanying repeat photographs. Monitoring plans will be finalized in the WNRCD Tamarisk Management Plan and will include maps, attributes to be measured, frequency of monitoring, justification of monitoring locations, procedures, analysis, data collection sheet template, and responsible personnel.

Task Purpose/Objective: Establish baseline information and data about the sites pre-treatment.

Responsible personnel: WNRCD Coordinator/Ecologist

Deliverable Description: Data and photographs from monitoring.

Deliverable Due Date: October 1, 2020

Task Cost: \$2,166

Task 4: Tamarisk Removal at Sheriff and DuBois Ranch Sites

Task Description: Hire ACE crews and heavy equipment operator to remove tamarisk by grubbing (18 acres) and hand cutting with stump painting (2 acres) totaling 20 acres. American Conservation Experience has already been consulted with by the WNRCD for tamarisk removal and price quoted (see supplemental material). Garlon 3A (or generic brand Triclopyr 3) + aquatically approved blue dye will be used on cut tamarisk. The WNRCD also consulted with Western Brush Clearing after they won the competitive bid for the Kearny site and they would likely be used to complete the tamarisk grubbing. Tamarisk will be removed by heavy mechanical grubbing along the floodplain and hand cut adjacent to the river anywhere the bank begins to slope to avoid bank and soil disturbance. Riparian vegetation adjacent to the river including native trees such as Fremont cottonwood, Gooding willow, velvet ash, and native shrubs such as seep willow will be left in place. Within the dry floodplain, the recent fire burned through a stand of Fremont cottonwood, and resulted in complete mortality. These trees are now snags and will be mostly left for wildlife habitat except in places required to be removed for safety and access by heavy equipment. Mesquite is a minor component of floodplain vegetation and was burned in the fire. Some of the mesquites have re-sprouted after the fire, and similar to salt cedar, they have multiple stems and lack the branch structure to become mature trees. The fuel reduction and treatment plan for this project is as follows:

1. Treatment within the floodplain will emphasize removal and control of tamarisk.
2. Mesquite will be grubbed, extracting as close to 100% of the root as possible, piled, and mechanically masticated (3 inch - 3 feet in length) or burned.
3. Within the floodplain, snags and native trees >8 inches DBH will be retained.
4. Within the floodplain, mesquite trees >8 feet tall will be retained when growing alone or in groups.
5. Mesquite shrubs/trees intermixed with tamarisk will be removed to reduce hazardous fuels.
6. Clearing or cutting of any material by mechanized equipment will not occur within 10 feet of riparian vegetation adjacent to the river where soil is wet.

At the DuBois Site and Sheriff Site, the ACE Crews will chainsaw cut-stump tamarisk and haul slash to piles on 2 acres of mixed native-tamarisk vegetation over 6 weeks with an 8-man crew. Garlon 3A (or generic brand Triclopyr 3) + aquatically approved blue dye will be applied after tamarisk is cut.

Monitoring will take place on transects immediately following treatment and repeat photographs taken.

Task Purpose/Objective: Remove tamarisk on 20 acres of riparian habitat and record vegetation data post-treatment.

Responsible personnel: WNRCD Coordinator/Ecologist, ACE contractor

Deliverable Description: Invoice from ACE, post-treatment monitoring data and photographs.

Deliverable Due Date: March 31, 2021

Task Cost: \$56,871

Task 5: Plant Material Purchase and Revegetation

Task Description: Revegetation will be completed on the 3 sites—Kearny, Sheriff’s Posse, and DuBois Ranch—within the same period of time. Planting will be done in coordination with volunteers, the Town of Kearny, and WNRCD cooperators. Seeding will be completed with the volunteer time of WNRCD cooperators to prep the sites by ripping or disking the site and a contractor to complete the seeding. Plant materials will be purchased from local providers including the Oracle Community Learning Garden, Gila Watershed Partnership, and Borderlands Restoration. Trees and shrubs will be planted on 50 acres at the Kearny site, 10 acres at the Sheriff’s site, and 2 acres at the DuBois with 30 plants per acre. Native plant seeding will be done on 30 acres at the Kearny site, 10 acres at the Sheriff’s, and 1 acre at the DuBois. Seeding and planting will be done to take advantage of seasonal rain and supplemental irrigation will take place if needed. Water will be donated by WNRCD cooperating ranchers and hauled to the site for initial tree planting. Water rights of water used will be proved prior to work beginning. Herbivore protectors will be used on planted trees to increase the likelihood of success.

Task Purpose/Objective: To install/plant native vegetation at the project site to carry out the goals of the project (i.e., restore native riparian vegetation and habitat, restore habitat needs for wildlife, decrease negative impacts to area by non-native species).

Responsible personnel: WNRCD Coordinator, WNRCD Board of Directors

Deliverable Description: Invoices from plant purchases, invoice from native plant restorationist, post-treatment photographs

Deliverable Due Date: June 15, 2021

Task Cost: \$56,325

Task 6: Post-treatment Maintenance and Monitoring

Task Description: To help ensure tamarisk removal, ACE crews will be hired to herbicide treat any resprouts after tamarisk removal. This follow up maintenance will be carried out by spraying Garlon 3A (or generic brand Triclopyr 3) + aquatically approved blue dye on resprouted tamarisk and establishing noxious weeds. The ACE crew will be hired to spray tamarisk and other noxious weeds post-treatment on the Kearny site (Spring 2021). The Town of Kearny, WNRCD staff, and the DuBois Ranch will be taught to spray tamarisk by the ACE Crews during this Spring 2021 retreatment of the Kearny site. Maintenance herbicide spraying will then be completed on all 125 acres with staff, WNRCD cooperators, Town of Kearny employees, and volunteers during Spring 2022. The Town of Kearny is committed to monitoring and spot treating Tamarisk over the next 20 years on the Kearny site with the help of the WNRCD. The Town of Kearny has full-time maintenance staff that could be used for this. Final agreements will be completed and signed in the WNRCD Tamarisk Management Plan. Monitoring will also take place on transects with repeat photographs the fall 2021 following treatment and spring 2022.

Task Purpose/Objective: Ensure tamarisk has been killed on all 125 acres and provide monitoring data to monitor the success of treatment

Responsible personnel: WNRCD Coordinator/Ecologist, ACE contractor

Deliverable Description: Invoices from ACE, data and photographs from monitoring

Deliverable Due Date: June 15, 2022

Task Cost: \$60,040

Task 7: Final Report and Presentation of Deliverables and Findings

Task Description: A final report will be produced by WNRCD outlining the deliverables that were met, goals of the project that were accomplished, and lessons learned to possibly enhance future projects that

are similar in nature. This report will be available to any interested parties, and an oral presentation will take place at the request of the grant funders.

Task Purpose/Objective: To create a final report of project deliverables, goals accomplished, findings that may improve future projects, and an oral presentation.

Responsible personnel: WNRCD Coordinator/Ecologist, WNRCD Board

Deliverable Description: The final report and oral presentation, final invoices, all monitoring data and photographs.

Deliverable Due Date: August 31, 2022

Task Cost: \$2,779

BUDGET

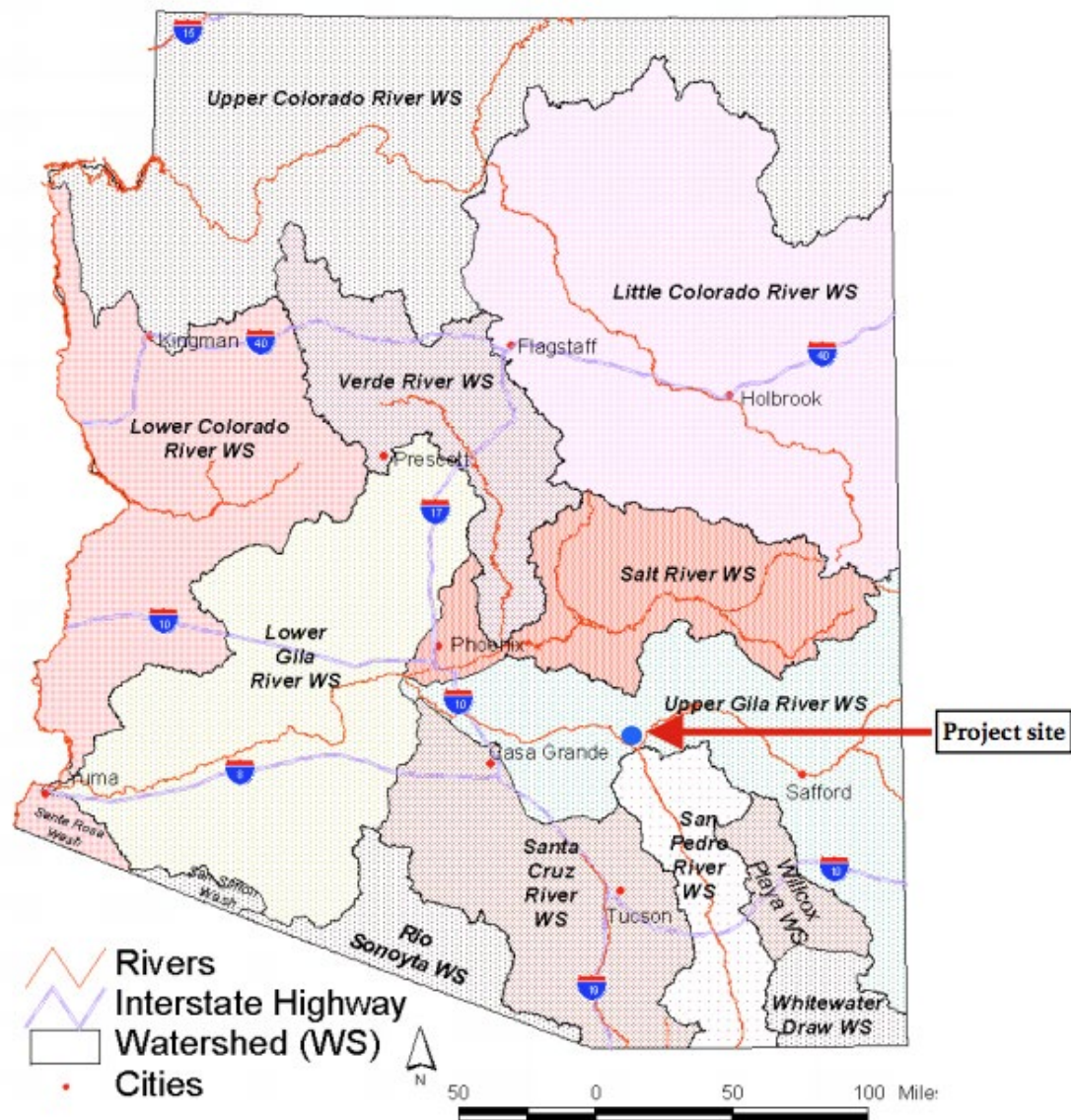
BUDGET ITEM - REQUESTED	COMPUTATION		Rate/ Unit	Total Cost
	\$/unit	Quantity		
<u>Task 1: Tamarisk Management Plan</u>				
WNRCD District Coordinator/Ecologist	\$33.00	200	\$33/hour	\$6,600
Mileage for site visits and landowner meetings	\$0.58	1280	\$0.58/mile	\$742
Soil Tests	\$10.00	10	\$10/sample	\$100
<u>Task 2: Permitting and Authorizations</u>				
WNRCD District Coordinator/Ecologist	\$33.00	80	\$33/hour	\$2,640
Mileage for site visits	\$0.58	480	\$0.58/mile	\$278
Cultural Resource Surveys	-	-	-	\$7,500
<u>Task 3: Pretreatment Monitoring</u>				
WNRCD District Coordinator/Ecologist	\$33.00	60	\$33/hour	\$1,980
Mileage for site visits	\$0.58	320	\$0.58/mile	\$186
<u>Task 4: Tamarisk Removal: Sheriff/DuBois</u>				
WNRCD District Coordinator/Ecologist	\$33.00	80	\$33/hour	\$2,640
Mileage for site visits	\$0.58	640	\$0.58/mile	\$371
ACE Crew	\$7,360.00	6	\$7,360/week	\$44,160
Garlon 3A + blue dye	\$350.00	2	\$350/acre	\$700
Heavy Equipment Contractor - Grubbing	\$500	18	\$500/acre	\$9,000

<u>Task 5: Plant Material Purchase and Reveg.</u>				
Trees and woody shrubs	\$10.00	1,860	\$10/tree	\$18,600
Delivery	\$0.15	18,600	15% of cost	\$2,790
Herbivore protectors	\$2.25	1,860	\$2.25/tree	\$4,185
Seeding Contractor (including seed)	\$750	41	\$750/acre	\$30,750
<u>Task 6: Post-treatment Maint. & Monitoring</u>				
WNRCD District Coordinator/Ecologist	\$33.00	120	\$33/hour	\$3,960
ACE Crew	\$7,040	2	\$7,040/week	\$14,080
Garlon 3A + blue dye	\$175	240	\$175/acre	\$42,000
<u>Task 7: Final Report and Presentation</u>				
WNRCD District Coordinator/Ecologist	\$33.00	80	\$33/hour	\$2,640
Travel for Presentation	\$0.58	240	\$0.58/mile	\$139
TOTAL DIRECT COSTS				\$196,042
INDIRECT COSTS	5%	196,042		\$9,802
TOTAL ESTIMATED PROJECT COSTS				\$205,844

BUDGET ITEM - MATCH	COMPUTATION		Quantity type	Total Cost
	\$/unit	Quantity		
<u>Task 4. Project Implementation</u>				
Volunteer labor	\$10.50	500	\$10.50/hour	\$5,250
Mileage by volunteers	0.58	800	0.58/mile	\$464

Soil Prep for seeding	\$150.00	10	\$150/day	\$1,500
Oracle Community Garden Volunteers	\$15.00	480	\$15/hour	\$7,200
Volunteer time from experts for WNRCD	\$50.00	80	\$50/hour	\$4,000
Tamarisk Management Plan Creation				
TOTAL IN-KIND COSTS				\$18,414

PROJECT LOCATIONS MAPS AND SCHEMATIC

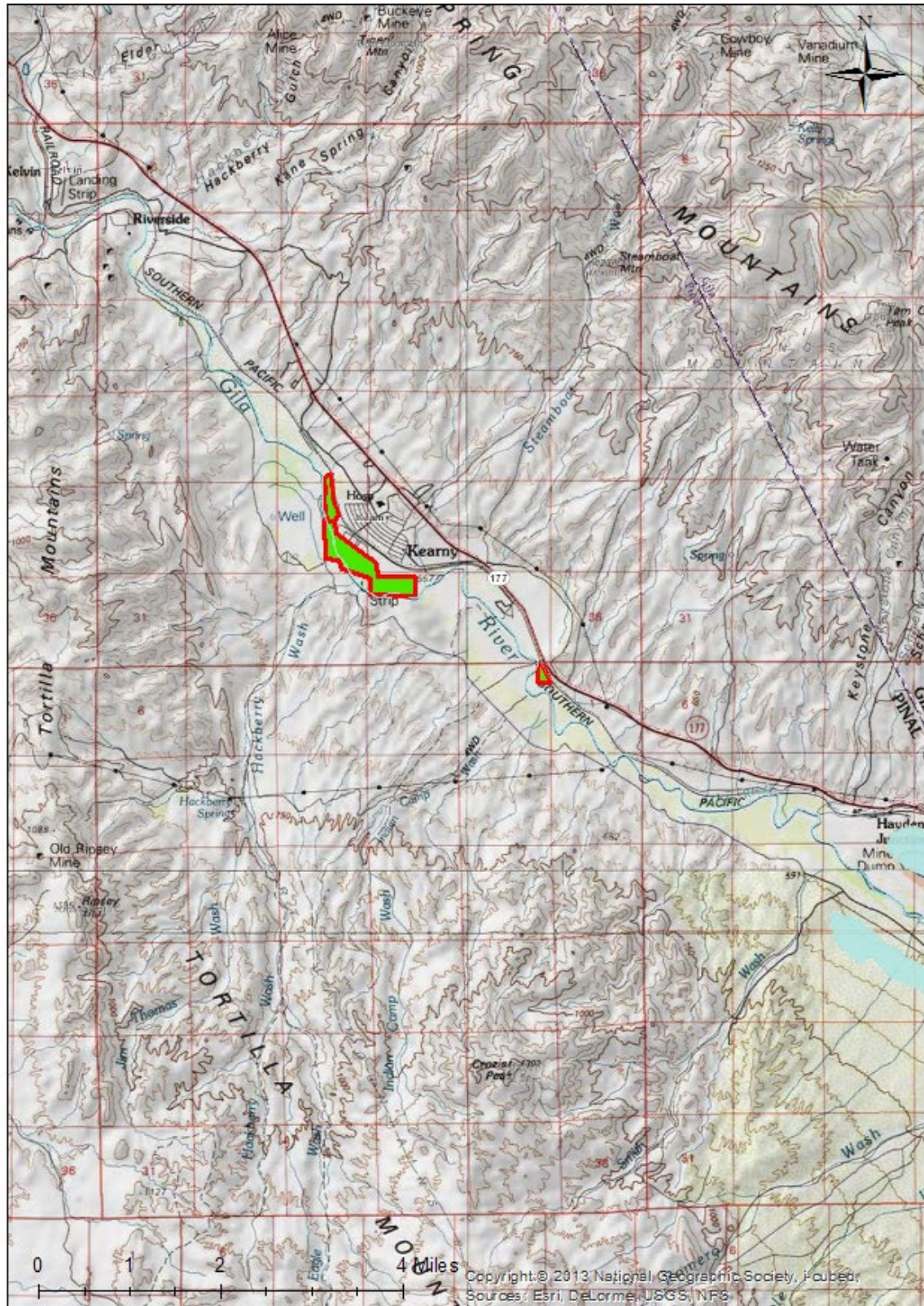


Title of Project: Winkelman Natural Resource Conservation District Riparian Restoration

Location (include UTM's & Township/Range/Section): UTM: 12 N 508775 3658087

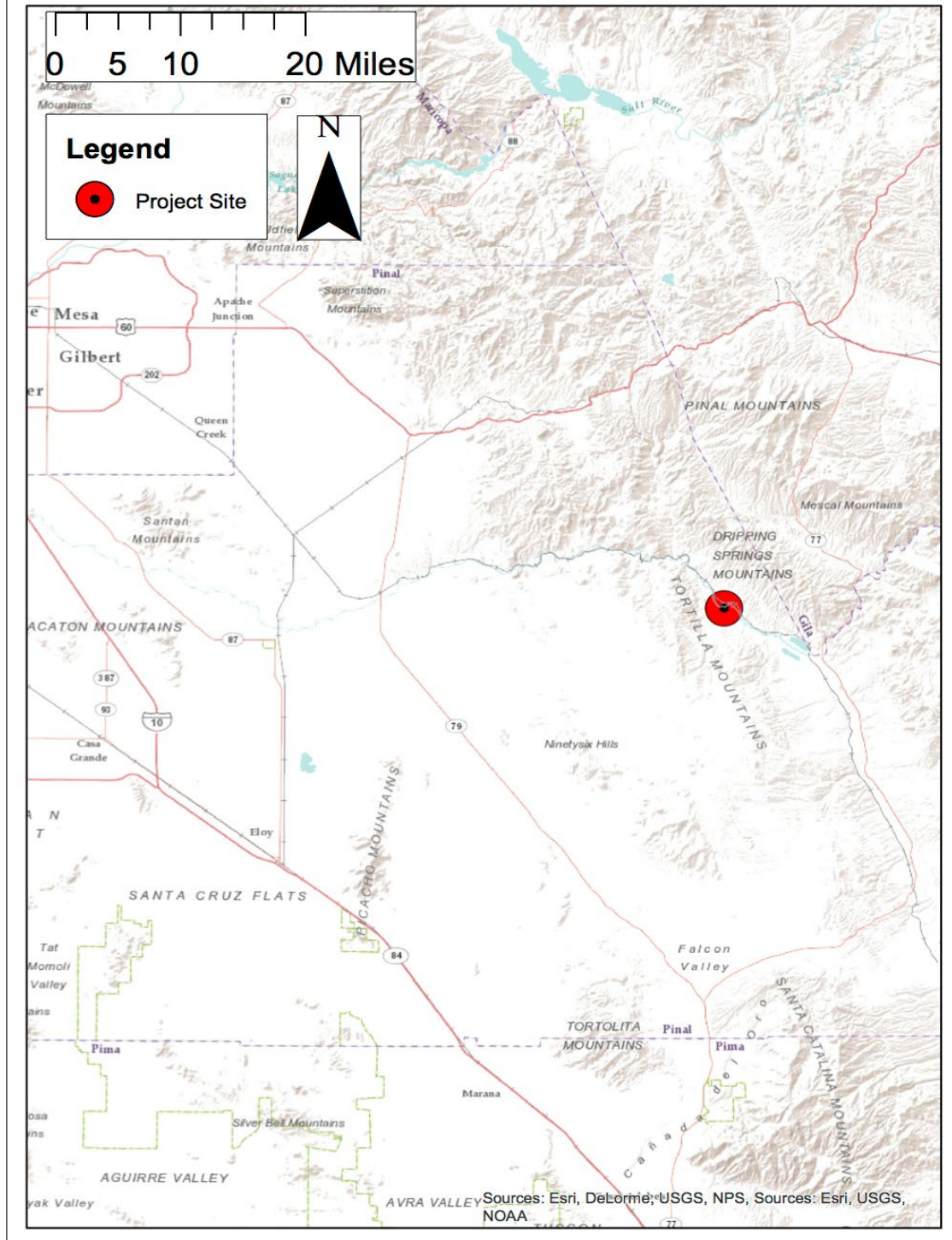
Township 4S, Range 14E, Sections: 28, 33 and 34

WNRCD Riparian Restoration

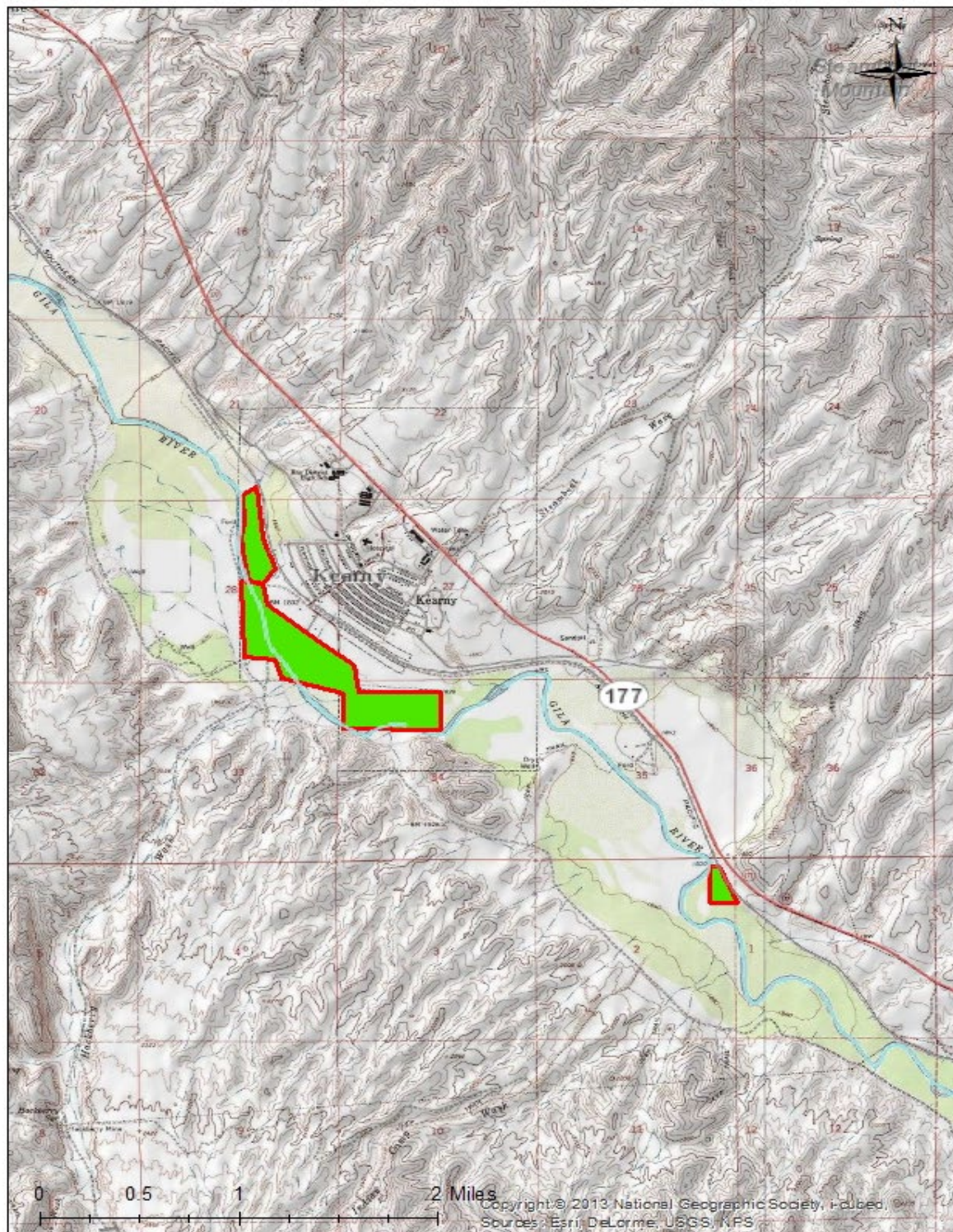


PROJECT LOCATION/OWNERSHIP MAPS

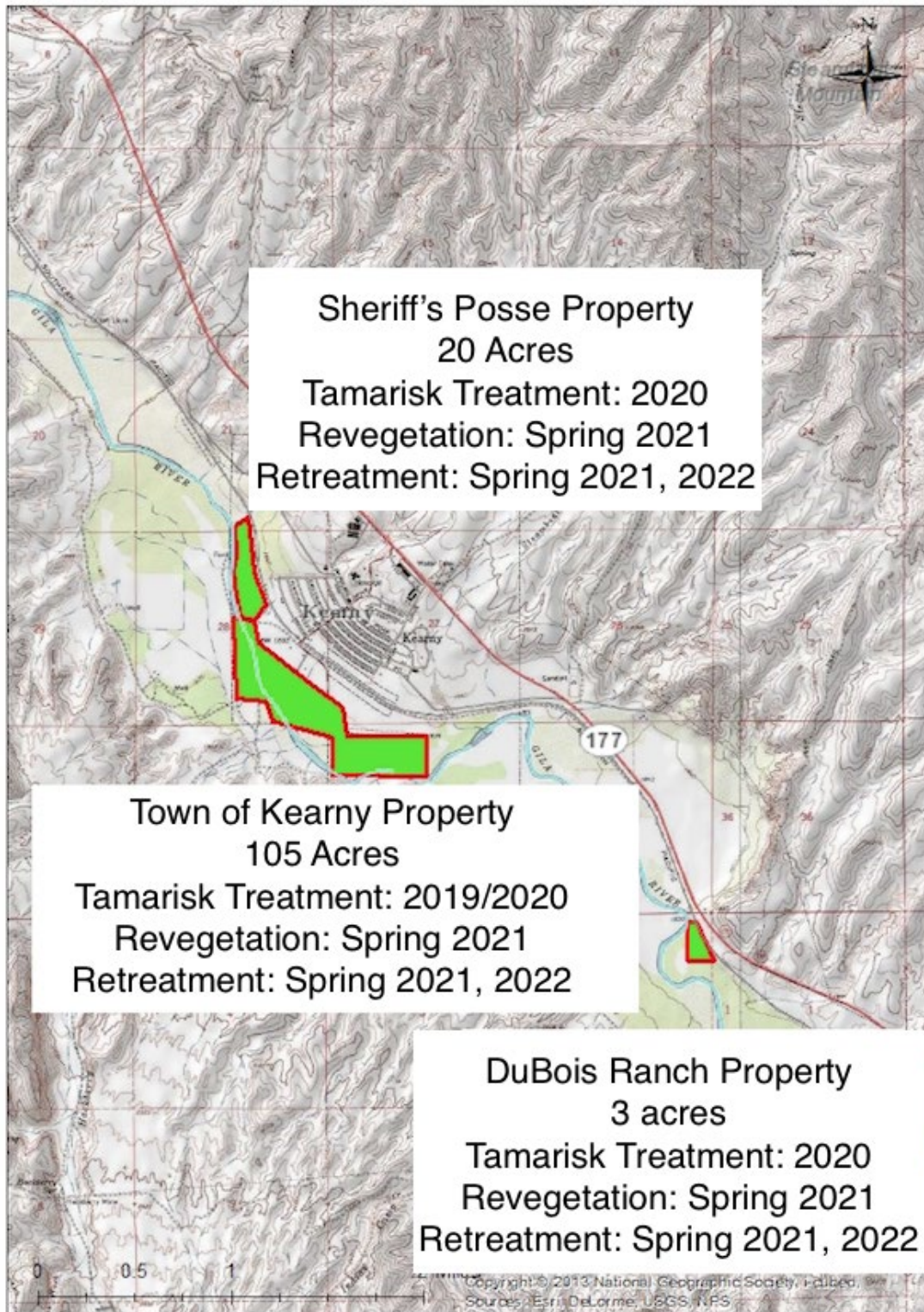
Riparian Restoration Kearny, Arizona



WNRCD Riparian Restoration



WNRCD Riparian Restoration



SUPPLEMENTAL INFORMATION

State Historic Preservation Office (SHPO) Review Form

In accordance with the State Historic Preservation Act (SHPO), A.R.S. 41-861 *et seq*, effective July 24, 1982, each State agency must consider the potential of activities or projects to impact significant cultural resources. Also, each State agency is required to consult with the State Historic Preservation Officer with regard to those activities or projects that may impact cultural resources. Therefore, it is understood that recipients of state funds are required to comply with this law throughout the project period. All projects that affect the ground-surface that are funded by AWPf require SHPO clearance, including those on private and federal lands.

The State Historic Preservation Office (SHPO) must review each grant application recommended for funding in order to determine the effect, if any, a proposed project may have on archaeological or cultural resources. To assist the SHPO in this review, the following information MUST be submitted with each application for funding assistance:

- A completed copy of this form, and
- A United States Geological Survey (USGS) 7.5 minute map
- A copy of the cultural resources survey report if a survey of the property has been conducted, and
- A copy of any comments of the land managing agency/landowner (i.e., state, federal, county, municipal) on potential impacts of the project on historic properties.

NOTE: If a federal agency is involved, the agency must consult with SHPO pursuant to the National Historic Preservation Act (NHPA); a state agency must consult with SHPO pursuant to the State Historic Preservation Act (SHPA),

OR

- A copy of SHPO comments if the survey report has already been reviewed by SHPO.

Please answer the following questions:

1. Grant Program: Arizona Water Protection Fund Grant
2. Project Title: Winkelman Natural Resource Conservation District Riparian Restoration
3. Applicant Name and Address: Winkelman Natural Resource Conservation District, PO Box 486, Kearny, AZ, 85137
4. Current Land Owner/Manager(s): General Kearny's Pinal County Sheriff's Posse, DuBois Ranch, and Town of Kearny
5. Project Location, including Township, Range, Section: Township 4S, Range 14E, Sections: 28, 33 and 34
6. Total Project Area in Acres (or total miles if trail): 125 acres
7. Does the proposed project have the potential to disturb the surface and/or subsurface of the ground? ☒ YES ☐ NO

8. Please provide a brief description of the proposed project and specifically identify any surface or subsurface impacts that are expected: Planting of native trees and shrubs and seeding of native plants. The ground will be disturbed from the digging and planting of the vegetation and the use of a mechanical seeder. Mechanical grubbing will be done with heavy equipment on 18 acres involving removing tamarisk trees from the roots and pulling them up.
9. Describe the condition of the current ground surface within the entire project boundary area (for example, is the ground in a natural undisturbed condition, or has it been bladed, paved, graded, etc.). Estimate horizontal and vertical extent of existing disturbance. Also, attach photographs of project area to document condition: The majority of the project site (105 acres) has been surveyed for cultural and historic resources to complete a tamarisk removal project with heavy equipment including grubbing and mastication. This tamarisk removal project will be completed by March 2020. The ground is mostly within the Gila River flood plain that has seen major flooding and likely disturbed the entire area.
10. Are there any known prehistoric and/or historic archaeological sites in or near the project area?
☐ YES ☒ NO
11. Has the project area been previously surveyed for cultural resources by a qualified archaeologist?
☒ YES ☐ NO ☐ UNKNOWN

If YES, submit a copy of the survey report. Please attach any comments on the survey report made by the managing agency and/or SHPO


12. Are there any buildings or structures (including mines, bridges, dams, canals, etc.), which are 50-years or older in or adjacent to the project area? ☐ YES ☒ NO

If YES, complete an Arizona Historic Property Inventory Form for each building or structure, attach it to this form and submit it with your application.

13. Is your project area within or near a historic district? ☐ YES ☒ NO

If YES, name of the district:

Please sign on the line below certifying all information provided for this application is accurate to the best of your knowledge.


Applicant Signature

09/04/2019
Date

Kyle Thompson
Applicant Printed Name

FOR SHPO USE ONLY	
SHPO Finding: <input type="checkbox"/> Funding this project will not affect historic properties. <input type="checkbox"/> Survey necessary – further GRANTS/SHPO consultation required (<i>grant funds will not be released until consultation has been completed</i>) <input type="checkbox"/> Cultural resources present – further GRANTS/SHPO consultation required (<i>grant funds will not be released until consultation has been completed</i>)	
SHPO Comments: 	
For State Historic Preservation Office:	Date:

Key Personnel

Kyle Thompson, WNRCD District Coordinator

Kyle earned a B.S. in Applied Biological Sciences with a concentration in Wildlife and Restoration Ecology in 2012 from Arizona State University and a Master of Science in Wildlife Conservation and Management from the University of Arizona. He has held previous jobs with the Arizona Game and Fish Department, United States Fish and Wildlife Service, and USDA APHIS. Most recently he was the Science and Conservation Coordinator for the Altar Valley Conservation Alliance where he managed and coordinated projects involving prescribed fire, native plant restoration, erosion control, and worked to continue and strengthen collaborative conservation within the Altar Valley. Additionally, Kyle works in Sonora, Mexico with the non-profit Primero Conservation on river otter research and carnivore conflict mitigation programs with ranchers. In the last 3 years he has participated in and helped administer half a million dollars in grant funds for several organizations.

Chris Postel, WNRCD Clerk

Responsible to District administrative functions: scheduling meetings, meeting minutes, newsletters, accounting records, district website and grant management and reporting. Chris is currently the Clerk for 3 NRCs and experienced in the administration of their funds and grants. Chris has over 10 years of project management experience in the software industry.

American Conservation Experience

The American Conservation Experience is a national non-profit organization dedicated to partnering with organizations to advance meaningful riparian restoration and environmental stewardship. The American Conservation Experience has treated tamarisk on hundreds of acres in Arizona and are a knowledgeable, experienced, organization that provides on-the-ground crews to complete work efficiently.

Project Site Photographs



Figure 1. Tamarisk stand at the DuBois Ranch



Figure 2. Tamarisk stand at the DuBois Ranch



Figure 3. Larger tamarisk at the Sheriff's posse site, but with access roads into them.



Figure 4. Large tamarisks seen at the Kearny site with the burned cottonwood snags in between.

Community Support



September 4, 2019

Arizona Department of Water Resources
1110 West Washington St. Suite 310
Phoenix, AZ 85007

Re: WNRCD Riparian Restoration Program

Dear Arizona Water Protection Fund Commission,

The Department has determined that the Winkleman Natural Resource Conservation District's (WNRCD) project proposal, Riparian Restoration Program, will provide benefit Arizona's wildlife and fish species. The WNRCD is involved throughout the region in conservation and promotion of sound management of natural resources. The WNRCD is especially concerned with water conservation and the impact tamarisk is having on water in the Gila and San Pedro River Watersheds.

As the local Wildlife Manager for the area, I have reviewed a draft project proposal to determine the value to wildlife and fish species, and the work proposed in this application should improve habitat for several species. Their proposal to create a district-wide management plan and implement tamarisk removal projects would positively impact the local and state-wide water resources. Their proposed on-the-ground restoration of riparian areas would benefit the local communities and a diverse group of stakeholders. The WNRCD is committed to the long-term conservation of natural resources in the area and has the ability to make and carry out long-term goals and objectives.

Please consider this letter as the Department's support in moving forward with the next step in implementing the work outlined in the WNRCD's application.

Sincerely,

A handwritten signature in dark ink, appearing to read "Allison Haywood", with a long, sweeping horizontal line extending to the right.

ALLISON HAYWOOD | WILDLIFE MANAGER III - 37B
ARIZONA GAME AND FISH DEPARTMENT
MOBILE: 520.401.4749
EMAIL: ahaywood@azgfd.gov
azgfd.com | 555 N Greasewood Rd, Tucson, AZ 85745

azgfd.gov | 520.628.5376

TUCSON OFFICE: 555 N. GREASEWOOD ROAD, TUCSON AZ 85745

GOVERNOR: DOUGLAS A. DUCEY COMMISSIONERS: CHAIRMAN, JAMES S. ZIELER, ST. JOHNS | ERIC S. SPARKS, TUCSON | KURT R. DAVIS, PHOENIX
LELAND S. "BILL" BRAKE, ELGIN | JAMES E. GOUGHNOUR, PAYSON DIRECTOR: TY E. GRAY DEPUTY DIRECTOR: TOM P. FINLEY



September 3, 2019

Arizona Dept. of Water Resources
1110 West Washington St. Suite 310
Phoenix, AZ 85007

Dear Arizona Water Protection Fund Commission,

On behalf of the Oracle Community Learning Garden (OCLG), I am writing to express strong support for the Winkelman Natural Resource Conservation District's (WNRCD) *Riparian Restoration Program*. The WNRCD is involved throughout the region in conservation and the promotion of sound management practices of our natural resources. They are especially concerned with water conservation and the impact tamarisk is having on water and native habitats in the Gila and San Pedro River Watersheds.

This project would be a positive addition to the conservation landscape in our region. It will provide a regional, on-the-ground example to landowners of how a riparian restoration program can be implemented and how these plans will benefit our shared water resources. The OCLG is currently in a partnership with the WNRCD as a regional demonstration site to teach water conservation, waste management, and native plant propagation. From our current experience working with them, we know that they have both the commitment and the capacity, as well as the influence with farmers and ranchers in our region, to succeed with this program. The OCLG whole-heartedly supports this effort.

Sincerely,

Linda S Leigh, PhD
Director - Oracle Community Learning Garden
PO Box 1262
Oracle, AZ 85623
520-262-5279



AMERICAN CONSERVATION EXPERIENCE

**2900 N Fort Valley Rd
Flagstaff, AZ 86001, USA**

September 3, 2019

Arizona Dept. of Water Resources
1110 West Washington St. Suite 310
Phoenix, AZ 85007

Dear Arizona Water Protection Fund Commission,

I am writing to express my support for the Winkelman Natural Resource Conservation District's (WNRCD) *Riparian Restoration Program*. The WNRCD is involved throughout the region in conservation and promotion of sound management of natural resources. The WNRCD is especially concerned with water conservation and the impact tamarisk is having on water in the Gila and San Pedro River Watersheds.

The American Conservation Experience (ACE) is a national, nonprofit organization dedicated to partnering with public and private land managers to advance meaningful riparian restoration and environmental stewardship projects. ACE is proud to partner with WNRCD on its latest project — filling the need of resource management and natural habitat restoration in Arizona. In doing so, fostering the next generation of land managers by utilizing hands-on restoration practices.

WNRCD's proposal to create a district-wide management plan and implement tamarisk removal projects would positively impact the local and state-wide water resources. Their proposed on-the-ground restoration of riparian areas would benefit the local communities and a diverse group of stakeholders. The WNRCD is committed to long-term conservation of natural resources in the area and has the ability to make and carry out long-term goals and objectives.

The American Conservation Experience fully supports this project and believes that our activities strongly align with the priorities of the **Arizona Water Protection Fund Commission** Fiscal Year 2020 Funding Cycle. Please feel free to contact us with any questions regarding our role in this project. I can be reached at 928-699-0198 or at itorrence@usaconservation.org.

Thank you,

Ian Torrence
National Restoration Director

Phone: (928) 226-6960 • www.usaconservation.org • Fax: (928) 226-1549

September 3, 2019

Arizona Dept. of Water Resources
1110 West Washington St. Suite 310
Phoenix, AZ 85007

Dear Arizona Water Protection Fund Commission,

We are writing to express our support for the Winkelman Natural Resource Conservation District's (WNRCD) *Riparian Restoration Program* and express our commitment to use a private parcel of our DuBoise Ranch for tamarisk removal. Our property, Pinal County parcel #301250050, is along the Gila River near Kearny, AZ and includes 3 acres of riparian habitat heavily impacted by tamarisk. In 2013, several of our buildings and a house were burned down because of the severe wildfire danger caused by the dense tamarisk. All tamarisk has since regrown and is again a significant fire hazard and a source of heavy water loss.

This proposed on-the-ground restoration of this area would benefit the local communities and a diverse group of stakeholders. The WNRCD is especially concerned with water conservation and the impact tamarisk is having on water in the Gila and San Pedro River Watersheds. Their proposal to create a district-wide management plan and implement tamarisk removal projects would positively impact the local and state-wide water resources. The WNRCD is committed to long-term conservation of natural resources in the area and has the ability to make and carry out long-term goals and objectives.

Sincerely,



Carol and Ralph DuBois,
DuBois Ranch



TOWN OF KEARNY

BOX 639, KEARNY, AZ 85237

PHONE (520) 363-5547

FAX (520) 363-7527

August 27, 2019

Arizona Department of Water Resources
1110 West Washington St. Suite 310
Phoenix, AZ 85007

Dear Arizona Water Protection Fund Commission,

I am writing to express my support for the Winkelman Natural Resource Conservation District's (WNRCD) Riparian Restoration Program. The WNRCD is involved throughout the region in conservation and promotion of sound management of natural resources. The WNRCD is especially concerned with water conservation and the impact tamarisk is having on water in the Gila and San Pedro River Watersheds.

The Town of Kearny will work with the WNRCD to create a long-term maintenance plan for the revegetation at the Kearny site. It is important for the town that this site remain clear of tamarisk and the fire hazard low.

Their proposal to create a district-wide management plan and implement tamarisk removal projects would positively impact the local and state-wide water resources. Their proposed on-the-ground restoration of riparian areas would benefit the local communities and a diverse group of stakeholders. The WNRCD is committed to long-term conservation of natural resources in the area and has the ability to make and carry out long-term goals and objectives.

Sincerely,

Anna Flores
Town Manager

**WINKELMAN NATURAL RESOURCE
CONSERVATION DISTRICT**
P.O. Box 465
Kearny, Arizona 85137



PROPERTY OWNER'S INVASIVE PLANT REDUCTION AGREEMENT

Name: The General Kearny Sheriff's Posse of Pinal County.

Phone number: 480-586-4298

Property address: 1 Airport Road

Total acres owned: 20 Number of structures:

In order to participate in the Winkelman Natural Resource Conservation District's invasive plant reduction grant project, the property owner must agree to the following conditions:

Please initial your agreement to each statement below:

TG I agree to allow Winkelman NRCD and/or its contractors to remove invasive plants (tamarisk) from my property.

TG I agree to maintain the treated property from reincursion of tamarisk.

TG I do not hold the Winkelman Natural Resource Conservation District, Arizona State Forestry or the Arizona Department of Corrections responsible for any property damage incurred during the Invasive Plant Reduction project work.

 Tim Gotto, President. 08/29/2019
Property Owner's Signature Print Name Date

 Kyle Thompson 08/30/2019
Winkelman NRCD Signature Print Name Date

Cultural and Biological Surveys at Kearny Site

09/24/2018
17:39:29

FEDERAL EMERGENCY MANAGEMENT AGENCY

REC-01

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: FMAG-5086-2

Title: Winkelman NRCD Final Rural Fuels Reduction

NEPA DETERMINATION

Non Compliant Flag: No	EA Draft Date:	EA Final Date:
EA Public Notice Date:	EA Fonsi Date:	Level: CATEX
EIS Notice of Intent Date:	EIS ROD Date:	

Comments: HMGP, Arizona Department of Forestry and Fire Management. The proposed action would involve fuels reduction work to remove invasive salt cedar in six municipally-owned parcels totaling approximately 80 acres along the southwestern edge of the Town of Kearny. Treatment will occur within the floodplain, but not adjacent to the existing stream or immediate area where soils are noticeable wet on the surface. Surviving native trees and shrubs that were spared by recent fires will be left in place to provide wildlife habitat and recreational amenities (shade).

This project has been determined to be Categorical Excluded from the need to prepare either an Environmental Impact Statement or Environmental Assessment in accordance with FEMA Instruction 108-1-1 and DHS Instruction 023-01-001-01: Categorical Exclusion(s) N11 has been applied. Particular attention should be given to the project conditions before and during project implementation. Failure to comply with these conditions may jeopardize federal assistance including funding.
- khardoge - 09/24/2018 17:01:55 GMT

CATEX CATEGORIES

Catex Category Code	Description	Selected
*n11	(*n11) Federal Assistance for Wildfire Hazard Mitigation Actions. Federal assistance for wildfire hazard mitigation actions involving the creation of defensible space or hazardous fuel reduction for up to 100 feet from at-risk structures including selective removal of vegetation less than 12 inches in diameter at breast height through thinning, pruning, limbing, sawing, or brush cutting and removal of downed, dead, or dry vegetation material as part of the overall action. Vegetation removal is limited to 100 acres inclusive of vegetation removal due to other reasonably foreseeable private or public connected actions. Actions must follow appropriate best management practices.	Yes

EXTRAORDINARY CIRCUMSTANCES

Extraordinary Circumstance Code	Description	Selected ?
	No Extraordinary Circumstances were selected	

ENVIRONMENTAL LAW / EXECUTIVE ORDER

Environmental Law/ Executive Order	Status	Description	Comments
Clean Air Act (CAA)	Completed	Project is located in a non-attainment area	The project is located in Pinal County that is within a nonattainment area for 8-hour Ozone, Lead, PM 2.5 & 10, and Sulfur Dioxide according to the U.S. Environmental Protection Agency (USEPA): https://www3.epa.gov/airquality/greenbook/analy_o_ca.html updated August 31, 2018. Based on the scope of work, the potential emissions from project activities are clearly below Ld0

NOTE: All times are GMT using a 24-hour clock.

Page 1 of 6

09/24/2018
17:39:30

FEDERAL EMERGENCY MANAGEMENT AGENCY

REC-01

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: FMAG-5086-2

Title: Winkelman NRCD Pinal Rural Fuels Reduction

Environmental Law/ Executive Order	Status	Description	Comments
			minimizing thresholds for the General Conformity Rule. Thus, the project is exempt from a conformity determination. See Condition. - khardege - 09/05/2018 17:44:32 GMT
	Completed	Coordination required with applicable state administering agency - Review concluded	
Coastal Barrier Resources Act (CBRA)	Completed	Project is not on or connected to CBRA Unit or otherwise protected area - Review concluded	
Clean Water Act (CWA)	Completed	Project would not affect any water of the U.S. - Review concluded	The proposed action would involve fuels reduction work to remove invasive salt cedar in six municipally-owned parcels totaling approximately 80 acres along the southwestern edge of the Town of Kearny. Treatment will occur within the floodplain, but not adjacent to the existing stream or immediate area where soils are noticeable wet on the surface. - khardege - 09/24/2018 16:51:31 GMT
Coastal Zone Management Act (CZMA)	Completed	Project is not located in a coastal zone area and does not affect a coastal zone area - Review concluded	
Executive Order 11988 - Floodplains	Completed	Located in floodplain or effects on floodplain/flood levels	The SOW associated with this PW occurs in Zone AE (FIRM 04021C0958E, effective 12/4/2007). The project is subject to the Eight-Step Decision-Making Process per 44 CFR 9.5(d)(3). The proposed action is not likely to result in any potential direct impacts that will adversely affect the natural values and function of floodplains, nor is it likely to increase the risk of flood loss. The Initial and Final Floodplain Public Notice was published on 9/7/2018. Per 44 CFR Part 9.5(d)(4), the 8-step Process was completed and the Floodplain Management Checklist is attached. See Condition. - khardege - 09/24/2018 17:17:26 GMT
	Completed	Possible adverse effects associated with investment in floodplain, occupancy or modification of floodplain environment	
	Completed	8 Step Process Complete - documentation attached - Review concluded	
Executive Order 11990 - Wetlands	Completed	Located in wetlands or effects on wetlands	Proposed project will not take place in the Wetland and thus no effect on the wetland. - khardege - 09/24/2018 17:19:34 GMT

NOTE: All times are GMT using a 24-hour clock.

09/24/2018

FEDERAL EMERGENCY MANAGEMENT AGENCY

REC-01

17:39:30

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: FMAG-5086-2

Title: Winkelman NRCD Pinal Rural Fuels Reduction

Environmental Law/ Executive Order	Status	Description	Comments
	Completed	Possible adverse effect associated with constructing in or near wetland	
	Completed	Review completed as part of floodplain review - Review concluded	
Executive Order 12898 - Environmental Justice for Low Income and Minority Populations	Completed	Low income or minority population in or near project area	The Undertakings associated with this project will result in a beneficial impact to all populations. - khardege - 09/05/2018 18:00:49 GMT
	Completed	No disproportionately high and adverse impact on low income or minority population - Review concluded	
Executive Order 13112 - Invasive Species	Completed	Review concluded	See project conditions for EO 13112 - khardege - 09/05/2018 18:01:47 GMT
Endangered Species Act (ESA)	Completed	Listed species and/or designated critical habitat present in areas affected directly or indirectly by the federal action	FEMA initiated formal consultation with the USFWS on November 27, 2017 with a Biological Assessment and with a subsequent confirmation of a final effects determination on June 20, 2018. The USFWS responded with a Biological Opinion on August 23, 2018: concurrence that the proposed action may affect, and is likely to adversely affect, the endangered southwestern willow flycatcher and its designated critical habitat and the threatened yellow-billed cuckoo and its proposed critical habitat. Because critical habitat is proposed for the cuckoo - khardege - 09/05/2018 18:40:32 GMT FEMA received a conference opinion for the yellow-billed cuckoo that maybe converted to biological opinion if western yellow-billed cuckoo critical habitat is designated. USFWS also concurred that the proposed action is not likely to adversely affect the endangered ocelot and the northern Mexican garter snake. The lesser long-nosed bat has been removed from the list of endangered and threatened species under the Act on April 18, 2018. Please see project conditions. - khardege - 09/05/2018 18:46:38 GMT
	Completed	Likely to adversely affect species or designated critical habitat	
	Completed	Formal consultation concluded. (Biological Assessment and Biological Opinion attached) - Review concluded	
Farmland Protection Policy Act (FPPA)	Completed	Project does not affect designated prime or unique farmland - Review concluded	

NOTE: All times are GMT using a 24-hour clock.

Page 3 of 6

09/24/2018
17:39:30

FEDERAL EMERGENCY MANAGEMENT AGENCY

REC-01

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: FMAG-5086-2

Title: Winkelman NRCD Pinal Rural Fuels Reduction

Environmental Law/ Executive Order	Status	Description	Comments
Fish and Wildlife Coordination Act (FWCA)	Not Applicable	Project does not affect, control, or modify a waterway/body of water - Review concluded	
Migratory Bird Treaty Act (MBTA)	Completed	Project located within a flyway zone	See project conditions in ESA. - khardege - 09/05/2018 20:36:56 GMT
	Completed	Project has potential to take migratory birds	
	Completed	Contact made with USFWS - Review concluded	
Magnuson-Stevens Fishery Conservation and Management Act (MSA)	Completed	Project not located in or near Essential Fish Habitat - Review concluded	
National Historic Preservation Act (NHPA)	Completed	Applicable executed Programmatic Agreement (enter date in comments).	This Undertaking was reviewed under Stipulation II.C.4 of the 2015 Section 106 Programmatic Agreement among FEMA, the Arizona State Historic Preservation Officer (SHPO), the Arizona Department of Emergency Management (AZDEM), and the Arizona Department of Homeland Security executed on September 4, 2015 (Agreement). FEMA's qualified archaeological contractor conducted a survey of the Area of Potential Effects (APE) for the Undertaking and identified no properties eligible for the National Register of Historic Places (NRHP). FEMA also sent letters with project descriptions and maps of the APE to nine Indian tribes, and two responded indicating no concerns with the Undertaking. By letter to the SHPO dated November 27, 2017 with supporting documentation, FEMA made a No Historic Properties Affected determination. The SHPO concurred with FEMA's determination of effect by concurrence signature stamp of James Cogswell, SHPO, dated November 29, 2017. - mnowick - 11/30/2017 18:26:57 GMT
	Completed	No properties in the project area are 50 years or older or listed on the National Register - Review concluded	
	Completed	Project affects undisturbed ground	
	Completed	Project area has potential for presence of archeological resources	

NOTE: All times are GMT using a 24-hour clock.

FEDERAL EMERGENCY MANAGEMENT AGENCY

REC-01

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: FMAG-5086-2

Title: Winkelman NRCD Pinal Rural Fuels Reduction

Environmental Law/ Executive Order	Status	Description	Comments
	Completed	Determination of no historic properties affected (FEMA finding/SHPO/THPO concurrence attached) - Review concluded	
Wild and Scenic Rivers Act (WSR)	Completed	Project is not along and does not affect Wild and Scenic River - Review concluded	

CONDITIONS

Special Conditions required on Implementation of Projects:

Sub-Grantee must coordinate with the local floodplain administrator and obtain required permits prior to initiating work. All coordination pertaining to these activities and Sub-Grantee compliance with any conditions should be documented and copies forwarded to the State and FEMA for inclusion in the permanent project files.
The Sub-Grantee shall ensure that best management practices are implemented to prevent erosion and sedimentation to surrounding, nearby or adjacent wetlands. This includes equipment storage and staging of construction to prevent erosion and sedimentation to ensure that wetlands are not adversely impacted per the Clean Water Act and Executive Order 11990.

Source of condition: Executive Order 11988 - Floodplains Monitoring Required: No

All erosion control materials and equipment, including seed, soil, and vegetation, must be free of invasive species.

Source of condition: Executive Order 13112 - Invasive Species Monitoring Required: No

The Subgrantee is responsible for complying with all applicable subparts of the Clean Air Act. Failure to comply with this condition may jeopardize federal assistance, including funding. Any change to the approved scope of work will require re-evaluation for compliance with the Clean Air Act.

Source of condition: Clean Air Act (CAA) Monitoring Required: No

All ground-disturbing and vegetation removal activities will be conducted between October 1 and March 31 to avoid the breeding season for the southwestern willow flycatcher and the yellow-billed cuckoo, as well as other migratory birds.

Source of condition: Endangered Species Act (ESA) Monitoring Required: Yes

Native trees and shrubs will not be removed as part of the proposed action and care will be taken to avoid harming any native trees and shrubs.

Source of condition: Endangered Species Act (ESA) Monitoring Required: Yes

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1. We recommend that your agency participate in the implementation of the recovery plan for the southwestern willow flycatcher and in the development of a recovery plan for the western yellow-billed cuckoo.

Source of condition: Endangered Species Act (ESA) Monitoring Required: Yes

2. We recommend that you coordinate with other landowners in the action area in fire and fuel management in order to benefit flycatchers, cuckoos, and other resources in the area.

3. We recommend that you conduct protocol surveys for flycatchers and cuckoos in and adjacent to the action area in order to improve the baseline information we have for these species in this area.

4. We recommend that you quantify habitat for flycatchers and cuckoos in the action area. For southwestern willow flycatchers this could include working with USGS to refine and implement the habitat model developed by Hatten (2016).

FEDERAL EMERGENCY MANAGEMENT AGENCY
RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: FMAG-5086-2

Title: Winkelman NRCO Pinal Rural Fuels Reduction

2. We recommend that you coordinate with other landowners in the action area in fire and fuel management in order to benefit flycatchers, cuckoos, and other resources in the area.
3. We recommend that you conduct protocol surveys for flycatchers and cuckoos in and adjacent to the action area in order to improve the baseline information we have for these species in this area.
4. We recommend that you quantify habitat for flycatchers and cuckoos in the action area. For southwestern willow flycatchers this could include working with USGS to refine and implement the habitat model developed by Hatten (2016).

Source of condition: Endangered Species Act (ESA)

Monitoring Required: Yes

5. We recommend that you discourage off-road vehicle incursion in the river bottom and adjacent habitat that damages habitat and increases fire risk by placing physical barriers such as boulders, logs, and fencing. Without physical barriers, opening up the habitat may attract off-road vehicle use and increases the associated fire risk.
6. We recommend that you leave a buffer of tamarisk around native trees to reduce the risk of native tree mortality from sudden exposure to heat and sun and to reduce the risk of increased predation on flycatchers, cuckoos and their nests.
- In order for the FWS to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the FWS requests notification of the implementation of any conservation recommendations.

Source of condition: Endangered Species Act (ESA)

Monitoring Required: Yes

As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation. See BO for specifics on amount or extent of take.

Source of condition: Endangered Species Act (ESA)

Monitoring Required: Yes

Standard Conditions:

Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.