Arizona Water Protection Fund Application Cover Page FY2019

| Title of Project: Kirkland Cro | eek Flood & Erosion | Mitigation Project | | | | |
|--|--|--|---------------------------------------|------------------|--|--|
| Type of Project: | Stream Type: | Type: Your level of commitment to maintenance of projection | | | | |
| Capital or Other | Perennial | benefits and capital ir | | | | |
| Water Conservation | Intermittent | < 5 years 5-10 |) years 11-15 years 🖂 | 16-20 years | | |
| Research | Ephemeral | - J | | j | | |
| Applicant Information: | 1 | I | Inside an AMA: Yes | No | | |
| Name/Organization: Triangl | e Natural Resource C | Conservation District | | | | |
| Address 1: 8841 E | . Florentine Rd | | If ves, which AMA: | | | |
| Address 2: Suite C | | | <i></i> , | Phoenix | | |
| City: Presco | tt Valley | | | Tucson | | |
| State: Arizon | a | | | Prescott | | |
| ZIP Code: 86314 | | | | Pinal | | |
| Phone: 928-92 | 5-3659 | | | Santa Cruz | | |
| Fax: | | | Type of Applications | Santa Cruz | | |
| Tax ID No.: | | | Type of Application: | | | |
| | | | X New | | | |
| | | | Continuation | ~ | | |
| Contact Person: | | | Any Previous AWPF (| Frants: | | |
| Name: Daric Knight | | | Yes 🖄 No | | | |
| Title: Project Manage | er | | | | | |
| Phone: 928-521-9897 | | | If yes, please provide (| Grant #(s): | | |
| Fax: | otmail com | | n/a | | | |
| | | | | | | |
| Arizona water Protection | runa | Motobing Funds | Obtained and Secured | | | |
| Grant Amount Requested: | Grant Amount Requested: Matching Funds Obtained and Secured: | | | | | |
| ¢1.41.750.00 | 1 | Applicant/Agency/Organiz | ation: <u>Amo</u> | <u>unt (\$):</u> | | |
| \$141,750.00 | \$141,750.00 I. App | | \$27,000.00 | | | |
| | 2. | Manager | \$6,400 | | | |
| If the application is funded, will the Grantee 3.BNI | | DINFS Kallioau | 913,00 Total: \$48 | U 400 | | |
| intend to request an advance: | | | 10tal: \$40, | 400 | | |
| Yes 📉 No | | | | | | |
| Has your legal counsel or contracting authority reviewed and accepted the Grant Award Contract General Provisions? | | | | | | |
| Yes No N/A | | | | | | |
| Signature of the undersigned | cortifics understand | ing and compliance with | all tarms conditions and | | | |
| specifications in the attached | annlication Addition | nally signature certifies | that all information provid | led 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. | | | | | | |
| | ··· F ······· | | · · · · · · · · · · · · · · · · · · · | | | |
| Daric Knight | | Project Manager 92 | Project Manager 928-521-9897 | | | |
| Typed Name of Applicant or . Poprosontative | Applicant's Authori | zed Title and Telephor | e Number | | | |
| Representative | . / | | | | | |
| Mai K. | XI | 9/7/ | 18 | | | |
| Signature |) (| Date Signed | / ~ | | | |
| ~-Bunner (| | 2 att Digittu | | | | |
| | | | | | | |

Executive Summary

Within the boundaries of the Triangle Natural Resource Conservation District ("Triangle NRCD" or "the District") lies Kirkland Creek, which conjoins with the Lower Colorado River watershed. It is the District's intent to implement practices to mitigate flooding and erosion within a certain boundary of the creek. The Kirkland Creek Flood and Erosion Mitigation Project (the Project) area encompasses the portion of the Kirkland Creek watershed just above the community of Ruger Ranch and adjacent to Kirkland, Arizona.

Historically, flooding within this area was confined to the main channel of the creek. However, this area now sees significant overbank flooding during large storm events. Due to the reconstruction of new bridge piling in the Kirkland Creek channel for the BNSF Railroad, bank erosion and over-land flooding issues have been exacerbated. As floodwaters move down the channel, water is directed toward the outer channel bank, causing direct force bank erosion and at times forcing flood waters over the bank into the Ruger Ranch community, resulting in over-land flooding and property damage. The redirection of flood waters has also led to significant changes within the historic stream channel, disrupting the normal transport of the sediment, which has led to unnatural sediment build-up and channel erosion.

By removing accumulated sediments and vegetation within the main channel, increasing bank height, and adding erosion revetment, we can mitigate active erosion and natural resource damage, as well as protect the adjacent and down-stream properties. These actions will also help to direct floodwaters back within the main channel, as they did historically.

Within the community of Kirkland, Arizona, is the subdivision of Ruger Ranch, which is directly impacted by this issue. Many of the landowners have already invested time and money in an attempt to mitigate these issues. As can be imagined, the goal of mitigating channel flooding and erosion is costly and can requires intensive permitting and construction, thereby making any actual headway towards this goal by an individual or small group of landowners is next to impossible. Locals affected by this issue have since reached out to the Triangle NRCD; with many of the District's volunteers working or living within the affected area.

The District and its unwavering group of volunteers see the extreme need for action. The Triangle NRCD has since begun working with an engineering firm out of Phoenix to assess the issue and devise a plan to implement mitigation practices to curtail the continued erosion and sediment buildup of this portion of the watershed.

The Triangle NRCD is, therefore, applying for funds from the Arizona Water Protection Fund to return the channel flow to a historical normal – thereby reducing land erosion and downstream sediment buildup.

Project Overview

Background

The subject reach of Kirkland Creek that comprises the Project area is ephemeral and subject to infrequent but intense flooding. Based on historical accounts, most of this flooding was confined to the main channel, which was well incised. More recently, overbank flooding has become more prevalent along the north side of the watercourse. This overbank flooding originates a short distance downstream of the existing BNSF railroad bridge crossing. Based on observed field conditions and review of historical aerial photography, a geomorphological trend was recognized whereby sediment and vegetation have appeared to accumulate a short distance downstream of the bridge.

As a result, the conveyance capacity of Kirkland Creek has diminished and floodwaters have overwhelmed the main channel during flood events. During these events, the overtopping floodwaters have caused extensive damage to private properties along the portion of Lower Kirkland Valley northeast of the channel. Extensive sediment deposition has also occurred within this area. As floodwaters reenter the channel at the northwest end of the valley, the diminished sediment load has resulted in erosion and scouring along the main channel. The aggradation and flooding at the upper end of the Lower Kirkland Valley and erosion occurring on the lower end appear to be indicative of an unbalanced sediment conveyance capacity in the watercourse.

Goals

The Project goals within the Kirkland Creek project area, include the:

- Reestablishment of the historical cross-section of Kirkland Creek within the Project area.
- Restoration of the balance of sediment conveyance within the watercourse.
- Reduction of aggradation and excessive vegetation growth in the upper end of the subject reach of Kirkland Creek.
- Reduction of flooding and flood damage in the overbank areas.
- Reduction of erosion and scour damage at the lower end of the subject reach.
- Limitation of disturbance to environmentally sensitive areas within the Project vicinity.

Objectives

The District's objective is to mediate erosion and flooding problems, beginning just below the BSNF Railroad bridge crossing adjacent to productive agricultural lands and the small community of Ruger Ranch. This will be accomplished by returning the channel to its original path by redirecting flow velocity away from scouring banks. Heavy equipment will be used remove the built up vegetation and sediment in the original channel. Bank armoring, reventments, rock vanes, and other specially engineered practices will be implemented in order to direct water flow to the more natural state in the channel. This work will return Kirkland Creek to a more historical function, where by flood water is efficiently carried downstream and over its original flood plain, sediment is more naturally conveyed through the stream course, and erosion and scour damage is minimized.

Statement of Problems/Causes

Historically, Kirkland Creek has been a narrow, well defined channel running from Yarnell through the Kirkland Valley, east to west, entering the Santa Maria River drainage and eventually pooling in Alamo Lake. In the past, the channel continually had surface flow and was lined with riparian vegetation. As is normal in the southwest, there has historically been periodic flooding through the valley and thus a wide, fertile flood plain was located above the channel banks.

While the channel efficiently passed storm waters and sediment through the valley, in more recent years, Kirkland Creek has experienced significant aggradation and degradation of sediments during storm events, significantly altering the proper

functioning condition of the channel. Previous alterations to the channel of Kirkland Creek just below the confluence with Skull Valley wash has resulted in more extreme over bank flooding and bank erosion. This has caused the channel to become shallower and wider, lessening the ability of the stream channel to effectively carry flood waters, as well as causing scouring issues further down the watershed allowing a greater amount of sediment to accumulate in the Santa Maria River and eventually reach Alamo Lake.

Furthermore, due to the reconstruction of new bridge piling in the Kirkland Creek channel by the BNFS Railroad, bank erosion and over-land flooding issues have been exacerbated. As floodwaters move down the channel, water is directed toward the outer channel bank, causing direct force bank erosion and at times forcing flood waters over the bank into the Ruger Ranch community, resulting in the aforementioned over-land flooding as well as property damage. Redirection of flood waters has also led to significant changes within the historic stream channel, disrupting the normal transport of the sediment, which has led to unnatural sediment build-up and channel erosion.

Statement of Solutions

The District seeks to implement corrective actions to impact the Kirkland Creek and surrounding watershed by reestablishing the channel cross-section at the upstream portion of the subject reach. Reestablishment efforts include the removal of accumulated sediments and vegetation within the main channel. The northern bank of the channel will also be bolstered by increasing its height and adding erosion revetment. It is anticipated that these corrective actions will allow floodwaters to remain within the main channel, as they did historically, thereby reducing overbank flooding and discontinuity in the sediment carrying capacity of the watercourse.

The Triangle NRCD is currently in the research and investigative stage of this Project. The District is moving aggressively to seek funding in order to address the watershed issues of this project, including applying to private and government driven grants.

Statement of Project Years of Benefit to the resource and general public

The project is estimated to take two years. These practices will be typical of USDA NRCS practices life expectancy of 30-50 years.

Project Location & Environmental Contaminant Information FY2019

| 1. County: <u>12</u> | 2. Section(s): <u>2</u> | 3. Township: <u>12 N</u> | 4. Range: <u>5 W</u> |
|--|--|--|--|
| | I | | |
| 5. Watershed: Lower Colorado Riv | rer | | |
| 6. 8 or 10 Digit Hydrologic Unit C | ode (HUC): _150302 | 03 | |
| 7. Name of USGS Topographic M | ap where project area is | located: Kirkland USGS | Горо |
| 8. State Legislative District: 1 | | | |
| (Information available at: <u>http://a</u> | zredistricting.org/distri | ctlocator/ | |
| 9. Land ownership of project area: | Private | | |
| 10. Current land use of project area: | Agriculture/Grazing | | |
| 11. Size of project area (in acres): <u>+</u> | - 2 acres DIRECT | | |
| 12. Stream Name: Kirkland Creek | | | |
| 13. Length of stream through project | t area: <u>TBD</u> | | |
| 14. Miles of stream benefited: TBD | miles | | |
| 15. Acres of riparian habitat: TBD a | cres will be: | 1 | |
| | X |] Enhanced Maintained | |
| | | Restored | |
| 16. General description and/or delin | eation for the area of in | pact of the project within t | he watershed. |
| from railroad bridge, approximately | 1/4 mile downstream v | vithin the Kirkland Creek fl | ood channel. |
| 17. Provide directions to the project Kirkland AZ, take Kirkland-Hillside to the railroad bridge crossing over | site from the nearest ci road west. Turn left or Kirkland Creek. Project | ty or town. List any specia <u>a Single Six road. Turn left</u> site is immediately down s | l access requirements: <u>From</u> on Founders Trail and follow tream of bridge. |
| Environmental Contaminant L | ocation Information | l | |
| Does your project site contain k contaminant(s) and enclose data | nown environmental co about the location and | ntaminants? YES No | D If yes, please identify the |
| 2. Are there known environmental contaminant(s) and enclose data | contaminants in the pro about the location and l | ect vicinity? YES N evels of contaminants: | O If yes, please identify the |
| | " Durate atta n Erro dana a | as to identify whether or n | at any ironmontal contaminants |

Scope of Work

Task #: 1 Engineering/Design

- Task Description: Contract engineering firm and initiate contract for services
- Task Purpose/Objective: Obtain professional engineering services; conduct site survey, project design, consultation for permitting needs; construction plans
- Responsible personnel: Project manager (Daric Knight), Triangle NRCD
- Deliverable Description: Signed copy of engineering services contract; finalized, stamped design/construction plans
- Deliverable Due Date: August 30, 2019
- Task Cost: \$22,000.00

Task #: 2 Permitting Requirements

- Task Description: Obtain all applicable permits needed for project implementation
- **Task Purpose/Objective**: Obtain all applicable permits needed for project implementation, including: Construction and storm water plan permits from ADEQ, as needed; Form 404 permit or exemption from the Army Corp of Engineers (ACOE); Cultural clearances/consultation from SHPO
- Responsible personnel: Project Manager (Daric Knight)
- **Deliverable Description**: Copy of all required and approved permits, including: ADEQ construction permits and storm water plan, if applicable; ACOE 404 permit or exemption; SHPO consultation and/or approval/exemption report
- Deliverable Due Date: March 30, 2020
- Task Cost: \$17,500.00

Task #: 3 Construction

- Task Description: Investigate, requests for proposal bids, and hire a Contractor for project construction
- **Task Purpose/Objective**: Engage and oversee a qualified contractor to implement engineering designs
- Responsible personnel: Project Manager (Daric Knight), Triangle NRCD
- Deliverable Description: Signed contract with Contractor, Construction Oversight Report
- Deliverable Due Date: January 30, 2021
- Task Cost: \$75,000.00

Task #: 4 Photo Monitoring Points and Construction Photos

- Task Description: Identify various photo points of project area
- **Task Purpose/Objective**: Photo monitoring points will be identified to establish trend over-time and revegetation of bank practices; points will be GPS located so long-term monitoring may be conducted
- Responsible personnel: Project Manager (Daric Knight)
- **Deliverable Description**: Book log of specific photo point monitoring locations, various photos of construction work in progress, including beginning, during, and completion
- Deliverable Due Date: January 30, 2021
- Task Cost: \$15,000.00

Task #: 5 Final Report

- **Task Description**: Written report submitted including the final budget for the project, pictures and final engineering report, etc.
- **Task Purpose/Objective**: Final presentation of the completed project as required in oral/written format in order to successfully close out project.
- **Responsible personnel**: Project Manager (Daric Knight)
- **Deliverable Description**: Bound copy of all relevant permits, cost sheets, design plans, photo monitoring points, and power point presentations
- Deliverable Due Date: March 30, 2021
- Task Cost: \$5,500.00

Project Schematic



Detailed Budget Breakdown

| Kirkland Creek Erosion/Flood Mitigation Project | | | | | |
|--|-------------------------|--------------|--------|-------------|-----------------------|
| PROJECT TASKS | Type | No | F | Rate of | Total Grant |
| | | | Com | pensation | Budget |
| Administration - Triangle NRCD | Administration | 5% of Total | Budget | | \$6,750.00 |
| | | | | | \$0.00 |
| | | | | | \$0.00 |
| | | | | | \$0.00 \$0.00 |
| Subtotal | | | | | \$6.750.00 |
| Task 1 - Engineering & Design | | | | | <i><i><i></i></i></i> |
| Research and Development | Outside Services | 9 | \$ | 75.00 | \$3,000,00 |
| Site survey | Outside Services | 40 hrs | \$ | 125.00 | \$5,000,00 |
| Stakeholder meetings | Outside Services | 14 hrs | \$ | 75.00 | \$1.000.00 |
| Conceptual Design | Outside Services | 40 hrs | \$ | 125.00 | \$5.000.00 |
| Construction Plans&Petails | Outside Services | 65 hrs | \$ | 125.00 | \$8,000.00 |
| Subtotal | | | | | \$22,000.00 |
| Task 2 Permitting Requirements | | | | | |
| Permitting (SHPO, ACOE, ADEQ) | Outside Services | 120 hrs | \$ | 125.00 | \$15,000.00 |
| Easements and Agreements | Outside Services | 20 hrs | \$ | 125.00 | \$2,500.00 |
| Subtotal | | | | | \$17,500.00 |
| Task 3 - Construction Construction of practices | Outside Convisoo | 05 hrs | Cont | rootor Toom | ¢ 47 000 00 |
| Channel excavation | Outside Services | 95 nrs | Cont | ractor ream | \$47,000.00 |
| Channel bank protection | Outside Services | 95 hrs | Cont | ractor Team | \$15,000.00 |
| Engineering & Construction Oversight | Outside Services | 175 hrs | \$ | 75.00 | \$13,000.00 |
| Subtotal | | | | | \$75,000.00 |
| Task 4 - Photo Monitoring Points and | Construction Phot | | | | |
| Photo Monitoring Points | | | | | |
| Before | Outside Services | 6 Days Field | \$ | 800.00 | \$5,000.00 |
| During | Outside Services | 6 Days Field | \$ | 800.00 | \$5,000.00 |
| After | Outside Services | 6 Days Field | \$ | 800.00 | \$5,000.00 |
| Subtotal | | | | | \$15,000.00 |
| Task 5 - Final Report | | | | | |
| Final Report | Outside Services | 33 hrs | \$ | 75.00 | \$2,500.00 |
| Engineering Final Report | Outside Services | 24 hrs | \$ | 125.00 | \$3,000.00 |
| Other cost | | | | | \$0.00 |
| Subtotal | | | | | \$5,500.00 |
| | | | | | |
| Project Grant Totals | | | | | \$141,750.00 |

Detailed Match Breakdown

| PROJECT TASKS | Туре | No, | Rate Compens | of sation | Match | Match Source |
|---|-------------------------|------------|-----------------|--------------|-------------|-----------------|
| Administration - Triangle NRCD | Administration | 175 hrs | \$40/ hr | | \$7,000.00 | Triangle NRCD |
| | | | | | \$0.00 | |
| | | | | | \$0.00 | |
| | | | | | \$0.00 | |
| | | | | | \$0.00 | |
| Subtotal | | | | _ | \$7,000.00 | |
| ask 1 - Engineering & Design | | | | | | |
| Stakeholder meetings | Outside Services | Board of S | Supervisors & | k | \$5,000.00 | Triangle NRCD |
| Construction Plans&Petails | Outside Services | Cash Co | ontribution | | \$5,000.00 | BNFS Railroad |
| Subtotal | | | | | \$10,000.00 | |
| ask 3 - Construction Construction of practices | | | | | | |
| Channel excavation | Outside Services | Cash Co | ontribution | | \$5,000.00 | BNFS Railroad |
| Channel bank protection | Outside Services | Cash Co | ontribution | | \$5,000.00 | BNFS Railroad |
| Engineering & Construction Oversig | Outside Services | Cash Co | ontribution | | \$5,900.00 | Project Manage |
| Subtotal | | | | | \$15,900.00 | |
| | | | | | | |
| ask 4 - Photo Monitoring Points a | nd Construction Ph | otos | | | | |
| Photo Monitoring Points | | | | | | |
| Before | Outside Services | Equipment | , Volunteers, F | acilities | \$5,000.00 | Triangle NRCD |
| During | Outside Services | Equipment | , Volunteers, F | acilities | \$5,000.00 | Triangle NRCD |
| After | Outside Services | Equipment | , Volunteers, F | acilities | \$5,000.00 | Triangle NRCD |
| Subtotal | | | | | \$15,000.00 | |
| Task 5 - Final Report | | | | | | |
| Final Report | Outside Services | 7 hrs | \$ | 75.00 | \$500.00 | Project Manage |
| Other cost | | | | | | |
| Subtotal | | | | | \$500.00 | |
| | | | | _ | | |
| roject Grant Match Totals | | | | | \$48,400.00 | |

Project Location Maps Arizona Watershed Map



Title of Project: The Kirkland Creek Flood and Erosion Mitigation Project

Location (include UTM's & Township/Range/Section): Lower Colorado River WS (34.409255, -112.742978) 12N 5W S2

(Location must include at least one Section delineation for large scale projects)

7.5 Minute Scale Map of Project Area



Kirkland Creek Flood & Erosion Mitigation Project Area Outlined in BLACK Township 12N Range 5W Section 2

Project Ownership Map



Kirkland Creek Flood & Erosion Mitigation Project Area on Private Land Outlined in Black

Project Location Map



Supplemental Information

SHPO Review Form

STATE HISTORIC PRESERVATION OFFICE 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),
 - <u>OR</u>
 - 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
- 2. Project Title: Kirkland Creek Flood & Erosion Mitigation Project
- 3. Applicant Name and Address: Triangle Natural Resouce Conservation District 8841 E. Florentine Rd
- 4. Current Land Owner/Manager(s): _____
- 5. Project Location, including Township, Range, Section: <u>T12N R5W S2</u>
- 6. Total Project Area in Acres (or total miles if trail): <u>3 acres</u>
- Does the proposed project have the potential to disturb the surface and/or subsurface of the ground? ∑ Y S NO
- Please provide a brief description of the proposed project and specifically identify any surface or subsurface impacts that are expected: <u>The project seeks to re-establish the channel cross section of</u> <u>Kirkland Creek. The reestablishment efforts will include removing accumulated sediments and vegetation</u> <u>within the main channel as well as shaping and placing erosion reventments along the banks of the</u> <u>channel.</u>

- 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: <u>The project will take place within the channel and flood plain of Kirkland Creek.</u> <u>The creek is intermittent in this reach with a road crossing and railroad bridge in the upper most reach of the project. Disturbance within the channel and the bank work is estimated to be less than 36".</u>
- 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 □ UNKOWN

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 XES 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? \Box YES \boxtimes 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 | /Date | Applicant Printed Name |
| | F | FOR SHPO USE ONLY |
| SHPO Finding: Funding this project with Survey necessary – furth consultation has been of Cultural resources preserved until consultation has been of | l not affect historic her GRANTS/SHF completed) ent – further GRAN peen completed) | c properties. PO consultation required (grant funds will not be released until NTS/SHPO consultation required (grant funds will not be released |
| SHPO Comments: | | |
| For State Historic Preserva | tion Office: | Date: |

Key Personnel

Triangle NRCD Board of Supervisors (Shelley Blackmore, Chairwoman)

The Triangle NRCD Board is comprised of locally elected or state government appointed individuals who own land and have a vested interest in the natural resources within the NRCD which they reside. These individuals are all volunteer and receive no salary or compensation for their responsibilities and positions.

Daric Knight (Project Manager)

Daric Knight, Knight Environmental, has been hired by the Triangle NRCD to help facilitate and manage this project. He has successfully managed numerous natural resource projects over the last 20 years and has just recently completed several ADEQ projects on watersheds on behalf of his own NRCD in Springerville, Arizona. He has experience in managing and completing over \$1 million dollars of conservation work over his career.

Professional Engineering Firm (TBD)

A professionally licensed engineering firm will be used to provide project design, provide construction planning and details, and assist in obtaining needed permitting, clearances, legal easements, and notices. While a specific firm has not been obtained yet, several consultations with duly qualified firms have occurred, and the District will initiate a contract for services with one of these firms once funds are awarded.

Construction Contractor (TBD)

A registered, qualified construction contractor will be used in completing the construction on this project. This contractor shall construct the approved, designed project practices under supervision of the Project Manager and the approval/inspection of the engineering firm. The contractor may use local operators and equipment to complete the project, but all work will be done under the direction of the registered contractor.

Project Site Photos











Existing Plans, Reports, Information Relevant to the Project (summary paragraph for each plan/report w/relevant portion or full report attached as an appendix)

N/A

Evidence of control and tenure of land including legal access A LETTER OF SUPPORT FROM THE LAND OWNER WHERE PROJECT WILL TAKE PLACE WILL BE INCLUDED

To Whom It May Concern,

As property owners adjoining the Kirkland Creek, (Parcel #'s 202-13-176F and 202-13-192) we support the project to restore/repair and prevent future damage caused by the flooding that has occurred in the past. We understand that the other property owners and residents along the creek have asked that the Triangle Natural Resource Conservation District take the lead in managing the work of this project and we agree also. The Triangle NRCD has our permission to conduct this work on our parcels to correct this damage.

Sincerely,

Jorge Sepulveda Sachada

Gustavo Sepulveda Beertave Populate

Phoenix, AZ 85023-1405



July 22, 2018

To whom it May Concern:

I own several parcels of land in Kirkland that have been adversely affected by run off and flooding from Kirkland Creek, particularly the parcels that border the creek.

Erosion, out of control debris deposits on the banks of the creek, and flooding are my concerns.

I support the participation of "Triangle Natural Resource Conservation District" to lead the effort to attempt to "RESTORE" proper drainage in the creek.

I'm available for further comment if necessary.

Meyo m Pem Meyer

April 15, 2018

TO: Triangle NRCD 8841 E Florentine Rd, Suite C Prescott Valley, AZ 86314-8731

Re: Kirkland Creek Project

To Whom It May Concern:

As a property owner adjoining the Kirkland Creek near Kirkland, AZ I am very much in favor of any remedial work that can be done to correct/restore/prevent future damage caused by the flooding that has occurred in the past.

As a long- time resident of the Kirkland Valley, my family and neighbors have experienced property damage as well as a near drowning incident for several of our members because of the floods that have occurred.

I am in favor of the Triangle NRCD taking the lead to finding a solution to this situation and am interested in participating in this project.

Sincerg Steve Hampton

Kirkland, AZ 86332



A narrative as to how the applicant will obtain permission for project work and/or access (agreements must be finalized prior to contract finalization)

Work related to this Project will take place on private land. Access to the Project site is via public road systems. Work will take place within channel and jurisdiction of Army Core of Engineers; permitting will be needed from Army Core of Engineers.

Letters from those pledging matching funds



BNSF Railway Foundation P.O. Box 961057 Fort Worth, TX 76161-0057 2500 Lou Menk Dr. AOB-2 Fort Worth, TX 76131-2830 817-867-6250 817-352-7924 fax Zak.andersen@bnsf.com

- The Foundation reserves the right to discontinue, modify, or withhold any payments to be made under this grant award or to require a total or partial refund of any grant funds if the Foundation, in its sole discretion, determines that such action is necessary:
 - Because Triangle Natural Resource Conservation District has not fully complied with the terms and conditions of this grant,
 - To protect the purpose and objectives of the grant or any other charitable activities of the Foundation, or
 - To comply with any law or regulation applicable to Triangle Natural Resource Conservation District, the Foundation, or this grant.
- Triangle Natural Resource Conservation District's deposit, negotiation, or endorsement of the enclosed check constitutes its agreement to the terms and conditions set forth above.

If you have any questions, please contact Deanna Dugas, Manager, BNSF Railway Foundation, at (817) 867-6458 or at <u>deanna.dugas@bnsf.com</u>. We extend our best wishes for your continued success and look forward to hearing of your accomplishments during the coming years. It is a pleasure to be among your current supporters. If you would like to publicize this grant, please feel free to do so. Also, you may apply again for future grant consideration one year from the date on the enclosed grant check.

Sincerely

Evidence of Physical and Legal Availability of Water

N/A