

ARIZONA WATER PROTECTION FUND COMMISSION

Business Meeting – November 16, 2021

Virtual Meeting via Cisco WebEx

Meeting Number (Access Code): 2596 516 4569

Meeting Password: EkAdh9pyv33

1-415-655-0001 US Toll

Final Meeting Minutes

ATTENDANCE

Commission Voting Members Present

Pat Jacobs – Chairman

Rodney Held – Vice-Chairman

Brian Biesemeyer

Shelley Blackmore

Paul Brick

William Schock

Stephen Turcotte

Arizona Water Protection Fund Staff

Sharon Scantlebury

Kelly Brown

Reuben Teran

Commission Voting Members Absent

Lucinda Earven

CALL TO ORDER

Chairman Pat Jacobs called the meeting of the Arizona Water Protection Fund (AWPF) Commission to order at 10:00 a.m.

COMMISSION MEMBER ROLL CALL

Mr. Reuben Teran called the roll of the AWPf Commission. Commissioners present at the time of roll call included Chairman Pat Jacobs, Vice-Chairman Rodney Held, Commissioner Shelley Blackmore, Commissioner Paul Brick, Commissioner William Schock, and Commissioner Stephen Turcotte. A quorum of voting Commission members was present. Commissioner Brian Biesemeyer was present but was having audio issues during the roll call.

REVIEW AND APPROVAL OF THE June 15, 2021 MEETING MINUTES

Chairman Jacobs asked if there were any questions or comments regarding the draft meeting minutes. Vice-Chairman Held stated that he does have one substantive correction for the minutes on page 6, paragraph 4, sentence one. He stated that sentence should read:

“Vice-Chairman Held stated that based on the current situation and available information he does not think the Commission can waive the current requirements as stated in the grant award contract, but if the grantee filed for a separate surface water right claim then the Commission may be able to consider the grantee’s request again.”

Vice-Chairman Held made a motion to approve the June 15, 2021 meeting minutes as corrected, with a second from Commissioner Paul Brick. Chairman Jacobs asked for a discussion on the motion. There was no discussion and Chairman Jacobs asked for a vote on the motion. The motion passed unanimously.

ARIZONA WATER PROTECTION FUND PROGRAM UPDATES

Grant Award Contracts Withdrawn by the Grantees

19-199WPF: Project Title: Headwater Stream Restoration - Coyote Springs, Museum of Northern Arizona, Flagstaff

Mr. Teran stated that a letter has been submitted by the grantee indicating that they are requesting to withdraw the AWPf grant, and the letter was made available in the AWPf Commission meeting materials. Chairman Jacobs asked for any comments or questions from the Commission. No comments were made.

19-201WPF: Webber Creek Sediment Control Project

Mr. Teran stated that a letter has been submitted by the grantee indicating that they are requesting to withdraw the AWPf grant, and the letter was made available in the AWPf Commission meeting materials. Chairman Jacobs asked for any comments or questions from the Commission. No comments were made.

Withdrawal of Fiscal Year 2022 Grant Application

WPF2212: Wagon Wheel Tank Water Storage

Mr. Teran stated that an email has been submitted by a representative of the applicant indicating that they are requesting to withdraw the grant application from consideration, and the email was made available in the AWPf Commission meeting materials. Chairman Jacobs asked for any comments or questions from the Commission. No comments were made.

Fund Balance Update

Mr. Teran displayed a financial table and stated that the figures displayed on this table are projected funds based on anticipated income for the program, and that it does not reflect the current financial status in the State accounting system. He also stated that this information is provided to inform the Commission on monies that will be available to grant as part of the meeting later in the day.

Mr. Teran commented that the projected fund balance for June 30, 2022 is \$3,229,999. Existing grant obligations as of October 31, 2021 are \$1,162,537, and the uncommitted fund balance is projected for June 30, 2022 is \$2,067,462. He further stated that projected administration support for 3 years to support any new grant awards is \$485,160, and the projected funds available to grant for fiscal year 2022 is \$1,582,302.

Vice-Chairman Held inquired if the projected funding available to grant includes the funds from the 2 grant award contracts that have been withdrawn. Mr. Teran responded that the total available to grant does include the funding amounts from the grants that were withdrawn.

Grant Application Voting Process

Mr. Teran stated that in past grant cycles there has been more funding requested than available to grant, and the Commission has opted to have each member provide the top 3 or 4 projects they

support to identify high, medium, and low Commission funding priorities. He stated that in this grant cycle there is more funding available to grant than has been requested, and the Commission will need to decide how they would like to proceed with voting on grant applications during agenda item VII. Fiscal Year 2022 Grant Cycle Awards.

Chairman Jacobs asked if there were any comments or questions. Vice-Chairman Held inquired if a decision to fund a project is “all or nothing”, or if the Commission can remove a component from a project, if necessary. Mr. Teran responded that the cover page of the grant application contains a clause stating, “*The Arizona Water Protection Fund Commission may approve Grant Awards with modifications to scope items, methodology, schedule, final products and/or budget.*” Mr. Teran also stated that the AWPf staff reviews for each application may include contract conditions that are recommended to be added to a project if the application is selected for funding.

Commissioner Bill Schock commented that some applications submitted this fiscal year did not seem to fit within the overall scope of the Arizona Water Protection Fund program. Chairman Jacobs stated that the Commission should address this concern during the discussion under agenda item VII. Fiscal Year 2022 Grant Cycle Awards. Commissioner Brian Biesemeyer commented that he also shares the concerns expressed by Commissioner Schock.

Commissioner Brick commented that the Commission should not change an application and evaluate it from what had been submitted, otherwise other applicants could have the opportunity to change theirs later. He requested clarification if any changes that are made take place when the grant award contract is developed. Mr. Teran responded that if any changes are requested by the Commission during the approval of a grant application those changes are incorporated into the grant award contract.

COMMISSION CONFLICT OF INTEREST NOTICE *(Tabled)*

Due to the time certain items listed on the agenda, this agenda item was tabled for later in the meeting.

FISCAL YEAR 2022 GRANT APPLICANT PRESENTATIONS

WPF2206 – Dye Ranch Erosion Control and Wetland Improvement Project

- Presenter: Audrey Owens, Arizona Game and Fish Department

Ms. Owens provided a power point presentation.

Commission Shelly Blackmore inquired about bats and frogs being described in the project and their purpose. Ms. Owens stated that they are both important for species diversity and provide ecosystem benefits. She further commented that the Arizona Game and Fish goal is to get a self-sustaining population of Northern leopard frogs established at Dye Ranch.

Commissioner Schock commented about soil compaction mentioned in the presentation and inquired how compaction was measured and how much that has decreased since livestock were removed. Ms. Owens responded that project partners did take soil clay measurements during a recent site visit and found that the ground was high in clay content and the project would not require liners to help maintain water availability. Ms. Owens also stated that she is unable to answer the question related to changes when livestock were removed since there was no previous soil data available. Commissioner Schock commented about previous head cut treatments and was interested in how those were implemented. Ms. Owens stated she could provide some information and Chairman Jacobs stated that any information could be provided to Mr. Teran who would then provide them to Commissioner Schock.

Vice-Chairman Held commented that a Statement of Claim for surface water has been filed for surface water in the project area, but stated that for the purposes of this project he believes that it may be more appropriate for the applicant to be seeking a Certificate of Water Right. He recommended that further discussion take place with the Arizona Department of Water Resources on the project to determine what type of right or permit would be necessary for this project.

WPF2204 – The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health

- Presenter: Ron Tiller, Arizona Department of Environmental Quality

Mr. Tiller provided a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project. There were no questions or comments.

WPF2201 – Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site

- Presenter: Tracy Stephens, Friends of the Verde River

Ms. Stephens provided a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Commissioner Biesemeyer inquired if the Verde Village Property Owners Association has consented to the proposed pond restoration plan. Ms. Stephens responded that Friends of the Verde River has been working with the Property Owners Association president and they are very excited to work with them to get this project going.

Vice-Chairman Held commented that he likes this project, but his biggest concern relates to the proposed pond component for Verde Village Property Owners Association since it appears that there is no legal evidence of a water right to support the pond. He is also concerned that there is not clear direction of what is planned for the project in the context of a park or community amenity, or what role the pond would play as part of the design phase. Ms. Stephens responded that her understanding is that the area was previously irrigated, and they will work with the Verde Village Property Owners Association to get more information.

She also stated that current input from homeowners is mixed between having a smaller pond feature and others wanting a park like amenity so there is not consensus on a final design at this time.

Commissioner Blackmore inquired how much funding was requested for the total project. Ms. Stephens responded \$300,000.

WPF2210 – Enhancement and Maintenance Plans and Designs for Three Rio de Flag Perennial Ponds and Related Wetlands

- Presenter: Edward Schenk, City of Flagstaff

Mr. Schenk provided an overview of the project via telephone. Chairman Jacobs asked for any questions or comments on the presentation or project.

Commissioner Biesemeyer inquired if there were separate costs for assessing the structural conditions of the Cheshire Dam. Mr. Schenk responded that he could not specifically answer the question at this time, but believes he could pull that cost out of the budget as a structural engineering component and estimated it at a cost of approximately \$20,000.

Commissioner Schock commented about the proposed budget and stated that AWPf funds are primarily being requested as lump sum costs for consultant services and it is not clear exactly what services AWPf would be paying for or what the deliverables would be. He inquired if AWPf has ever funded a project of this type before. Mr. Teran responded that this project falls within a feasibility of design under the Capital project category, and that a generally similar project was funded during the fiscal year 2019 grant cycle for the City of Prescott. Vice-Chairman Held stated that feasibility studies evolved within the AWPf program due to input from interested parties stating that financial assistance would be helpful to determine if a proposed project could be feasible, with the intent that the applicant would come back to the AWPf to implement the on-the-ground component. Mr. Schenk responded that deliverables would include three separate plans for Cheshire Park, Frances Short Pond, and the Rio Wetlands.

WPF2209 – Ravenna & Pampas Grass Control along the Colorado River from Glen Canyon Dam to Diamond Creek

- Presenter: Melissa McMaster, RiversEdge West & Mariposa Botanical and Ecological Consulting, LLC

Ms. McMaster provided a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Vice-Chairman Held commented that the AWPf staff review indicated that there was not a letter of support from the National Park Service and concerns regarding the legal and physical availability of access for the project. He inquired if there is documentation from the National Park Service that they approve this project. Ms. McMaster stated that they do have a letter of support from the National Park Service.

Commissioner Schock inquired who will be going on these river trips. Ms. McMaster responded that one motorboat will be used when they go upriver, and three oar powered rafts when they go downriver. Personnel would include three boatman, RiversEdge West staff, National Park Service staff, and other scientists or researchers associated with the Grand Canyon.

Commissioner Blackmore inquired if the targets grass species were nonnative. Ms. McMaster responded that both Ravenna grass and Pampas grass are ornamental, nonnative plants and once they become established, they can create monocultures and outcompete native vegetation. Commissioner Blackmore inquired if there were other nonnative grasses or plants that would be targeted in this project. Ms. McMaster responded that the Ravenna grass and Pampas grass will be the only target species for this project, but they have been mapping Russian Olive and documenting any other nonnative species that are encountered.

WPF2203 – Little Green Valley Fen Restoration Feasibility Study

- Presenter: Sasha Stortz, National Forest Foundation

Ms. Stortz provided a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Commissioner Schock requested clarification on the task to implement the feasibility study. Ms. Stortz responded that the proposed project will not include any ground disturbing activities, and implementing the feasibility study will involve using the contractors selected in a previous task to implement monitoring and data collection activities.

WPF2205 – Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona

- Presenter: Ashley Hullinger, University of Arizona

Ms. Hullinger shared her screen to provide a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Vice-Chairman Held commented that he had concerns about how this project was going to demonstrate water conservation or increased water supplies that tie back to the AWPf program goals and objectives of benefitting rivers and riparian habitat.

Chairman Jacobs commented that it could be helpful to look at the lessons learned from past AWPf funded projects to help educate other local governments or rural areas about the science available for conservation.

Commissioner Biesemeyer expressed concerns about how the proposed project would connect with the goals of the AWPF.

WPF2208 – Habitat Restoration in the Gila River Riparian Corridor

- Presenter: Keira Kauffman, Gila Watershed Partnership of Arizona

Ms. Kauffman shared her screen to provide a power point presentation.

Chairman Jacobs asked if there were any active grants with the AWPF at this time. Ms. Kauffman responded that the last grant from AWPF was closed out in 2019.

Vice-Chairman Held requested clarification on overlapping treatment units from the 2017 grant and the treatment units proposed for this application. Ms. Kauffman responded that due to limited staff capacity not all acres in a given treatment unit were able to be restored previously, and this application seeks to continue treating new acres within the identified treatment units.

WPF2207 – Restoration of Tacna Marsh

- Presenter: Jason Wood, Arizona Game and Fish Department

Mr. Wood shared his screen to provide a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Vice-Chairman Held requested clarification if the intent is to transition the water source of the ponds from irrigation water to groundwater. Mr. Wood responded that the water provided by the irrigation district is technically groundwater, and they do intend to continue using the irrigation district water source and supplement it with the proposed solar well water. Vice-Chairmen Held recommended that the applicant continue to stay in contact with the Arizona Department of Water Resources Surface Water Program to determine if there may be an issues or concerns pertaining to pumping sub flow of surface water resources from a well.

Commissioner Schock inquired how many acres the proposed pond liners would cover. Mr. Wood responded approximately 4.5 acres. Commissioner Schock commented that water appears to be seeping into the ground at a high rate and inquired what would prevent the areas outside of the lined ponds from drying out. Mr. Wood responded that if the liners work as intended then the surrounding areas will dry out, but the woody species they are intending to plant are only about 10 feet from the water table and emergent vegetation will be planted within the lined pond areas.

Commissioner Blackmore inquired about the level of interest and any financial support provided by the local communities or the general public for the wildlife area. Mr. Wood stated that local participation is

primarily from the irrigation district and a farmer who leases a portion of the property, and they are anticipating support from the local Mule Deer Foundation group.

WPF2202 – Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs - Coconino/Redwall-Muav Aquifer Modeling Project Phase 2

- Presenter: Ron Doba, Coconino Plateau Watershed Partnership

Mr. Doba provided a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Commissioner Blackmore requested clarification on the terms for aquifer saturation and well fields.

Commissioner Schock commented that a climate change model accounted for a 20% reduction of groundwater recharged, and requested clarification if there is expected to be 20% less rainfall due to climate change in the future leading to decreases in groundwater recharge. Mr. Doba responded that the 20% figure came about from researching the number of areas and the reductions in all precipitation types due to climate change and that data was input into the model as recharge.

WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics

- Presenter: Daric Knight, Triangle Natural Resource Conservation District

Commissioner Shelly Blackmore recused herself from any discussion related to this grant application.

Mr. Knight provided a power point presentation. Chairman Jacobs asked for any questions or comments on the presentation or project.

Commissioner Brick inquired what the railroad has done to help mitigate the effects of the flooding. Mr. Knight responded that the issues were not entirely caused by the railroad, but were also caused by other contributing factors such as other roads in the system and historic channel straightening to allow for different types of irrigation systems several decades ago. Mr. Knight also stated that since a similar application was proposed to the AWPFC Commission a few years ago they have been working with the railroad who helped fund the initial research and concept plan designs for the current restoration efforts proposed in this grant application.

Commissioner Biesemeyer inquired if there was a letter of support from the railroad. Mr. Knight responded that there is not a current letter of support for the project from the railroad but did reiterate that the initial research and concepts designs were funded by the railroad and they are still engaged with them in different partnerships.

Chairman Jacobs inquired about the height of the bank construction necessary to redirect water into the channel after it passes under the railroad bridge. Mr. Knight responded that they are not intending to create a bank higher than what is currently existing, but plan to excavate just over half an acre of the existing stream channel and install rock vanes to encourage the stream to stay within the newly excavated stream channel.

COMMISSION CONFLICT OF INTEREST NOTICE (continued)

Mr. Teran stated that all Commissioner members were provided a Commission Conflict of Interest form prior to the meeting that should be filled out and provided to staff if any Commission member believes they have or may have a conflict of interest or other cause to refrain from participating in discussions for any the grant applications submitted for the Fiscal Year 2022 grant cycle.

Mr. Teran stated that he has received two Conflict of Interest forms:

- Commissioner Shelley Blackmore for grant application WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics
- Commissioner Brian Biesemeyer for grant application WPF2203 – Little Green Valley Fen Restoration Feasibility Study

Mr. Teran requested that Commission members please make their Conflict of Interest or recusals known verbally for the meeting record if not already provided in writing prior to the meeting.

FISCAL YEAR 2022 GRANT CYCLE AWARDS

Chairman Jacobs requested input from Commission members to either discuss each application individually or make recommendations for applications they would like to put on a consent agenda. Commissioner Brick suggested that since there are only 11 grant applications for consideration that the Commission go through each application individually for discussion and voting. Chairman Jacobs asked if there were any objections from Commission members to go through each application individually. No objections were made.

Mr. Teran stated that he has grant application voting and project funding tables in excel format that will assist the Commission in tracking votes and available funding.

Mr. Teran inquired about grant award contract conditions that were noted on the AWPf staff review forms and if the Commission intends to incorporate those as part of the grant award. Vice-Chairman Held commented that he did review all the contract conditions recommended by staff and supports including them as part of the grant award. Commissioner Stephen Turcotte concurred with Vice-Chairman Held's assessment and suggested that staff's recommended grant award contract conditions stand as part of the grant approval. Commissioner Biesemeyer made a motion that all contract conditions recommended in the AWPf staff review of the application be included as part of the grant award approvals, with a second from Vice-Chairman Held.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes
- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick Yes
- Commissioner William Schock Yes
- Commissioner Stephen Turcotte Yes

The motion passed unanimously.

Commissioner Brick inquired how much funding is available for research projects this grant cycle. Mr. Teran responded that the amount available for research project this grant cycle is limited to 5% of the funds deposited into the AWPf that fiscal year. He further stated that because there was a Legislative appropriation of \$1,250,000, the amount available for research projects this grant cycle is \$62,500 and this figure is noted on the funds tracking table.

Vice-Chairman Held requested clarification on the amount of funding available for projects under the water conservation category. Mr. Teran responded that changes to the AWPf statutes in approximately 2013 did away with funding limits on projects submitted under the water conservation category.

WPF2201 – Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site

Commissioner Brick made a motion to approve application WPF2201 – Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site, with a second from Vice-Chairman Held. Chairman Jacobs called for any discussion on the motion. Vice-Chairman Held expressed his concerns regarding Task #6 of the application for the pond construction because it was not clear if there is a legal water right for the existing pond. He also expressed concerns that if the pond feature would be decommissioned if it would be within the Commission’s purview to authorize AWPf funds to turn the area into a community park. He further stated that he completely supports all other components of the project.

Chairman Jacobs inquired if the Commission could approve this project without Task #6. Mr. Teran referenced the grant application cover page which states:

“The Arizona Water Protection Fund Commission may approve Grant Awards with modifications to scope items, methodology, schedule, final products and/or budget.”

Commissioner Blackmore inquired if a funding decision on this project could be tabled while additional information is gathered from the applicant. Commissioner Brick responded that the Commission could vote on this project but not award the funding for the pond component, and agreed with concerns made by Vice-Chairman Held. Commissioner Blackmore supported those comments.

Vice-Chairmen Held made a motion, to modify the previous motion, that the Commission approve grant application WPF2201 – Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site with the exception of excluding Task #6: Verde Village Property Owners Association Pond Restoration Planning from the grant award contract. Chairman Jacobs accepted this as a substitute motion, with a second from

Commissioner Brick. Chairman Jacobs called for any discussion on the substitute motion. No comments were made.

Chairman Jacobs called for a vote on the substitute motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes
- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick Yes
- Commissioner William Schock Yes
- Commissioner Stephen Turcotte Yes

The motion passed unanimously.

WPF2202 – Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs - Coconino/Redwall-Muav Aquifer Modeling Project Phase 2

Commissioner Biesemeyer made a motion to approve application WPF2202 – Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs -Coconino/Redwall-Muav Aquifer Modeling Project Phase 2, with a second from Commissioner Stephen Turcotte.

Chairman Jacobs asked for any discussion on the motion. Commissioner Biesemeyer commented that he does have some concerns about the overall applicability and link of this project to the mission of AWPf program, but did acknowledge that there was a potential to impact riparian areas by constraining groundwater pumping. Commissioner Brick commented that he feels this project is a real stretch for the program and even though there is funding available doesn't mean they should have to spend it on a proposal that doesn't necessarily meet the AWPf program criteria. Vice-Chairman Held commented that he does see some value in this modeling effort but does agree with Commissioner Brick's comments that this project does not meet the mission of the AWPf. Commissioner Schock commented that he did not really believe this modeling effort would support the AWPf.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs No
- Vice-Chairman Rodney Held No
- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore No
- Commissioner Paul Brick No
- Commissioner William Schock No
- Commissioner Stephen Turcotte No

The motion failed.

WPF2203 – Little Green Valley Fen Restoration Feasibility Study

Vice-Chairman Held made a motion to approve application WPF2203 – Little Green Valley Fen Restoration Feasibility Study, with a second from Commissioner Brick.

Chairman Jacobs asked for any discussion on the motion. Commissioners Schock commented that this will be a very expensive project, and that photos in the application show there are major problems in the area including a large head cut, but felt the proposed solutions were not going to do much to solve them. Chairman Jacobs requested clarification that this project was a study, and not an actual restoration effort. Mr. Teran responded that this project is a feasibility study and the applicant would be collecting data to help determine what restoration options would be the most feasible, with the goal of developing an actual restoration plan and implementation budget as part of the final products for the project. Chairman Jacobs commented that he sees value and supports data collection efforts that will inform future restoration efforts.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes
- Commissioner Brian Biesemeyer Abstained
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick Yes
- Commissioner William Schock No
- Commissioner Stephen Turcotte Yes

The motion passed.

WPF2204 – The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health

Commissioner Biesemeyer made a motion to approve application WPF2204 – The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health, with a second from Commissioner Brick.

Chairman Jacobs asked for any discussion on the motion. Commissioner Brick commented that a lot of funding is being requested to close down trails especially when parking areas are already being closed down to alleviate the trail problems. Vice-Chairman Held commented that the concept is good and can see the benefit, but was hoping there would have been more of a discussion on how this project would help the riparian habitat. Commissioner Biesemeyer commented that trail improvements and closures could help with erosion issues into Oak Creek, but did share the concerns about the amount of funding requested and the lack of information provided regarding the restoration of the trails. Commissioner Schock commented that the amount of sediment entering the system from the trail did not appear significant based on the information in the application. He also expressed concern about the continuing number of trails that need to be restored and stated that they are not solving the bigger problem of trail creation. Vice-Chairman Held commented that he understands from the presentation that there are not many more new trails being created, but that the applicant is intending to restore or decommission existing trails. Commissioner Blackmore commented that this appears to be more of a people management problem when they don't pick up their trash. Commissioner Biesemeyer agreed with Vice-Chairman Held's comments that the applicant is proposing to restore or decommission existing trails.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes
- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick No

- Commissioner William Schock No
- Commissioner Stephen Turcotte Yes

The motion passed.

WPF2205 – Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona

Vice-Chairman Held made a motion to approve application WPF2205 – Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona, with a second from Commissioner Biesemeyer.

Chairman Jacobs asked for any discussion on the motion. Commissioner Biesemeyer commented that this appears to be a good project but did not feel that it meets the mission of the AWPf. Vice-Chairman Held and Commissioner Brick both agreed with Commissioner Biesemeyer’s comments.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs No
- Vice-Chairman Rodney Held No
- Commissioner Brian Biesemeyer No
- Commissioner Shelley Blackmore No
- Commissioner Paul Brick No
- Commissioner William Schock No
- Commissioner Stephen Turcotte No

The motion failed.

WPF2206 – Dye Ranch Erosion Control and Wetland Improvement Project

Vice-Chairman Held made a motion to approve application WPF2206 – Dye Ranch Erosion Control and Wetland Improvement Project, with a second from Commissioner Brick.

Chairman Jacobs asked for any discussion on the motion. Vice-Chairman Held wanted to further clarify a comment he previously made during the application presentation. He stated that during the presentation the applicant stated they have submitted a Statement of Claim for a surface water right, which is intended to support a pre-1919 water use under the adjudications laws, and he suggested that the appropriate course of action would be for the applicant to pursue a Certificate of Water Right, pending the evaluation of the Arizona Department of Water Resources. He further commented that he believes it is a good project.

Mr. Teran requested clarification from the Commission regarding the potential funding amount for this application because the application requested \$76,941, staff’s budget calculation totaled \$76,935, and the applicant’s budget in the presentation totaled \$76,945. Vice-Chairman Held amended his previous motion to approve application WPF2206 – Dye Ranch Erosion Control and Wetland Improvement Project with funding not to exceed \$76,945, with a second from Commissioner Brick.

Chairman Jacobs called for a vote on the amended motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes

- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick Yes
- Commissioner William Schock Yes
- Commissioner Stephen Turcotte Yes

The motion passed unanimously.

WPF2207 – Restoration of Tacna Marsh

Commissioner Brick made a motion to approve application WPF2207 – Restoration of Tacna Marsh, with a second from Commissioner Biesemeyer.

Chairman Jacobs asked for any discussion on the motion. Vice-Chairman Held commented that one of his biggest concerns is that the way the applicant is proposing to restore the marsh is by changing from a natural system to more of a man-made system by cutting off the marsh from the natural hydrologic flow by lining the ponds. He further stated that the project does offer great habitat value and recreational opportunities for the public, but is concerned due to the loss of the hydrologic connection. Commissioner Schock agreed with Vice-Chairman Held’s comments, and stated that once the ponds are lined all the surrounding habitat around the ponds are cut off and the connection to the marsh habitat is lost.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs No
- Vice-Chairman Rodney Held No
- Commissioner Brian Biesemeyer No
- Commissioner Shelley Blackmore No
- Commissioner Paul Brick No
- Commissioner William Schock No
- Commissioner Stephen Turcotte No

The motion failed.

WPF2208 – Habitat Restoration in the Gila River Riparian Corridor

Vice-Chairman Held made a motion to approve application WPF2208 – Habitat Restoration in the Gila River Riparian Corridor, with a second from Commissioner Brick.

Chairman Jacobs asked for any discussion on the motion. Vice-Chairman Held commented that he is in favor of this project but wants to ensure that there is some follow-up regarding staff’s review comments that the specific project sites proposed for restoration in this application do no overlap with those that were funded through previous AWPf grants or conflict with AWPf operation and maintenance clauses. Mr. Teran commented that during today’s presentation the applicant acknowledged that the proposed restoration areas are within the same planning polygons as the previous AWPf grant, but stated that specific restoration areas for this application are different and do not overlap. Mr. Teran stated that he will follow up with the grant applicant to get this verification in writing prior to having the Chairman sign a grant award contract if the project is selected for funding.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes
- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick Yes
- Commissioner William Schock Yes
- Commissioner Stephen Turcotte Yes

The motion passed unanimously.

WPF2209 – Ravenna & Pampas Grass Control along the Colorado River from Glen Canyon Dam to Diamond Creek

Vice-Chairman Held made a motion to approve application WPF2209 – Ravenna & Pampas Grass Control along the Colorado River from Glen Canyon Dam to Diamond Creek, with a second from Commissioner Turcotte.

Chairman Jacobs asked for any discussion on the motion. No comments were made.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs Yes
- Vice-Chairman Rodney Held Yes
- Commissioner Brian Biesemeyer Yes
- Commissioner Shelley Blackmore Yes
- Commissioner Paul Brick Yes
- Commissioner William Schock Yes
- Commissioner Stephen Turcotte Yes

The motion passed unanimously.

WPF2210 – Enhancement and Maintenance Plans and Designs for Three Rio de Flag Perennial Ponds and Related Wetlands

Commissioner Brick made a motion to approve application WPF2210 – Enhancement and Maintenance Plans and Designs for Three Rio de Flag Perennial Ponds and Related Wetlands, with a second from Commissioner Biesemeyer.

Chairman Jacobs asked for any discussion on the motion. Vice-Chairman Held stated that he has concerns about the budget and agrees with Commissioner Schock’s earlier comments regarding the lump sum costs described in the grant application budget, and lack of details provided to assess how those costs or totals were derived. Commissioner Biesemeyer commented that that he agrees with Vice-Chairman Held’s comment, and expressed an additional concern that the scope of work included a task to assess a dam. He commented that this should be a City of Flagstaff flood control responsibility and did not see how using AWPf funds for assessing their asset meets the mission of the AWPf. Commissioner Brick expressed concern about the future upstream flood control project that may obliterate any AWPf funded efforts, and that there has been no coordination between the applicant and the proponents of the flood control project.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs No
- Vice-Chairman Rodney Held No
- Commissioner Brian Biesemeyer No
- Commissioner Shelley Blackmore No
- Commissioner Paul Brick No
- Commissioner William Schock No
- Commissioner Stephen Turcotte No

The motion failed.

WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics

Commissioner Schock made a motion to approve application WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics, with a second from Commissioner Brick.

Chairman Jacobs asked for any discussion on the motion. Vice-Chairman Held commented that he see’s the value of this project and wants to support the Conservation District’s work, but did have a few concerns regarding the project in that it primarily described the flood control aspects of the project; only included a brief mention of the riparian habitat benefits; and did not include a description of the riparian vegetation or revegetation effort that would potentially be implemented or the overall monitoring component of the project. He further commented that he did not have a good sense of how the riparian habitat or wildlife values of the project area would be enhanced, outside of the flood control aspect, and there were not any details provided to assess the proposed photo and drone monitoring components. Commissioner Biesemeyer inquired if the Commission can request further clarification about the restoration and monitoring components at this time, and commented that it would have been helpful to have documentation or evidence from the railroad about their support of the proposed actions and prior financial contributions to the overall project, and the overall revegetation effort. Vice-Chairman Held responded that the applicant’s presentation essentially took the full 20 minutes with little to no time for any follow-up questions, and wished there was more time to discuss these questions during the presentation. He further commented that the Commission is tasked with making decisions based on the information that has been provided, and it would not be fair to other applicants if the Commission would go back to ask additional clarifying questions after the presentation time, or add additional items to this project’s scope of work to make the project what the Commission would want it to be. Commissioner Brick agreed with Vice-Chairman Held’s comments, and believes this is more of a flood control project and did not address what riparian improvements they were going to make. He also agreed with Vice-Chairman Held that the Commission cannot change the application in a major way to include what the Commission would want.

Chairman Jacobs called for a vote on the motion. Mr. Teran proceeded with a roll call vote:

- Chairman Pat Jacobs No
- Vice-Chairman Rodney Held No
- Commissioner Brian Biesemeyer No
- Commissioner Shelley Blackmore Abstained
- Commissioner Paul Brick No
- Commissioner William Schock No
- Commissioner Stephen Turcotte Yes

The motion failed.

Mr. Teran filled in the dollar amounts on the FY 2022 Grant Cycle Funds Tracking spreadsheet for the projects that the Commission selected for funding, including any approved budget modifications. He stated that the Commission has awarded funding for 6 projects totaling \$780,911.

Chairman Jacobs asked for any discussion on the FY 2022 Grant Cycle funds Tracking spreadsheet. No comments were made, and the voting record and fund allocations tables were finalized.

CALL TO THE PUBLIC

Chairman Jacob made a call to the public. No public comments were made.

CALL FOR FUTURE AGENDA ITEMS

Chairman Jacobs made a call for future agenda items. No items were suggested by Commission members.

Chairman Jacobs stated that the Honorable David Cook from the Arizona House of Representatives who is non-voting ex officio member of the AWPf Commission previously made public statements that there was a need to remove salt cedar from a waterway in his District. He asked the Commission if there would be any objection for him to reach out to Representative Cook's office about the AWPf program and direct the Executive Director to meet with interested parties about the opportunity to submit a grant application for this project in the FY 2023 grant cycle. No objections were made.

Chairman Jacobs commented that he understands the Legislature is now providing funding to other State agencies to deal with invasive species issues such as salt cedar. He stated that he would like to investigate this further and provide a report back to the Commission. He further commented that he believes the AWPf does a good, thorough job of evaluating these types of projects in a public forum, and was not sure if Legislators are fully aware of what the program does since funding is also being allocated to other State agencies for issues that this Commission currently deals with. He suggested the Commission consider an education program for Legislators. He also suggested a future discussion with the Commission about the current direction of the AWPf program and to see if there is a need or interest to explore prioritizing other types of projects to consider for funding. Commissioner Blackmore commented that there is always a need to continue educating Legislators. Commissioner Brick supported educating Legislators as much as possible. Commissioner Biesemeyer supported educating Legislators on the role of the AWPf and how funding the program really does help the State and our water supply, and commented that it would be important for the Commission to understand why other agencies are also receiving funding for these activities. Chairman Jacobs asked if there were any objections to moving forward with these activities. No objections were made.

The proposed future agenda items will tentatively be:

- A report from the Chairman regarding Legislative relations
- A discussion if there is a need to prioritize funding for other AWPf projects or programs

FUTURE MEETING DATE(S)

The Commission selected Tuesday, February 8, 2022 at 10:00 a.m. as the next full Commission meeting date. Mr. Teran stated that this will be general business meeting of the Commission and will most likely be another virtual meeting. He also stated that hybrid in-person/virtual meetings could also be an option for future meetings depending on current public health guidelines.

Chairman Jacobs acknowledged and thanked the Commissioner members for their time and efforts reviewing the grant application proposals and for participation in today's meeting. Chairman Jacobs and the Commission members thanked Mr. Teran for his efforts of creating and facilitating a successful online grant application submittal process.

ADJOURN

With no other agenda items, the meeting adjourned at approximately 5:20 p.m.

Arizona Water Protection Fund Commission Fiscal Year 2022 Grant Application Voting Table

Application #	Project Title	Pat Jacobs	Rodney Held	Brian Biesemeyer	Shelley Blackmore	Paul Brick	Lucinda Earven	William Schock	Stephen Turcotte	Yes Votes	Commission Majority Votes for Funding Consideration
WPF2201	Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site	1	1	1	1	1		1	1	7	Yes
WPF2202	Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs - Coconino/Redwall-Muav Aquifer Modeling Project Phase 2	0	0	1	0	0		0	0	1	No
WPF2203	Little Green Valley Fen Restoration Feasibility Study	1	1		1	1		0	1	5	Yes
WPF2204	The Path to Protection at Oak Creek: Social Trail Rehabilitation for Improved Watershed Health	1	1	1	1	0		0	1	5	Yes
WPF2205	Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona	0	0	0	0	0		0	0	0	No
WPF2206	Dye Ranch Erosion Control and Wetland Improvement Project	1	1	1	1	1		1	1	7	Yes
WPF2207	Restoration of Tacna Marsh	0	0	0	0	0		0	0	0	No
WPF2208	Habitat Restoration in the Gila River Riparian Corridor	1	1	1	1	1		1	1	7	Yes
WPF2209	Ravenna & Pampas Grass Control along the Colorado River from Glen Canyon Dam to Diamond Creek	1	1	1	1	1		1	1	7	Yes
WPF2210	Enhancement and Maintenance Plans and Designs for Three Rio de Flag Perennial Ponds and Related Wetlands	0	0	0	0	0		0	0	0	No
WPF2211	Kirkland Restoration of Proper Stream Channel Characteristics Project	0	0	0		0		0	1	1	No

1 = Yes Vote
0 = No Vote

Arizona Water Protection Fund Commission Projects Approved for Fiscal Year 2022 Funding

AWPF Grant Application Fiscal Year 2022 Grant Cycle Funds Tracking				\$1,582,302	AWPF Uncommitted Funding Available
Application #	Project Title	Amount Requested	Amount Funded	Available Balance	Project Type
WPF2201	Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site	\$300,000	\$247,350	\$1,334,952	Capital
WPF2202	Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs - Coconino/Redwall-Muav Aquifer Modeling Project Phase 2	\$62,500	\$0	\$1,334,952	Research
WPF2203	Little Green Valley Fen Restoration Feasibility Study	\$77,003	77,003	\$1,257,949	Capital
WPF2204	The Path to Protection at Oak Creek: Social Trail Rehabilitation for Improved Watershed Health	\$238,980	238,980	\$1,018,969	Capital
WPF2205	Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona	\$89,216	0	\$1,018,969	Water Conservation
WPF2206	Dye Ranch Erosion Control and Wetland Improvement Project	\$76,941	76,945	\$942,024	Capital
WPF2207	Restoration of Tacna Marsh	\$113,589	0	\$942,024	Capital
WPF2208	Habitat Restoration in the Gila River Riparian Corridor	\$97,455	97,455	\$844,569	Capital
WPF2209	Ravenna & Pampas Grass Control along the Colorado River from Glen Canyon Dam to Diamond Creek	\$43,178	43,178	\$801,391	Capital
WPF2210	Enhancement and Maintenance Plans and Designs for Three Rio de Flag Perennial Ponds and Related Wetlands	\$101,115	0	\$801,391	Capital
WPF2211	Kirkland Restoration of Proper Stream Channel Characteristics Project	\$230,600	0	\$801,391	Capital
		1,430,577	780,911		

\$62,500.00	Research Funds Balance	62,500
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(available for research)

Available Grant Funding Balance	801,391
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Commission Members

Pat Jacobs, Chairman
Rodney Held, Vice Chairman
Brian Biesemeyer
Shelley Blackmore
Paul Brick
Lucinda Earven
William Schock
Stephen Turcotte

Executive Director

Reuben Teran

Arizona Water Protection Fund Commission

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Ex-Officio Members

Thomas Buschatzke
Director
AZ Department of Water Resources

Lisa Atkins
State Land Commissioner
AZ State Land Department

Advisory Members

The Honorable Sine Kerr
AZ State Senate

The Honorable David L. Cook
AZ House of Representatives

NOTICE OF PUBLIC MEETING

Pursuant to A.R.S. § 38-431.02, notice is hereby given that there will be a meeting of the Arizona Water Protection Fund (AWPF) Commission on **Tuesday, November 16, 2021 at 10:00 a.m.** This meeting is open to the public. Due to safety considerations during the COVID-19 pandemic and guidance from the Centers for Disease Control and Prevention for large events and mass gatherings, the AWPF Commission will be conducting this meeting in a virtual format. The meeting information and agenda are described below.

Cisco Webex Meeting Information

Link: https://azwater.webex.com/azwater/j.php?MTID=m0c3b08dd43aa0cd50f176552b806876e Meeting Number (Access Code): 2596 516 4569 Meeting Password: EkAdh9pyv33

or

Join by Phone

1-415-655-0001 US Toll	Access Code: 2596 516 4569
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Dated this 3rd day of November 2021

**Arizona Water Protection Fund Commission
Meeting Agenda**

- I. Call to Order –Chairman Pat Jacobs
- II. Commission Member Roll Call – Executive Director
- III. Review and Approval of the June 15, 2021 Meeting Minutes – Chairman Pat Jacobs
- IV. Arizona Water Protection Fund Program Updates – Executive Director
 - Grant Award Contracts Withdrawn by the Grantees
 - 19-199WPF: Project Title: Headwater Stream Restoration - Coyote Springs, Museum of Northern Arizona, Flagstaff
 - 19-201WPF: Webber Creek Sediment Control Project
 - Withdrawal of Fiscal Year 2022 Grant Application
 - WPF2212: Wagon Wheel Tank Water Storage
 - Fund Balance Update

Arizona Water Protection Fund Commission
Notice of Public Meeting and November 16, 2021 Meeting Agenda (continued)

- Grant Application Voting Process

V. Commission Conflict of Interest Notice – AWPf Staff

VI. Fiscal Year 2022 Grant Applicant Presentations [schedule attached]

- a. Applicant Presentations (10:20 a.m.)
- b. Break (11:55 a.m.)
- c. Applicant Presentations (12:30 p.m.)
- d. Break (2:05 p.m.)
- e. Application Presentations (2:20 p.m.)

VII. Fiscal Year 2022 Grant Cycle Awards

- Discussion on Fiscal Year 2022 grant applications.
- The Commission may consider and take action on grant application funding awards.

VIII. Call to the Public – Chairman Jacobs

- Comments from the public will be limited to 3 minutes per speaker.

IX. Call for Future Agenda Items

X. Future Meeting Date(s) – Chairman Jacobs

XI. Adjourn – Chairman Jacobs

- *The Arizona Water Protection Fund Commission may elect to go into Executive Session for the purposes of obtaining legal advice from its attorney on any of the listed agenda items pursuant to A.R.S. § 38-431.03(A)(3). Executive sessions are not open to the public.*
- *Agenda items may be taken out of order. No action may be taken on items unless specifically noted on the agenda.*
- *Members of the Arizona Water Protection Fund Commission may appear by telephone.*
- *Agenda and backup/supporting documents can be obtained by contacting Sharon Scantlebury at 602-771-3957 or sscantlebury@azwater.gov.*
- *People with disabilities may request reasonable accommodations such as interpreters, alternate formats, or assistant with physical accessibility. If you require accommodations, please contact Jennifer Marteniez at (602) 771-8426 or by e-mailing jkmarteniez@azwater.gov Please make requests as soon as possible to allow time to arrange the accommodation.*

**Arizona Water Protection Fund
Fiscal Year 2022 Grant Cycle
Application Presentation Schedule**

Application #	Project Title	Tuesday, November 16, 2021
		AWPF BUSINESS 10:00 – 10:20
WPF2206	Dye Ranch Erosion Control and Wetland Improvement Project	10:20 a.m. – 10:40 a.m.
WPF2204	The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health	10:45 a.m. – 11:05 a.m.
WPF2201	Verde River Riparian Restoration - Highway 89A to Bignotti Picnic Site	11:10 a.m. – 11:30 a.m.
WPF2210	Enhancement and Maintenance Plans and Designs for Three Rio de Flag Perennial Ponds and Related Wetlands	11:35 a.m.– 11:55 a.m.
		BREAK 11:55 a.m.– 12:30 p.m.
WPF2209	Ravenna & Pampas Grass Control along the Colorado River from Glen Canyon Dam to Diamond Creek	12:30 p.m. – 12:50 p.m.
WPF2203	Little Green Valley Fen Restoration Feasibility Study	12:55 p.m. – 1:15 p.m.
WPF2205	Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona	1:20 p.m. – 1:40 p.m.
WPF2208	Habitat Restoration in the Gila River Riparian Corridor	1:45 p.m. – 2:05 p.m.
		BREAK 2:05 p.m. – 2:20 p.m.
WPF2207	Restoration of Tacna Marsh	2:20 p.m. – 2:40 p.m.
WPF2202	Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs – Coconino/Redwall-Muav Aquifer Modeling Project Phase 2	2:45 p.m. – 3:05 p.m.
WPF2211	Kirkland Restoration of Proper Stream Channel Characteristics	3:10 p.m. – 3:30 p.m.

ARIZONA WATER PROTECTION FUND COMMISSION

Business Meeting – June 15, 2021

Virtual Meeting via Cisco WebEx

Meeting Number (Access Code): 133 842 7959

Meeting Password: m3Pupm2nqH4

1-404-397-1516 US Toll

DRAFT Meeting Minutes

ATTENDANCE

Commission Voting Members Present

Pat Jacobs – Chairman

Rodney Held – Vice-Chairman

Brian Biesemeyer

Shelley Blackmore

Paul Brick

Lucinda Earven

William Schock

Stephen Turcotte

Arizona Water Protection Fund Staff

Sharon Scantlebury

Kelly Brown

Reuben Teran

Commission Voting Members Absent

None

CALL TO ORDER

Chairman Pat Jacobs called the meeting of the Arizona Water Protection Fund (AWPF) Commission to order at 10:00 a.m.

COMMISSION MEMBER ROLL CALL

Mr. Reuben Teran called the roll of the AWPF Commission. Commissioners present at the time of roll call included Chairman Pat Jacobs, Vice-Chairman Rodney Held, Commissioner Brian Biesemeyer, Commissioner Paul Brick, Commissioner Lucinda Earven, Commissioner William Schock, and Commissioner Stephen Turcotte. A quorum of voting Commission members was present.

Chairman Jacobs recognized and welcomed Commissioner Turcotte to his first meeting as a Water Protection Fund commissioner.

REVIEW AND APPROVAL OF THE MARCH 16, 2021 MEETING MINUTES

Chairman Jacobs asked if there were any questions or comments regarding the draft meeting minutes. Vice-Chairman Held stated that he does have a number of typographical corrections for the minutes, but nothing substantive. Chairman Jacobs responded that incorporating those technical corrections can be made as part of the motion to approve minutes. Vice-Chairman Held made a motion to approve the March 16, 2021 meeting minutes to include technical corrections, with a second from Commissioner Schock. Chairman Jacobs asked for a discussion on the motion. There was no discussion and Chairman Jacobs asked for a vote on the motion. The motion passed unanimously.

ELECTION OF CHAIRMAN AND VICE-CHAIRMAN

Chairman Jacobs stated that June is the traditional month that AWPf officers are elected, and asked the Executive Director to remind the Commissioners about the terms for officers. Mr. Teran responded that the terms for both the Chairman and Vice-Chairman are generally one calendar year from June to the following June. Chairman Jacobs called for nominations for Chairman from June 2021 to June 2022. Vice-Chairman Held stated that he is interested in serving in the capacity as either the Chairman or Vice-Chairman, but inquired if the current Chairman was still interested in serving in his current position. Chairman Jacobs stated that he would be interested in serving as Chairman at least one more year. Vice-Chairman Held made a motion that Pat Jacobs continue serving in his current role as Chairman of the AWPf Commission, with a second from Commissioner Brick. Chairman Jacobs asked for any discussion on the motion. There was no discussion and a vote was called for on the motion. The motion passed unanimously. Chairman Jacobs asked for nominations for Vice-Chairman. Commissioner Brick made a motion to nominate Rodney Held to serve as Vice-Chairman of the AWPf Commission, with a second from Commissioner Biesemeyer. Chairman Jacobs asked for any discussion on the motion. There was no discussion and a vote was called for on the motion. The motion passed unanimously.

PROJECT CLOSEOUT PRESENTATION. AWPf GRANT 19-193WPF: VERDE RIVER-OAK CREEK CONFLUENCE HABITAT IMPROVEMENT PROJECT

- Presenter - Tracy Stevens, Habitat Restoration Program Manager, Friends of the Verde River

Mr. Teran introduced Ms. Tracy Stevens, who then presented a slideshow of the project with its results and accomplishments.

Chairman Jacobs asked the Commission members if there were any comments or questions for the presenter or AWPf staff. There were no questions or comments from the Commission.

PROJECT CLOSEOUT PRESENTATION. AWPf GRANT 19-197WPF: BILL WILLIAMS MOUNTAIN FOREST AND WATERSHED RESTORATION PROJECT

- Presenter – Rebecca Davidson, Southwest Region Director, National Forest Foundation

Mr. Teran introduced Ms. Rebecca Davidson, who then presented a slideshow of the project with its results and accomplishments.

Chairman Jacobs asked if there were any volunteer program activities within the project. Ms. Davidson responded that there were no volunteer opportunities for this particular project due to the difficult access and steep slopes that required special operations; however, there were a number of tours held for local community members to see the work being implemented. Chairman Jacobs asked if there were any private lands involved with this project. Ms. Davison responded that all the work was done on public lands managed by the Kaibab National Forest. Chairman Jacobs asked if this project provided a direct service for increasing water quantity and quality to those on the watershed. Ms. Davidson responded that from a watershed perspective there are direct benefits to local reservoirs and downstream communities, and commented that a benefit from the reduction of fire risk is a reduction of the post-fire flooding risk which results in improved water quality and long term water sustainability for water supplies throughout the Verde watershed.

Chairman Jacobs asked the Commission members if there were any other comments or questions for the presenter or AWPf staff. Commissioner Schock asked if there were any payments received for the wood

products like pallets and mulch created from the project. Ms. Davidson responded that the National Forest Foundation’s contract with Markit! Forestry Management LLC. (Markit!) did contain provisions for some payments to be made to Novo Power and Southwest Forestry for wood products as part of the overall costs of fuel reduction actions of the project. Commissioner Schock asked if the runoff going into the reservoirs from rains was inhibited prior to forest thinning, or if there is evidence or anticipation of more rain runoff post thinning. Ms. Davidson responded that she does not have data to support an answer for Bill Williams Mountain, but stated there are studies that do suggest there is an increase in flow and runoff moving downstream for a short period of time post thinning and as forests regenerate that flow decreases. Ms. Davidson also commented that the intent for this project is that it will increase the long term sustainability of the mountains and water supply, and allow for a more natural reintroduction of fire that will sustain those treatments over time and lead to higher quality water, sustained use of water, and for some short term increased water yield. Commissioner Schock what plans are in place to keep these areas thinned. Ms. Davidson responded that they are working with the US Forest Service on the long-term strategy for these thinning projects and those on adjacent lands to reintroduce fire to support the maintenance of the historic and natural forest structure ecosystem. Commissioner Schock commented that logging in the past was halted due to concerns over the Mexican Spotted Owl, and inquired if special permits were necessary to essentially remove the same trees that would have most likely been commercially logged, and if through the removal of these trees if they have seen a decrease in the number of Mexican Spotted Owls. Ms. Davidson responded that work was done within a National Environmental Policy Act (NEPA) decision called the Bill Williams Mountain Restoration Project Record of Decision signed in 2015 that allowed the removal of dead and down material and small diameter ponderosa pine across a 15,000 acre landscape outside of the Mexican Spotted Owl breeding season.

Chairman Jacobs thanked Ms. Davidson for her time and the presentation.

COMMISSION MEMBER ROLL CALL (cont.)

Mr. Teran stated that Commissioner Shelly Blackmore was having issues joining prior to the start of the meeting and inquired if she was present at this time. There was no response from Commissioner Blackmore.

AWPF GRANT 19-201WPF: WEBBER CREEK SEDIMENT CONTROL PROJECT

Mr. Teran provided a brief background on the project explaining that the project was a joint funded sediment and erosion control project with the Arizona Department of Environmental Quality (ADEQ) that was to include various activities based on a master plan that was to be developed. He also stated that there were no specific project implementation actions identified in the AWPf grant application so the agreement was written that the grantee would develop the sediment control master plan at no cost to AWPf. The grant deliverable also included language to specifically identify the project actions that were to be implemented with AWPf funds. To date the master erosion control plan has been developed, but specific project actions for AWPf have not yet been identified due to the fact that most of the proposed sediment control measures identified in the AWPf grant application and master plan have already been implemented through the funding available from ADEQ. Mr. Teran then referred the Commission to the letter from the Boy Scouts of America – Grand Canyon Council (BSA) provided in the meeting materials, and introduced Mr. Gregory Harmon who further explained the information in the letter. Mr. Harmon stated that the BSA is requesting to move funds from Task #3 to Task #4 for public outreach implementation, and to use a majority of the grant funds to construct and install 1 or 2 bridges across Webber Creek. He stated that the BSA was able to leverage many volunteer hours to help complete the erosion control projects throughout the property, and the biggest issue that is now causing the most erosion into Webber Creek is the vehicle water crossing that goes to west side of the property. BSA estimated that Webber Creek is crossed approximately 5,000 times

per year by vehicles. The BSA is requesting funding for a vehicular bridge across Webber Creek to reduce erosion and protect the riparian habitat along the banks. The bridge would also provide BSA a high-water crossing access point to the west side of the property in the event of an emergency due to heavy rain or floods. The BSA is also requesting funding to install a pedestrian bridge for additional foot traffic access between the east and west sides of the property across Webber Creek.

Chairman Jacobs asked the Commission if there were any questions or comments for Mr. Harmon. Vice-Chairman Held requested clarification if the \$8,000 in Task #3 budgeted for the outreach and education plan was going to be moved to Task #4 for bridge construction activities. Mr. Harmon responded that the \$8,000 would be moving from the design of the education plan to purchase the signage and materials to implement the outreach and education plan. Vice-Chairman Held then requested clarification if the BSA is requesting permission to use AWPf funds to purchase and construct the 2 bridges. Mr. Harmon responded that no grant money from AWPf has been used to date since ADEQ funds have been used to complete the majority of the erosion control projects, and they would like permission to use AWPf for the bridge construction activities under the existing budget for Task #4. Mr. Teran commented that the reason this request was brought before the Commission today is because the construction and installation of bridges is a change in the Scope of Work activities of the grant award contract, and a concept that was not presented to the Commission during the grant application review period. Vice-Chairman Held asked if a budget has been developed for the construction and installation of the bridges. Mr. Harmon responded that BSA has been in contact with a contractor and the initial costs for the vehicular bridge are approximately \$120,000, but they are looking into creative solutions to have enough funds to install both bridges. One potential solution Mr. Harmon mentioned was to use a retired railroad bridge from Colorado, and that he has been in contact with the Department of Transportation in Colorado.

Commissioner Biesemeyer stated that he is little concerned because it appears that all the costs to implement the proposed changes have not yet been figured out. He also asked what long-term maintenance plans BSA has for these bridges. Mr. Harmon responded that that BSA would build the maintenance costs into their capital needs assessment model, and stated that the BSA Council allocates a certain amount of maintenance funds every year to maintain operations.

Commissioner Brick stated that in the past the AWPf Commission has supported funding vehicular water crossing projects to eliminate silt, but doesn't believe that the construction of bridges has ever been funded by the Commission or in the Commission's scope of funding. Mr. Teran commented that he was not aware of any vehicular bridge construction projects funded by AWPf. Vice-Chairman Held commented that he recalls several pedestrian water crossing projects being funded by AWPf, and has that he also has concerns if AWPf should be funding a bridge construction project unless it could be tied back to enhancing the riparian corridor or stream bed.

Mr. Harmon stated that the intent of the grant is to improve water quality in Webber Creek by providing nutrient cycling and streambank stabilization. He also stated that he believes BSA has done a good job of implementing their erosion control master plan, but during the application phase the master plan was not yet developed. He further stated that he understands the BSA request is not typical, and that this issue was not known until the master erosion control plan was developed.

Chairman Jacobs asked Mr. Teran and Vice-Chairman Held if they had any notion that the construction or installation of a bridge is prohibited by statute or Commission policy. Mr. Teran that he is not aware if there are any prohibitions and that he would need to investigate this matter further with AWPf legal staff. Vice-Chairman Held stated that he was also not aware if there are prohibitions on bridge installations, but stated

that in the past the Commission has generally not been supportive of these types of construction activities because they wanted to see AWPf funding focused on actual restoration efforts.

Vice-Chairman stated that he is uncomfortable moving forward at this point, and that he would like to see a budget for the bridge construction activities before anything get approved so the Commission could evaluate if it would be reasonable. He also suggested that there may be a need for the Commission to have a discussion about funding these types of expenditures.

Commissioner Biesemeyer stated that he is also uncomfortable moving forward with seeing a budget, and did not see any issues with supporting the bridge construction provided that it does create the erosion control stated. He also asked if the master plan is available to evaluate and substantiate the amount of erosion control that would occur with the construction of both the pedestrian and vehicle bridges. Mr. Teran commented that a copy of the master plan is available in the project file.

Commissioner Biesemeyer made a motion that a decision on this request be tabled, and requested a copy of the detailed construction budget and the master plan designs for both the pedestrian and vehicle bridges be provided to the Commission for evaluation. Vice-Chairman Held and Commissioner Brick both seconded the motion. Chairman Jacobs requested that staff also evaluate if the grantee's request meets legal and Commission grant provision requirements. Commissioner Schock commented that the current budget for erosion control activities in the grant is approximately \$153,000 and that this funding is now being requested to construct bridges. He stated that he has reservations about the proposed actions and supports tabling the decision. He then asked for clarification about the original intent for the \$153,000. Mr. Teran responded that the original intent of the project was to implement various erosion control practices on the BSA property, and referred the Commission to page 14 of the grant award contract to the Introduction and Purpose language. He further stated that the grantee also received an ADEQ grant to implement erosion control and other water quality related projects on the property, and with those ADEQ funds they were essentially able to complete all the erosion control projects originally intended to be completed with AWPf funds. Commissioner Brick commented that Camp Geronimo is primarily used during the summertime and the proposed bridges would only be used when the camp is open and during monsoon season. He also commented that he was not sure if a pedestrian bridge would be used much by campers. Mr. Harmon responded that Webber Creek flows year-round and there are over 7 pedestrian bridge crossings that connect various trails on the property. He further stated that Camp Geronimo is used throughout the year for various activities, and the proposed pedestrian bridge would fix a major erosion issue on a large bank slope that their engineer's do not have a good solution to fix, and by installing a pedestrian bridge it would allow BSA to close off this slope from further use. With no other discussion or comments Chairman Jacobs called for a vote on the motion. The motion passed unanimously.

COMMISSION MEMBER ROLL CALL (cont.)

Commissioner Blackmore announced that she is present for the meeting.

AWPF GRANT 19-199WPF: HEADWATER STREAM RESTORATION - COYOTE SPRINGS, MUSEUM OF NORTHERN ARIZONA, FLAGSTAFF

Mr. Teran reminded the Commission that this project was discussed at the March 2021 Commission business meeting, and the grantee's request to amend the grant award contract to remove the requirement to sever and transfer their existing certificate of water right for the purposes of this project was tabled. He then stated that he did coordinate with Arizona Department of Water Resources (ADWR) staff to answer the 3 questions

the Commission requested clarification, and made reference to the privileged and confidential attorney work product provided to the Commission members.

Mr. Teran then introduced Mr. Larry Stevens who is representing the grantee. Mr. Stevens stated that the Museum of Northern Arizona is in the process of applying to ADWR for an assignment of the certificate of water right to their name, and also stated that there are no other water right claims to Coyote Springs which is located on Museum on Northern Arizona property. Mr. Stevens commented that a requirement to go through a sever and transfer process would be financially difficult for the non-profit organization. He also requested the Commission to identify how many previous AWPf grants have required a sever and transfer of water rights as part of the grant award contract to determine if they were being treated fairly.

Chairman Jacobs asked staff has a response to Mr. Stevens' inquires. Mr. Teran responded that he does not have a formal response to the number of projects that have required a sever and transfer of water rights, but stated that each AWPf project is unique in the scope of work, land ownership, and project details and permitting issues or requirements are handled within the grant award contract on a case by case basis based on all the variables related to that particular project.

Vice-Chairman Held stated that his initial concerns with this project was that the certificate of water right was issues in someone else's name and understands this is currently being addressed. He also stated that this is a unique situation because a sever and transfer process through ADWR is required to change the beneficial water use for a certificate of water right that has been issued and understands this can be an expensive process. He commented that because there are no other known surface water claimants on Coyote Springs that may be affected by the spring water use, there may be an opportunity for the grantee or landowner to file for a new surface water right claim for Coyote Springs through a separate process and not require a sever and transfer of the domestic use under the existing certificate of water right.

Vice-Chairman Held stated that based on the current situation and available information he does think the Commission can waive the current requirements as stated in the grant award contract, but if the grantee filed for a separate surface water right claim then the Commission may be able to consider the grantee's request again. Vice-Chairman Held made a motion to table this agenda item until the next meeting to allow Mr. Stevens to follow up with ADWR and to determine if the suggestions provided would be a feasible option for the Museum of Northern Arizona, with a second from Commissioner Brick. The motion passed unanimously.

ARIZONA WATER PROTECTION FUND PROGRAM UPDATES

Commission and Executive Committee Activity Updates

Mr. Teran provided the following updates:

- Mr. Stephen Turcotte was appointed to the AWPf Commission by the Speaker of the House of Representatives Russel Bowers in October 2020, and stated that Mr. Turcotte's appointment has replaced Mr. Roy Pierpoint on the AWPf Commission.
- Open Meeting Law Training for the AWPf Commission and staff was provided through the State Ombudsmen's office on May 4, 2021.
- Commissioner Brian Biesemeyer was appointed to the AWPf Executive Committee on April 27, 2021.

- AWPf Executive Committee met on May 18, 2021 and made recommendations to update the AWPf Commission Policy and Procedures manual. A copy of the draft meeting minutes was provided to Commissioner members for reference to agenda item #14.
- Executive Committee provided direction to use eCivis Grant Management Network as the AWPf grant application submittal portal to replace the traditional paper copy submittal process.

Legislative Update

- Under the proposed Governor’s and Legislative budgets for FY 2022, there is a Water Protection Fund deposit of \$1.25 million into the ADWR budget for the AWPf program. This appropriation includes the continued annual appropriation of \$250,000, with an additional one-time appropriation of \$1 million for FY 2022. Mr. Teran clarified that the original AWPf Legislative appropriation bill HB2035 was modified and renamed by a strike-everything amendment, but the AWPf appropriation was rolled into the larger ADWR budget discussion process.

Financial Update

- Mr. Teran provided an update the AWPf fund balance from July 1, 2020 through May 31, 2021 and described the current totals for revenues and expenditures for both the grant fund account and administration account. The fund balance on July 1, 2020 was \$3,428,028.

Revenues from July 1, 2020 – May 31, 2021 totaled \$198,623 and Mr. Teran explained that this total does reflect a transfer of \$161,720 from the grant account to the administration account that was approved by the Commission in June 2020. Mr. Teran also stated that there was a \$250,000 Legislative appropriation to the fund through ADWR’s budget, and clarified that deposits from this appropriation are only made on a quarterly basis and that is why the General Fund Appropriation line item only shows deposits totaling \$187,500 as of May 31, 2021, and the additional \$62,500 will be credited to AWPf in June 2021.

Expenditures from July 1, 2020 – May 31, 2021 totaled \$1,343,840. The fund cash balance on May 31, 2021 was \$2,282,811. This total includes \$2,227,106 from the grant account, and \$55,705 from the administration account.

Mr. Teran identified existing grant award contract obligations as \$1,552,603. The uncommitted AWPf fund balance is \$730,208 which includes \$674,503 from the grant account, and \$55,705 from the administration account.

Chairman Jacobs asked for any questions or comments from Commission members regarding the program updates presented. There were no questions or comments from the Commission.

ARIZONA WATER PROTECTION FUND ADMINISTRATION FUND TRANSFER REQUEST

Mr. Teran stated that as of May 31, 2021 there is a balance of \$55,705 available for program administration, and fiscal projections show that this balance would be depleted by mid-October 2021. Staff requested the Commission’s authorization to transfer \$161,720 of the unobligated fund balance to support administration needs for FY 2022. Mr. Teran further stated that the actual transfer would take place within the FY 2022 timeframe, most likely in August or September 2021.

Commissioner Schock asked for clarification if the \$250,000 appropriation for FY 2020 was already included in the FY 2021 beginning fund balance of \$3,387,615. Mr. Teran responded that that the \$250,000 appropriation was not included in the beginning fund balance, but that \$62,500 is deposited quarterly between July 1, 2020 to June 30, 2021.

Commissioner Schock asked if the FY 2022 \$1,250,000 appropriation is approved, would \$1,000,000 be credited immediately and the \$250,000 be credited quarterly. Mr. Teran responded that he does not have a definitive answer at this time, but if the appropriation was approved the Commission could consider that amount as available for budgeting purposes.

Commissioner Schock requested clarification if the \$161,720 requested will then come from the unobligated grant fund balance of \$674,503. Mr. Teran responded in the affirmative.

Commissioner Schock made a motion to transfer \$161,720 of the AWPf unobligated grant account fund balance to the AWPf program administration account for FY 2022, with a second from Commissioner Brick. The motion passed unanimously.

Chairman Jacobs asked if there were any concerns from the Commission to move item XI. Fiscal Year 2022 Grant Cycle up in agenda to discuss it next. There were no objections from the Commission.

FISCAL YEAR 2022 GRANT CYCLE

Chairman Jacobs stated that the Governor's budget has supported an additional \$1,000,000 in addition to the ongoing \$250,000 appropriation for AWPf, and sees this as a good sign that the Commission should not hesitate to consider implementing a grant cycle this next fiscal year if the funding is approved by the Legislature.

Vice-Chairman Held made a motion for the Commission to move forward with implementing a grant cycle for fiscal year 2022, with a second from Commissioner Blackmore. Chairman Jacobs asked for any comments or discussion on the motion.

Mr. Teran described the proposed FY 2022 grant application schedule. Chairman Jacobs stated that the final State budget should be in place by July 1, 2021, and asked Commission members if there were any conflicts or scheduling issues for the November 16-18, 2021 grant application selection meeting. No scheduling conflicts were identified. Chairman Jacobs called for a vote on the motion. The motion passed unanimously.

FISCAL YEAR 2021 ARIZONA WATER PROTECTION FUND ANNUAL REPORT

Chairman Jacobs stated that the AWPf Commission is required by law to submit an annual report to the Governor and Legislature by July 1st, and that a draft of the report has been provided to Commission members for review. Chairman Jacobs stated that the cover letter from the Chairman will be developed in incorporated for the final submittal, and asked the Commission for any comments regarding the report. Mr. Teran stated that he needs the end of the fiscal year financial report which will be provided by ADWR, and this will also be incorporated into the report for the final submittal when it become available. Vice-Chairman Held requested that a typographical error be corrected in the second paragraph on page 8.

Vice-Chairman Held made a motion to approve the fiscal year 2021 annual report, with a second from Commissioner Brick. Chairman Jacobs called for a vote on the motion. The motion passed unanimously.

Chairman Jacobs called for a recess from 12:27pm – 12:45pm. At 12:45pm the Executive Director called the roll of the Commission. Commissioners present at the time of roll call included Chairman Pat Jacobs, Vice-Chairman Rodney Held, Commissioner Brian Biesemeyer, Commissioners Shelley Blackmore, Commissioner Paul Brick, Commissioner Lucinda Earven, Commissioner William Schock, and Commissioner Stephen Turcotte.

FISCAL YEAR 2022 GRANT APPLICATION MANUAL

Mr. Teran stated that each time a grant cycle is initiated the Commission reviews and updates the grant application manual for the upcoming cycle. He mentioned that the Commission made updates to the manual for the proposed FY 2021 grant cycle which did not take place due to budget issues, and that the current manual does incorporate those updates.

Mr. Teran stated that the substantive changes in the current draft of the manual are on page 13 under the grant application submission requirements, and these updates refer to the electronic application submittal process that will be facilitated through the eCivis Grant Management System.

Chairman Jacobs asked for any comments or questions from the Commission. Commissioner Biesemeyer asked if the proposed webinar will be for training purposes and for clarification when this training would occur. Mr. Teran responded that the webinar will include a brief overview of the AWPf program and application requirements, and referred to the FY 2021 grant application process schedule that the tentative date for the webinar is July 21, 2021 if the portal is ready for use. Commissioner Biesemeyer commented that the webinar link in the application manual is blank and asked if that will be populated if the manual is approved. Mr. Teran responded in the affirmative, and that highlighted items in the manual will be populated with the final information, dates, links, etc. prior to publishing.

Commissioners Schock stated that there have been instances where applicants don't have all the required permits when the application is submitted, but intend to get them as part of the grant when they know their project has been funded. He also stated that there have been instances where grant funds were ultimately turned back because the grantee could not get the permits needed. He inquired if Commission members should be reviewing the permitting requirements for grant applications in more detail, and commented that during his experience on the Commission he has noted that permitting requirements for projects takes a lot of time, effort and costs on the grantee's part to obtain them. Vice-Chairman Held commented that grant applicants are not required to provide all necessary permits with a grant application, but if a project is awarded a grant all permits need to be submitted prior to implementing any on-the-ground work or applicable permitted activity. Commissioner Schock commented that the example Task on page 15 of the manual should also include references to State Land and State Historic Preservation Office permits. Vice-Chairman stated that during the last update of the grant application manual he believed there was specific language included for proposed projects on State Trust lands, and inquired if there were any other stipulations regarding permitting requirements include in the manual. Mr. Teran responded that page 18 of grant application manual does include required application contents if a proposed project is located on Arizona State Trust lands. He also stated that as part of the application review period if additional permits or clearances are identified for the proposed project, those will be identified in the AWPf staff review and noted as contract conditions that the Commission can incorporate into a grant award contract. Commissioner

Blackmore commented that she understands the State Trust Land Office is now trying to keep permitting approvals/disapprovals to 90 days or less. Chairman Jacobs requested clarification if grantees can be working on other project related Tasks such as reporting or monitoring, but are not able to break ground until the applicable permits or clearances are in place. Mr. Teran responded that permitting requirements can vary greatly between projects, but in general staff tracks projects to ensure that the applicable permits are in place for the specific project action to be implemented.

Commissioner Brick made a motion to approve the Fiscal Year 2022 grant application manual, with a second from Commissioner Turcotte. Chairman Jacobs called for a vote. The motion passed unanimously.

ARIZONA WATER PROTECTION FUND POLICY AND PROCEDURE MANUAL UPDATES

Mr. Teran stated that the policies in the AWPFC Commission's Policies and Procedure Manual that needed to be reviewed and discussed include Section 320: Compensation and Reimbursement for Commissioners, Section 411.10 Executive Committee members, and Section 411.15 Quorum. He also stated the AWPFC Executive Committee has made draft recommendations for these policies that were provided in the meeting materials for their review, along with the Executive's Committees draft meeting minutes that included their discussion on the policies. Mr. Teran further stated that updates to sections 411.10 & 411.15 have been made based on clarification provided to staff and the Commission following the recent Open Meeting Law training session and current Open Meeting Law provisions, and have been reviewed by AWPFC legal staff.

Section 320: Compensation and Reimbursement for Commissioners

Vice-Chairman Held stated that during the Executive Committee discussions on the compensation policy it was noted that all 3 Executive Committee members are currently reimbursed for Commission related services by their respective organizations so it was difficult to fully develop recommendations on a reimbursement policy for other Commission members when there was not input from the Commission members who would actually be affected by this policy. He also stated that other Commissioner's input is needed on the amount of time and other activities that would trigger the eligibility for compensation.

Commissioner Earven stated that she is not reimbursed by any organization for her time or expenses, and commented that costs for overnight travel to meetings in Phoenix can be quite expensive. Mr. Teran explained that all Commission members are eligible for reimbursement of travel expenses, but Commission members need to expressly request reimbursement via a travel claim and also be set up as a vendor with the State of Arizona. Mr. Teran referred the Commission to the page 5, Section 321 of the policy that begins to explain the process for Commission members who elect to receive compensation.

Chairman Jacobs asked for clarification regarding travel expenses and daily reimbursement. Mr. Teran responded that each Commission member is eligible for the \$30/day compensation as described in statute, and also eligible for reimbursement of travel expenses when engaging in AWPFC Commission business.

Commissioner Schock stated that he has previously requested reimbursement for travel expenses, but asked how Commission members proceed with requesting the \$30/day compensation for services. Mr. Teran referred the Commission to page 6, section 324-Compensation for Services that outlines the process for requesting the \$30/day compensation. Commissioner Schock stated that traveling to Phoenix for meetings and reviewing grant application materials takes up a lot of personal time, and inquired if this Commission has reviewed policies for other commissions in Arizona to see what is included in their compensation policies. Vice-Chairman Held commented that State statute limits AWPFC Commissioner compensation to \$30/day and since this cannot be changed, he did not feel there would be a need to review other Arizona commission policies at this time. He further stated that the need at this time is to identify what amount of

time is fair and justifiable for the \$30/day compensation with input from the full Commission because this would not necessarily affect the Executive Committee members who had input on the initial draft of the policy.

Vice-Chairman Held commented that in previous years the Commission member meeting sign-in sheets had a check box where members could identify if they are requesting compensation for their meeting attendance. A copy of the sign-in sheet would then be forwarded to the ADWR Human Resources office and they would process the compensation payments for those Commission members that requested it.

Commissioner Brick asked for clarification to the exceptions described under Section 324 on page 6. Mr. Teran responded that these exceptions are intended to include any other Commission member's activities or services that are not affiliated with specific Commission meeting services. Commissioner Brick asked where the funding for the compensation and travel reimbursements comes from. Mr. Teran responded that the funds would come from the AWPf administration account.

Commissioner Blackmore stated that she agrees this Commission should have some type of reasonable compensation, and commented that while people do donate their time, they should remember that they are also paying forward their time to fellow Arizonans.

Chairman Jacobs stated that the definition of "Day" on page 6, Section 323 needs to be agreed upon by the Commission to identify the minimum amount of time required for Commissioners to be eligible for the \$30/day compensation. Commissioner Biesemeyer suggested that a minimum of 2 hours of work be considered to count for a day of work eligible for compensation to start the discussion. Commissioner Brick suggested 1 hour. Commissioner Schock suggested 2 hours. Commissioners Turcotte suggested that a 2 to 8-hour block of time sounds reasonable for compensation. Chairman Jacobs asked if there was a motion or any other discussion of the definition of a day. Commissioner Turcotte made a motion to define "Day" under section 323-Definitions to read "Day means from two hours, up to eight hours of time worked in the same calendar day", with a second from Commissioner Brick. The motion passed unanimously.

Chairman Jacobs asked the Commission for any comments or discussion on the remaining red-lined text in the Policy and Procedures manual. Vice-Chairman Held suggested to update the language under Section 324, sentence two to read: "Exceptions to this authorization include attendance or participation in non-official events when completed on days not affiliated with Commission meeting services." The Commission had no issues or comments with the proposed change. Mr. Teran inquired if there were any other activities that needed to be identified for compensation under "Services" under Section 323-Definitions. None were identified or added.

Vice-Chairman Held made a motion to approve the language for AWPf Commission policies Sections 320 through 325 with all updates and final recommendations as presented, with a second from Commissioner Brick. The motion passed unanimously.

Section 411.10 Executive Committee members, and Section 411.15 Quorum

Chairman Jacobs stated that Open Meeting Law requirements have to be met by the Commission and updates to the AWPf Commission policies and procedures manual have been suggested based on recent training and clarifications provided to the AWPf Commission by the State Ombudsman Office. Mr. Teran stated that all suggested updates have been reviewed by AWPf legal staff.

Mr. Teran presented suggested updates to Section 411.10 Executive Committee members. Chairman Jacobs stated that the AWPf Executive Committee is made up of three members and two members make up a quorum, and other members of the Commission may attend Executive Committee meetings but are not allowed to participate since the Executive Committee is a formal standing committee. Vice-Chairman Held requested clarification on the public noticing requirements and what needs to be done if other Commission members plan to attend an Executive Committee meeting. Mr. Teran responded that while other AWPf Commission members may attend Executive Committee meetings, Executive Committee meeting public notices will need to include a notice of a possible quorum of the AWPf Commission and explain that AWPf Commission members that are not part of the AWPf Executive Committee will not participate or vote on business discussions in accordance with the Open Meeting Law.

Mr. Teran presented suggested updates to Section 411.15 Quorum. Chairman Jacobs asked if there were any comments on the suggested updates for this section. There were no comments from the Commission.

Chairman Jacobs stated that all suggested updates have been made to reflect compliance with Open Meeting Law requirements and ask if there is any further discussion on the proposed updates to the policies and procedures manual. There were no other comments from the Commission. Vice-Chairman Held made a motion to approve the updates to the AWPf Policies and Procedures manual Sections 411.10 and 411.15 as presented, with a second from Commissioner Brick. The motion passed unanimously.

CALL TO THE PUBLIC

Chairman Jacob made a call to the public. No public comments were made.

CALL FOR FUTURE AGENDA ITEMS

Chairman Jacobs made a call for future agenda items. Mr. Teran stated that there were two agenda items from today's meeting that were tabled by the Commission for future discussion. These included AWPf grants 19-201WPF: Webber Creek Sediment Control Project and 19-199WPF: Headwater Stream Restoration - Coyote Springs, Museum of Northern Arizona, Flagstaff.

FUTURE MEETING DATE(S)

The Commission selected September 14, 2021 at 10:00 a.m., and November 16 – 18, 2021 as the next Commission meeting dates. Mr. Teran stated that at this time ADWR is currently anticipating on opening its doors to the public by August 30, 2021 and that public meetings would potentially be allowed to take place within the ADWR office. He also stated that based on the use of the virtual meeting formats and the increased opportunity for public participation at meetings, it is likely that future meetings will be held in a hybrid format to include both in-person and virtual meeting attendance options.

ADJOURN

With no other agenda items, the meeting adjourned at 2:17 p.m.



Reuben Teran <rteran@azwater.gov>

RE: Notice of Public Comment Period for AWPB Fiscal Year 2022 Grant Applications

1 message

larry@springstewardship.org <larry@springstewardship.org>

Wed, Sep 15, 2021 at 8:24 AM

Reply-To: larry@springstewardship.org

To: Reuben Teran <rteran@azwater.gov>

Cc: Jeri Ledbetter <jeri@springstewardship.org>

Mr. Teran,

With regrets, the Museum of Northern Arizona has withdrawn its proposal for rehabilitation funding from Arizona Water Protection Fund due to uncertainty over the potential costs of altering MNA's water rights to the site. Please let me know if you have questions about this.

Larry Stevens, Curator

Biology Department

Museum of Northern Arizona

[3101 N. Ft. Valley Rd.](#)

[Flagstaff, AZ 86001](#)

LStevens@musnaz.org

Grand Canyon Council BSA

8840 E Chaparral Rd Suite 200 Scottsdale, Arizona 85250

www.grandcanyonbsa.org | 602-955-7747



September 5, 2021

Dear Mr. Teran and Members of the AWPf Commission,

It is with deep regret that I write to surrender the funds awarded in Contract 19-201WPF. As you have likely heard, the National Boy Scouts of America has been involved in bankruptcy hearings for the last 2 years. Though the Grand Canyon Council is a separate entity and not in bankruptcy, we have been asked along with all Councils nationwide to contribute 500 million towards the national settlement. The Grand Canyon Council's share of this debt is 7.1 million and the Executive Board has decided to contribute Camp Geronimo toward the settlement.

Though we were not able to utilize the AWPf funds, I am proud to say that our Scouting volunteers have spent almost 19,000 hours implementing the master erosion plan created by West Consultants. This work was recently tested when a microburst storm dropped over 6 inches of rain on Geronimo and the structures performed admirably reducing the sediment that would have previously ended up in Webber Creek.

The last two years have been extremely challenging for the Scouting movement, but we are excited to move forward and continue delivering our mission to "prepare young people to make ethical and moral choices over their lifetimes by instilling in them the values of the Scout Oath and Law." Thank you so much for considering the Grand Canyon Council for one of your grants. I hope that we will be able to work with your organization in the future.

Sincerely,

A handwritten signature in black ink that reads "Gregory W. Harmon".

Gregory W. Harmon

Director of Support Service

Grand Canyon Council, BSA



Re: AWPf Grant Application Presentation Information

1 message

Phil Ronnerud [REDACTED]
To: Reuben Teran <rteran@azwater.gov>

Wed, Nov 3, 2021 at 9:18 AM

Reuben:
Since Dick Kaler's passing, I feel it best that the grant application be postponed until the estate is settled.
Phil

On Thu, Oct 21, 2021 at 9:56 AM Reuben Teran <rteran@azwater.gov> wrote:
-UPDATE-

If you are still interested in presenting your project, below are the remaining time slots available:

- 12:30 – 12:50
- 12:55 – 1:15
- 1:20 – 1:40
- 1:45 – 2:05
- 3:35 – 3:55

If you are not planning to present your project please let me know. Thank you.

Reuben Terán | Executive Director
Arizona Water Protection Fund

On Mon, Oct 18, 2021 at 8:53 AM Reuben Teran <rteran@azwater.gov> wrote:
Arizona Water Protection Fund Fiscal Year 2022 Grant Applicant:

As part of the AWPf grant application process applicants have the opportunity to present their project to the AWPf Commission. Presentations will be part of the AWPf Commission meetings scheduled for Tuesday, November 16, 2022 to be held virtually via Webex.

Oral presentations are not required, but are recommended. 20 minutes will be allowed for each application which is to include the presentation and time for questions/answers. If you are interested in presenting to the Commission, please notify staff at rteran@azwater.gov or 602-771-8525 **no later than November 2, 2021.**

The attached table represents the times available for presentations. Time slots are available on a *first come, first served* basis. Please notify staff as soon as possible with your preferred time slot, and provide a second option in the event your first option is filled. Please include your grant application number and project title with your response.

If you are not planning on presenting, I would appreciate knowing that as well for scheduling purposes. Thank you, and please contact me if you have any questions.

Reuben Terán | Executive Director
Arizona Water Protection Fund
Arizona Department of Water Resources
[1110 W. Washington Street, Suite #310 | Phoenix, AZ 85007](http://1110.W.WashingtonStreet,Suite#310|Phoenix,AZ85007)
602-771-8525 | rteran@azwater.gov | www.azwpf.gov

Arizona Department of Water Resources
Water Protection Fund
PROJECTED MONIES AVAILABLE TO GRANT
For the period July 1, 2021, projected through June 30, 2022

Description	1302-WPF Grants	1303-WPF Administration	Total
Beginning Fund Balance - 7/1/2021	\$2,099,328	\$39,342	\$2,138,670
Revenues:			
Projected Interest Income		\$6,000	\$6,000
In-Lieu Fee Deposit	\$0	\$0	\$0
General Fund Appropriation	\$1,250,000	\$0	\$1,250,000
Transfers - Administrative Expenses	(\$161,720)	\$161,720	\$0
Total - Projected Revenues	\$1,088,280	\$167,720	\$1,256,000
Expenditures:			
FY 2022 Projected Salary Expense	\$0	\$161,720	\$161,720
Grantee Payments (through Oct 31, 2021)	\$2,050	\$0	\$2,050
Projected Travel	\$0	\$300	\$300
Projected Operating Expenses	\$0	\$600	\$600
Total - Projected Expenditures	\$2,050	\$162,620	\$164,670
Projected Fund Balance - as of October 31, 2021	\$3,185,557	\$44,442	\$3,229,999
Less: Existing Grant Obligations	(1,162,537)		
Uncommitted Balance	\$2,023,020	\$44,442	\$2,067,462

Less: Projected Admin Support (3 years)	(\$485,160)
Projected Funds Available to Grant	\$1,582,302

MEMORANDUM

To: Reuben Teran, Executive Director
Arizona Water Protection Fund

From: Arizona Water Protection Fund Commissioner

Subject: **Commissioner Conflict of Interest**

I hereby state that my relatives or I may have a “substantial interest” within the meaning of Arizona Revised Statutes §38-501, et seq., or other cause to refrain from participation in the Water Protection Fund Application(s) listed below. I will refrain from voting on or participating in any manner on the application(s) identified below.

Note: Attorneys who are members of the Water Protection Fund Commission are also bound by the Rules of Professional Conduct, Rules of the Supreme Court, 17A A.R.S., Rule 42.

Application Number(s)

Date

Printed name

Signature

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 1, 2021	Application Number: WPF2201	Type: Capital Project
Title: Verde River Riparian Restoration – Highway 89A to Bignotti		
Applicant Name: Friends of the Verde River		Requested Amount: \$300,000
AWPF Reviewer: Reuben Teran		Matching / Cost Share Funds: \$30,000

SUMMARY:

The Friends of the Verde River propose to collaborate with multiple Verde Watershed Restoration Coalition partners to 1) monitor vegetation treatments along the Verde River project area, 2) initially treat and retreat target invasive plants, 3) plan and implement landowner outreach and volunteer events to engage the community and educate people about the threats from invasive riparian plants, and 4) develop a restoration plan to reduce the size of an artificial pond on private property to reduce surface water use and potentially create a park-like community amenity. These proposed actions build upon the work completed and currently underway by Friends of the Verde River and the Verde Watershed Restoration Coalition partners, and will take place in the vicinity of previously funded Arizona Water Protection Fund project sites where a mix of initial and retreatment is needed for invasive plant species. The project area spans a total of 387 riparian acres on both sides of the Verde River within a 5.9-mile river reach located along Coconino National Forest, Prescott National Forest, and on private properties.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

- See attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The project proposes to protect/restore native riparian vegetation and habitat, and clearly identifies and demonstrates direct benefits to river, stream and riparian resources.

The project also proposes to develop a restoration plan to potentially reduce the size of a pond located on the Verde Village Property Owners Association property that is currently supplied by surface water. AWPf funding is only requested for the plan development and not the actual implementation of the pond or community amenity construction activities.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

The project has a high potential to restore and maintain habitat needs for riparian dependent wildlife species, and sensitive and special status wildlife species.

Feasibility (Measures appropriate to address issues of concern identified above)

Project objectives are clearly identified and demonstrate benefits to river, stream and riparian resources / dependent fish and wildlife resources.

Methodologies and designs clearly presented, appropriate and adequate

Overall methodologies and designs are clearly presented. Site specific monitoring and restoration plans will be developed and submitted as part of the scope of work. The restoration plan for the Verde Valley Property Owners Association will be submitted under a separate task.

Clarity and adequacy of the scope of work and deliverables

Clarity and adequacy of the scope of work and deliverables is evident.

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and subcontractors demonstrate experience and the expertise appropriate to implement the project as proposed.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The proposed project falls under the general plans, goals, and objectives of the Verde Watershed Restoration Coalition and Verde River Cooperative Invasive Plant Management Plan.

Monitoring

Objectives clearly identified

The FVR monitoring proposes to use a tiered approach to monitoring, including both quantitative and qualitative elements. These approaches will provide data to evaluate whether actions are meeting management objectives, indicators of whether modifications need to be made (adaptive management) during the process, and plant community changes (native and invasive) within the riparian corridor. Monitoring and native plant community surveys will occur during the growing season, prior to treatment activities, after Year 1 treatment, and after Year 2 treatment. Monitoring information is planned to be used to adapt management techniques to ensure the long-term success of the project, maximize effectiveness, document restoration benefits, and assess the health of the riparian ecosystem.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Monitoring of the project area will be following the overall monitoring protocols developed by Friends of the Verde River and Verde Watershed Restoration Coalition partners. A site-specific monitoring plan will be developed as part of the project's scope of work, and should be adequate to evaluate the effectiveness of invasive plant treatments and the overall benefits to Verde River riparian habitat resources.

Other Considerations:

Coordinated effort with state or watershed restoration programs

This project is being implemented under the general guidance of the Verde Watershed Restoration Coalition Strategic Restoration Plan, and the Verde River Cooperative Invasive Plant Management Plan.

Public outreach

The applicant proposes to develop a Landowner Outreach and Volunteer Plan which should direct work with landowners and land managers to plan and implement 2 outreach events in the project area and describe outreach materials. Outreach events are anticipated to engage local citizens in riparian restoration through invasive plant removal, monitoring, and related activities. Volunteer events will also combine education with restoration activities in the project area.

Project will support local businesses

The project has a high potential to support local businesses through contracting of services, materials purchases, and overall community engagement activities.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

It was not clear or described that out of state consultants would be used.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Coconino National Forest, Red Rock Ranger District
- RiversEdgeWest
- Prescott National Forest, Verde Ranger District
- Verde Village Property Owners Association
- The Nature Conservancy

Matching Funds

Matching fund are proposed to be provided by the following:

- Applicant - \$30,000

GENERAL COMMENTS:

The applicant has the authority to work on US Forest Service lands (Coconino National Forest and Prescott National Forest), and the Verde Village Property Owners Association. It appears that work will also be done on other private lands as interest and access are secured; however, these will be identified during the project implantation period and were not specifically described in the application. A template for access and habitat improvements on these properties was included in the application.

TECHNICAL (project design, hydrology, biology):

None at this time.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

- Task #6 on page 17 states that the “Verde Village Property Owners Association (VVPOA) currently owns and maintains an approximately 3-acre pond on Yavapai County Parcel 406-15-439. This pond

is filled with surface water from the Cottonwood Ditch. The VVPOA has interest in reducing the size of this pond and replacing the area with a new, lower water-use community amenity such as a park”. It is not clear if funding the development of a plan to reduce the size of a pond feature and replace it with a park type community amenity generally falls within the scope of the AWPf program. Page 8 states a project objective is to “plan for restoration of an artificial pond to improve habitat quality, increase river flows, protect water quality, and safeguard human health.”

- Clarification is needed if the smaller pond feature and proposed lower water-use park will continue to use surface water from the Cottonwood Ditch.
- Clarification is needed regarding the final design and maintenance plan for the Verde Village Property Owners Association pond. A review of the official records of ADWR has not revealed any surface water right or claim that authorizes the storage of surface water in the existing pond. The applicant should be aware that evidence of authority to impound surface water must be provided to the Arizona Department of Water Resources if the pond will continue to retain surface water.
- The budget under Task #5 describes “snacks” as part of the volunteer event supplies. The State of Arizona generally does not allow for the purchase of separate food or beverage products that are not part of travel and/or meal per diem costs. Staff does not recommend changing the proposed budget for volunteer supplies but recommends that any snack related costs not be eligible for reimbursement under volunteer event supplies.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- AWPf Commission determination is requested if the scope of work for the project should continue to include the development of the restoration plan to reduce the size of a 3-acre pond that is (or may be) using surface water from Cottonwood Ditch and replacing with a lower water use amenity such as a park. If this component remains as part of the project, staff suggests that verification of a surface water right for the pond and/or park feature be included a project deliverable before any funding is reimbursed for the plan development activities.
- A formal agreement for access and the pond reduction/park restoration plan development between the applicant and Verde River Owners Property Association will need to be submitted prior to the execution of an AWPf grant agreement if the project is selected for funding.
- Project implementation agreements with future private landowners identified during the project term will need to be included as task deliverables.
- Any proposed food related items associated with outreach activities identified in the application project budget should not be eligible for reimbursement.

APPLICATION SCREENING

WPF2201 - Title: Verde River Riparian Restoration – Highway 89A to Bignotti

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
 - The applicant has the authority to work on USFS lands (Coconino NF and Prescott NF), and support from the Verde Village Property Owners Association. It appears that work will be done on other private lands as interest and access are secured; however, these will be identified in the future and were not included in the application. A template for access and habitat improvements on these properties was included in the application.
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
 - Task #6 of the application pertains to the development of a plan to reduce the size of an existing pond feature and replacing the area with a new, lower water use community amenity such as a park.
- The application is consistent with Commission policies.**
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - Water rights are not applicable to the proposed project specifically; however, the project does intend to develop plans that would ultimately reduce the size of an artificial pond and replace it with an low water use park in the future, which may be subject to water rights.

- Clarification is needed if the proposed artificial pond and lower water-use park will continue to use surface water from the Cottonwood Ditch.
- Clarification is needed regarding the final design and maintenance plan for the Verde Village Property Owners Association pond. A review of the official records of ADWR has not revealed any surface water right or claim that authorizes the storage of surface water in the pond. The applicant should be aware that evidence of authority to impound surface water must be provided to the Arizona Department of Water Resources if the pond and/or park will continue to retain or use surface water.

Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.

- It appears that work will be done on other private lands as interest and access are secured; however, these will be identified in the future and were not included in the application. Any future work on private lands during the project period will require an access/habitat improvement agreement as part of the grant award project deliverables if the application is selected for funding. A template for access and habitat improvements on these properties was included in the application.
- A letter of support for the project was provided by Verde River Owners Property Association, but a formal agreement for access and the pond reduction/park restoration plan development between the applicant and will need to be submitted prior to the execution of an AWPf grant agreement if the project is selected for funding.

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2202	Type: Research Project
Title: Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs - Coconino / Redwall-Muav Aquifer Modeling Project Phase 2		
Applicant Name: Coconino Plateau Watershed Partnership		Requested Amount: \$62,500
AWPF Reviewer: Reuben Teran		Matching/Cost Share Funds: \$3,000

SUMMARY:

The Coconino Plateau Watershed Partnership (CPWP) is proposing a research project to update and improve the accuracy and applicability of the Coconino and Redwall-Muav Aquifer Modeling Project (CARAMP) groundwater flow model that is based on the Red Gap Ranch-Leupp Groundwater Flow Model (RGRLGFM) and The Regional Groundwater-Flow Model of the Redwall-Muav, Coconino, and Alluvial Basin Aquifer Systems of Northern and Central Arizona (NARGFM) Model for use in assessing groundwater availability and surface waters baseflow sustainability.

The final CARAMP model to be developed through this project is proposed to provide stakeholders within the areas of the Coconino and Redwall-Muav Aquifers with a robust tool to evaluate future water uses, in addition to developing a groundwater flow model that could potentially be used by the public to support their future water supply applications submitted to the Arizona Department of Water Resources (ADWR) Assured and Adequate Water Supply Program (AAWSP). The CPWP plans to make the completed model and files available to the public, along with instructions for their use.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

- See attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Research is applicable to river and riparian restoration and or fish and wildlife that are dependent on river and riparian resources

The application makes reference to incorporating updated hydrologic criteria and data into the CARAMP model to include improved hydrogeology controlling discharge to surface waters, a stream package to simulate stream-aquifer interaction to provide an accurate tool for calculating impacts to surface waters, along with a recharge analysis to address climate change. However, the application did not clearly

explain or demonstrate how the model or data gathered from the project would help inform river and riparian restoration and/or provide benefits to fish and wildlife resources.

Application demonstrates use of the Scientific Method

Background research includes data collection, analysis and synthesis

- Data collection will build on existing data, or generate new data
The proposed project will build on the existing Coconino And Redwall-Muav Aquifer Modeling Project, and incorporate modeling data from the RGRLGFM, NARGFM models and various hydrologic data sets.
- Quality literature review provided
A literature review was not provided the proposed research project, but the application did contain the existing modeling report dated February 2020 for the Coconino And Redwall-Muav Aquifer Modeling Project Northern Arizona.

Hypothesis or hypotheses are clearly articulated

A hypothesis was not described or clearly articulated.

Research/experimental design is clearly presented, appropriate and adequate to:

- Test hypothesis or hypotheses
A hypothesis was not described or clearly articulated.
- Analyze data and draw conclusions
The proposed methodology and scope of work in the application appears feasible to analyze water resources and climate change data. However, the application did not clearly explain or demonstrate how the model or data gathered from the project would help inform river and riparian restoration and/or provide benefits to fish and wildlife resources.
- Report results
The resulting model, data files, and instructions for its use will be made available for public use on the applicant's website. However, the application did not clearly explain or demonstrate how the model or data gathered from the project would help inform river and riparian restoration and/or provide benefits to fish and wildlife resources.

Feasibility

Clarity and adequacy of the scope of work and deliverables

The scope of work and deliverables appear adequate for the proposed project objectives of developing an updated groundwater flow model. However, the application did not clearly explain or demonstrate how the model or data gathered from the project would help inform river and riparian restoration and/or provide benefits to fish and wildlife resources.

Cost of research reflects potential benefits of outcomes

The cost appears adequate as research funds available for the fiscal year 2022 grant cycle are limited to \$62,500.

Expertise of applicant/personnel/subcontractors appropriate

The applicant and project personnel appear to have the appropriate expertise to implement and manage the proposed project. A subcontractor for the actual modeling efforts will be selected through the applicant's procurement process.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

- The proposed project is phase 2 of the Coconino And Redwall-Muav Aquifer Modeling Project. The report and findings of phase 1 of the project were provided in the application.
- External review of the application suggested there should be a discussion comparing results between the proposed study and those found in "Simulation of groundwater withdrawal scenarios for the Redwall-Muav and Coconino Aquifer Systems of northern and central Arizona" (USGS, 2016), as that study also evaluated impacts to the many of the same streams identified in this proposal – albeit under different pumping assumptions.

Research results may be translatable

Given the general nature of the proposed model and its functions, the results of the modeling effort may be translatable and used to model a variety of groundwater and surface water scenarios.

Proposal includes some form of publication as a deliverable

The CPWP plans to make the completed CARAMP model and files available to the public, along with instructions for their use.

Other Considerations

Project will support local businesses

It is not clear if the direct implementation of the project would support local businesses, unless the contractor hired by the applicant is a local business.

Out of state consultants are justified.

Not able to evaluate based on the information provided in the application.

GENERAL COMMENTS:

Letters of support for the project have been submitted by:

- Coconino County Community Development Department
- US Fish and Wildlife Service – Arizona Ecological Services Office
- City of Flagstaff Water Services Division
- Arizona Game and Fish Department
- City of Sedona Wastewater Department

- Town of Chino Valley

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

- See comments regarding the applicability of the project in meeting Arizona Water Protection Fund program statutory goal and objectives please see attached application screening document.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

None at this time.

APPLICATION SCREENING

WPF2202 – Assessing Aquifer Withdrawals to Sustain Baseflow in Streams and Springs - Coconino/Redwall-Muav Aquifer Modeling Project Phase 2

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
 - Not applicable for this project.
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
 - Arizona Department of Water Resources (ADWR) staff's interpretation on the intent of this application is to develop new criteria for assessing physical water availability under the ADWR Assured and Adequate Water Supply Program (AAWSP), and to develop a groundwater flow model for use by ADWR AAWSP applicants.
 - The application references using the results of the model to support an ADWR proposed rule change, however, at this time ADWR has no plans to modify or recommend modification of Rule 12-15-716: Physical Availability.
 - Page 6, paragraph 4 of the Background section of the application states "*These groundwater conditions were not addressed when the current rule (R12-15-716) was adopted. This is recognized by ADWR and they have planned for the rule modification on the condition of support from the CPWP*" [Coconino Plateau Watershed Partnership]. This statement is not an accurate assessment of this rule. Any future modification of Rule 12-15-716 would not be conditioned on the support of the Coconino Plateau Watershed Partnership.
- The application is consistent with Commission policies.**
 - See bullets above. Although the application does mention that an intent of the groundwater modeling effort is to provide data to protect surface water resources, it was not clear if the general intent of the project or overall actions proposed in the application fall within the statutory guidelines of the AWPf program.
- The application identified the correct categorization of project type.**
 - The application was submitted under the Research category. It was not clear if this is really a research project based on the grant application manual's definition or expected project components of a research project.
 - Based on the scope of work it was not clear if this application falls within the scope of AWPf related data collection and research projects or overall program objectives since it focuses on updating an existing groundwater model. The application did not specifically propose to conduct scientific research or data collection related to river and riparian resources.
- The application demonstrates compliance with five percent administrative costs maximum.**
 - No administration funds requested.

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- ☒ **Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
 - No administration funds requested.

- ☒ **Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
 - Not applicable for this project.

- ☒ **Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - Not applicable for this project.

- ☒ **Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2203	Type: Capital Project
Title: Little Green Valley Fen Restoration Feasibility Study		
Applicant Name: National Forest Foundation		Requested Amount: \$77,003
AWPF Reviewer: Reuben Teran		Matching / Cost Share Funds: \$17,252

SUMMARY:

The purpose of the Little Green Valley Fen restoration feasibility study is to gather technical information and expertise needed to develop and implement a plan to restore the wet meadow function of the Little Green Valley Fen (Fen). The Fen is located east of Payson, AZ on the Payson Ranger District of the Tonto National Forest (TNF) within Green Valley Creek, a watershed that ultimately feeds into the Salt River. Fens are extremely rare and unique in Arizona, and Little Green Valley is one of the largest fens (peat forming wetlands that receive recharge and nutrients almost exclusively from groundwater) in Arizona. A 20-foot-deep head cut advanced upstream hundreds of feet for many decades, creating significant gullies and eroding local soils.

In this proposed phase of work on the Little Green Valley Fen project the goal is to obtain the information needed in order to develop a restoration implementation plan and budget for restoring the wet meadow function of the Little Green Valley Fen, and extending the perennial flow of Green Valley Creek. This goal aligns with Phase 3 of the activities currently being undertaken by TNF and National Forest Foundation (NFF) to address restoration of the Little Green Valley Fen and Green Valley Creek:

- Phase 1: Develop Watershed Restoration Action Plan (complete 2021)
- Phase 2: Implement Fen enclosure project and provide a water source to ungulates and livestock off the meadow (Contractor selection process underway, target of December 2021 for completion)
- Phase 3: Conduct restoration feasibility study (anticipated complete in 2022)
- Phase 4: Implement plan to restore hydrologic function (anticipated start in 2023)

The objectives of this proposal are to develop an implementation plan and budget for restoring Little Green Valley Fen by 1) engaging contractor(s) to study feasibility of both form and process-based restoration scenarios for the fen; 2) gather monitoring data needed to assess condition and trend of the Fen after enclosure installation; and 3) synthesize the information obtained through objectives 2 & 3 and conduct a workshop/site visit to bring together relevant stakeholders and decide on a path forward.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

- See attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

Implementation of the proposed feasibility study will provide the applicant the data on how to restore proper hydrologic conditions of the Fen and the associated wetland functions.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

Although implementing the feasibility study itself will not have a direct impact to wildlife resources, the results of a feasibility study and ultimate restoration of the Fen have a high potential to benefit important and unique wildlife habitat.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

The methodologies and designs for implementing the feasibility study are clearly presented and appropriate.

Clarity and adequacy of the scope of work and deliverables

The proposed scope of work and deliverable appear adequate to meet the goals and objectives of the project.

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and suggested procurement of subcontractors appear appropriate to implement the project as proposed.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The Fen is the focal point of the Green Valley Watershed and the Little Green Valley Fen Restoration (and proposed feasibility study project) is identified as Essential Project #3 in the Green Valley Creek Watershed Restoration Action Plan.

Monitoring

Objectives clearly identified

Several monitoring activities are identified in the Green Valley Creek Watershed Restoration Action Plan. A project specific, detailed monitoring protocol will be developed and implemented under this proposal if selected for funding. Proposed monitoring activities will include repeat monitoring of riparian vegetation, hydrology, and water quality. Although specific methodologies are not available at this time, the proposed monitoring activities appear adequate to support the feasibility study and development of a Fen restoration plan.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Specific methodologies are not available at this time. The proposed monitoring activities including channel cross section transects, vegetation sampling transects, and collection of water quality samples appear adequate to support the overall feasibility study and development of a Fen restoration plan.

Other Considerations:

Coordinated effort with state or watershed restoration programs

The proposed feasibility study project falls under the coordinated effort under the Tonto National Forest's Green Valley Creek Watershed Restoration Action Plan.

Public outreach

The applicant does not specifically propose to implement a public outreach component for the project. However, they will organize a workshop with Tonto National Forest personnel, contractors, (and other stakeholders as appropriate) to discuss findings from the Feasibility Study and monitoring information, and weigh the costs and benefits of varying restoration approaches, and outline next steps.

Project will support local businesses

The project has the potential to support local business if local contractors are hired for project monitoring and assessments of the project area under the proposed feasibility study.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

The application did not specify if out of state consultants will be used. The applicant will be soliciting bids from interested contractors under their own procurement processes.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Tonto National Forest – Payson Ranger District
- Earnhardt Ranches
- Friends of the Tonto National Forest
- Trout Unlimited
- Arizona Game and Fish Department
- Arizona Department of Environmental Quality

Matching Funds

Matching fund are proposed to be provided by the following:

- Applicant - \$5,002
- Tonto National Forest - \$12,250

GENERAL COMMENTS:

None at this time.

TECHNICAL (project design, hydrology, biology):

Staff recommends that the locations, final designs and maintenance plans for the restoration techniques such as the “plug-and-pond” features in a future restoration plan include sufficient details to assess whether the restoration structures may require a surface water right. Structures that merely slow the flow of surface

water but allow that water to flow past the structure in its entirety “detain” surface water. Structures that impound surface water and prevent some portion of that water from flowing past the structure “retain” surface water. If any proposed structures are only detaining water, a maintenance plan should be included to assure that water will not be retained in the future.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

None identified.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

None identified.

APPLICATION SCREENING
WPF2203 – Little Green Valley Fen Restoration Feasibility Study

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
- The application is consistent with Commission policies.**
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - Water is not planned on being used for this project. For future reference, surface water rights may be necessary during future implementation of the project if surface water resources are purposefully retained and not allowed to flow naturally.
- Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2204	Type: Capital Project
Title: The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health		
Applicant Name: Arizona Department of Environmental Quality		Requested Amount: \$238,980
AWPF Reviewer: Reuben Teran		Matching / Cost Share Funds: \$74,000

SUMMARY:

In 2020, a joint project with the Arizona Department of Environmental Quality (ADEQ), Natural Channel Design, Arizona Conservation Corps, and the National Forest Foundation rehabilitated 145 unpermitted social trails leading to Oak Creek. Social trails are informal trails and not part of a trail network. In Oak Creek, a majority of social trails stem from unauthorized parking areas along Highway 89A and are exacerbated by increased visitation which causes soil erosion and transports sediment and *E. coli* into Oak Creek. The applicant and its partners propose to build upon these past efforts by rehabilitating and improving an additional 120 unpermitted social trails along an approximate 12-mile stretch of Oak Creek on lands managed by the Coconino National Forest, Red Rock Ranger District. Trails will be rehabilitated using locally sourced rock and brush to implement low-impact engineering techniques such as armoring and stabilizing bare soil, installing signage to encourage responsible recreation, and constructing wooden pedestrian barriers where appropriate. The applicant also proposes to monitor and maintain approximately the 145 trails previously rehabilitated, and monitor an additional 55 trails planned for future rehabilitation. Additional project monitoring will include measurements of *E. coli* contamination, monitoring and photographing pre- and post-decommissioned and improved trails, and modeling the reduction of sediment load levels in Oak Creek. This effort will complete a high-priority, essential project approved in the Oak Creek Watershed Restoration Action Plan (WRAP), and is intended to improve riparian habitat for wildlife and protect stream water quality.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

- See attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The application clearly identifies the threats to water quality and riparian habitat in Oak Creek and proposes to protect and rehabilitate trails in the uplands, floodplains, and riparian zones to enhance existing native riparian vegetation, wildlife habitat, and improve the water quality in Oak Creek.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

The project has a high potential to protect and restore habitat needs for aquatic and riparian dependent wildlife species. The applicant also stated that the project will improve habitat for the threatened Narrow-Headed Garter Snake and the Northern Mexican Garter Snake.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

The proposed methodologies appear appropriate and adequate to rehabilitate unauthorized social trails and monitor water quality.

Clarity and adequacy of the scope of work and deliverables

The first part of the project will rely heavily on re-establishing or extending contracts with various partners to build capacity to implement trail rehabilitation and monitoring activities. The scope of work and associated budgets may need to be slightly reorganized to better document project planning expenditures from actual restoration or monitoring expenditures, but overall the scope of work should be adequate.

An actual deliverable for Task #3 was not clearly spelled out and only referred to the successful rehabilitation of 120 untreated social trails. Staff recommends that semi-annual or annual progress reports (as applicable) be included as deliverables under Task #3 to include, at a minimum, summaries of work completed and photos documenting the work being done. Task #4 currently identifies annual reports for monitoring activities.

Staff also recommends adding in a deliverable requirement in the form of a project work plan or other appropriate format to specifically identify the 120 trails planned to be rehabilitated with AWPF funds, the 145 previously rehabilitated trails that will be monitored and maintained with AWPF funds, and the remaining 55 trails that will be monitored with AWPF funds for future implementation.

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and subcontractors are appropriate to implement the project as proposed. As stated previously, successfully implementing the first part of the project by executing agreements and building capacity to implement the proposed project will be a key component of the project.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The proposed project is a continuation of an effort by the applicant and their project partners to implement the Oak Creek Watershed Restoration Action Plan.

Monitoring

Objectives clearly identified

Proposed objectives include pre and post monitoring of the effectiveness of trail decommissioning with three methods: (1) Estimating the reduction in sediment load delivery into Oak Creek, (2) Photo monitoring of closed social trails to help ensure they are no longer being used, and (3) comparisons between the pounds of trash picked up before closure and after closure of the trails as an indicator of effectiveness of trail closures.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

The methods described in the Monitoring Plan Concept provided in the application appear appropriate to document the trail decommissioning activities. Photo monitoring and effectiveness of trail closures will evaluate the habitat enhancement benefits of the project, and the estimation in *E. coli* and sediment load reduction using the Water Erosion Prediction Protocol (WEPP) soil erosion and sedimentation modeling will directly evaluate water quality benefits to Oak Creek.

Other Considerations:

Coordinated effort with state or watershed restoration programs

The proposed project is a direct result of the coordinated efforts to implement the Oak Creek Watershed Restoration Action Plan.

Public outreach

Although the proposed scope of work does not contain a specific public outreach Task, all the work being implemented is geared towards public education in the form of protecting and/or rehabilitating unauthorized social trails from public use. In addition, some educational signage is proposed to be installed educating the public on the closed trails.

Project will support local businesses

The proposed project has a high potential to support local businesses through contracting of services, direct labor, and purchase of materials (e.g. rocks and fence material, informational signs, etc.).

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

Not applicable.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Coconino National Forest, Red Rock Ranger District
- National Forest Foundation
- Sharon Masek Lopez

Matching Funds

The application states that matching / cost share funds will be provided by the following:

- Applicant - \$50,000 (Non-point source federal funds were not verified in the application)
- National Forest (Service or Foundation?) - \$20,000
- Coconino National Forest - \$4,000 (Although a letter of support was included in the application it did not mention a commitment of resources to the project. It was not clear if these funds would also be pledged as part of the National Forest Foundation on behalf of the Coconino National Forest)

GENERAL COMMENTS:

Budget may need to be reorganized between Tasks #2 & #3 to better account for costs related to on-the-ground implementation and direct labor to develop and administer contracts for actual project activities.

TECHNICAL (project design, hydrology, biology):

None at this time.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

- The application mentioned many project partners needed to implement the project; however not all entities provided a letter or support or commitment to the project. It appears that they may partners that the applicant intends to contract with for future project work, but the relationship was not clear. See attached application screening document.
- The proposed budget contains line items in Tasks #2, #3, and #4 that identifies project subcontractors billing AWPf for reports and/or deliverables that are to be submitted to other project entities. Example: “*Conduct photopoint monitoring, and report findings to NFF* [National Forest Foundation] (*OCWC*) [Oak Creek Watershed Council]”. It is not clear exactly why AWPf is being requested to pay contractors to implement work and then have those reports submitted to other entities.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- Development of a specific AWPf project work plan identifying the 120 trails that will be rehabilitated, monitored, and/or maintained with AWPf funds.
- Progress report deliverable(s) for Task #3.
- Development of a project specific monitoring plan identifying which trails will be monitored with AWPf funds, and what attributes will be monitored for each trail. This plan should also include the monitoring methodologies to be used for sediment load modeling and *E. coli* measurement components.

APPLICATION SCREENING

WPF2204 – The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
 - A letter of support was submitted from the USFS, Coconino National Forest where most of the work will be implemented. A formal contract or agreement may need to be submitted prior to an AWPf contract if the project is awarded funding if the USFS also requires an agreement with the applicant.
 - A copy of an Encroachment Permit Application to the Arizona Department of Transportation (ADOT) was included in the grant application for work to be implemented on the highway right-of-way(s), however it states the project implementation dates are 9/7/2021 – 9/10/2021. It is not clear if other permits for the entire stretch of the project area are in progress. The budget section states these permits will need to be updated, and they will need to be added as deliverables for project work associated with this grant application for work along Highway 89A.
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
- The application is consistent with Commission policies.**
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
 - A letter of support was submitted from the USFS, Coconino National Forest where most of the work will be implemented. A formal contract or agreement may need to be submitted prior to an AWPf contract if the project is awarded funding if the USFS also requires an agreement with the applicant.

- A copy of an Encroachment Permit Application to the Arizona Department of Transportation (ADOT) was included in the grant application for work to implemented on the highway right-of-way(s), however it states the project implementation dates are 9/7/2021 – 9/10/2021. It is not clear if other permits for the entire stretch of the project area are in progress. The budget section states these permits will need to be updated, and they will need to be added as deliverables for project work associated with this grant application for work along Highway 89A.

Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.

- The use of water is not applicable to this project.

Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.

- This element was not clearly documented. Partners stated in the application and budget request included USDA Forest Service, National Forest Foundation, Arizona Conservation Corps, Natural Channel Design, Inc., Oak Creek Watershed Council, and Arizona Department of Transportation. Letters of support or acknowledgement of committing resources to the project were not included from Arizona Conservation Corps (potential contractor?), Natural Channel Design (potential contractor?), or Oak Creek Watershed Council (potential USFS contractor), or Arizona Department of Transportation (potential contractor?). However, the application budget section stated that existing USFS participating agreements and No-Fund agreements with National Forest Foundation, Oak Creek Watershed Council, and Arizona Conservation Corps will need to be renewed between project partners during the grant period. Copies of these existing agreements were not included in the AWPf application for reference.

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2205	Type: Water Conservation
Title: Building Water Conservation Capacity and Outreach Capabilities with Local Governments in Rural Arizona		
Applicant Name: University of Arizona Water Resources Research Center		Requested Amount: \$89,216
AWPF Reviewer: Reuben Teran		Matching Funds: \$0

SUMMARY:

The University of Arizona Water Resources Research Center (WRRC), in partnership with County Cooperative Extension partners, proposes a new initiative to support water conservation goals in four counties (Mohave, Cochise, Graham, and Greenlee) through the development of tailored outreach tools and resources, such as geospatial platforms, factsheets, and presentations for local governments. The applicant intends to promote effective and relevant conservation practices while building broad-based support and capacity to implement and maintain water conservation and demand management programs, and increase public awareness about their impact on riparian resources in Arizona. Each task will be performed in partnership with Cooperative Extension partners, local government representatives, and broad stakeholder engagement opportunities.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See the attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

It appears the overall goals of this water conservation project are to assess strategies and promote water conservation practices in rural communities, and to ultimately create water conservation tools and resources tailored to the geography and needs of each County. However, the application did not clearly demonstrate that this water conservation project is directly related to maintaining, enhancing and restoring river and riparian resources, or fish and wildlife that are dependent on these resources as required by statute. There may be indirect benefits to river and riparian resources in the future if water conservation practices are ultimately implemented.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

Staff was not able to assess if the project would directly benefit fish and wildlife resources, although there may be indirect benefits in the future if water conservation practices are ultimately implemented.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

The methodologies appear appropriate to implement the proposed water conservation project; however, it is not clear if the project would directly benefit fish and wildlife resources, although there may be indirect benefits in the future if water conservation practices are ultimately implemented.

Clarity and adequacy of the scope of work and deliverables

The scope of work appears adequate to assess environmental, local, and general watershed conditions, county water conservation goals, and public outreach strategies. However, it was not clear exactly what outreach products would be created or what the messaging would consist of to promote water conservation practices or river/riparian benefits in the 4 counties.

Expertise of applicant/personnel/subcontractors appropriate

The applicant and project personnel are appropriate to implement the proposed project.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The application states that this project will build upon existing data, readily available outreach tools, and established partnerships, but did not specially describe the extent or source of these existing resources.

Monitoring

Objectives clearly identified

Monitoring objectives were not identified.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Monitoring methods were not identified to evaluate benefits to rivers, streams, riparian habitat, or wildlife resources.

Other Considerations:

Coordinated effort with state or watershed restoration programs

It was not clear if this project would be coordinated with state or watershed restoration programs, but appears that there will be significant coordination with county staff and interested water conservation stakeholders.

Public outreach

The project has a strong outreach component through gathering stakeholder and public input, and then disseminating water conservation information to the general public through public meetings, social media, newspapers, online, and other partnership opportunities.

Project will support local businesses

It was not clear if the proposed project would directly support local businesses.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

N/A

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Cochise County Cooperative Extension
- Graham County Cooperative Extension
- Greenlee County Cooperative Extension
- Mohave County Cooperative Extension
- Cochise County Engineering and Natural Resources

Matching Funds

There are no matching or cost share funds associated with the application.

GENERAL COMMENTS:

Staff noted cost calculation discrepancies in several line items when reviewing the budget, especially in Task #3 direct labor costs (difference of \$9,313.72 less being requested than calculated). Also, the Task totals of the detailed budget provided in the application did not match the grant request on the application cover page (difference of \$39.10 less being requested than calculated). *NOTE: staff did not modify any of the applicant's calculated amounts, or the applicant's requested grant amount on this review document.*

TECHNICAL (project design, hydrology, biology):

- The application proposes to reach out to local governments to target municipal conservation efforts to reduce per capita water use. While this is beneficial for overall municipal water conservation efforts, the application was not clear or describe how this would translate to or preserve riparian ecosystem health.
- The application refers to various water conservation outreach products being developed based on each local government's need(s), but specific examples of these products were not provided.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

The application does demonstrate and support water conservation goals outside of the 5 Active Management Areas, however the proposed project deliverables or products do not clearly demonstrate how they would provide direct benefits to river, stream, riparian resources, and/or fish and wildlife resources as mandated in AWPf statutes. However, there may be indirect benefits to these resources in the future if the resulting water conservation actions and programs are implemented, but there is no way to assess this based on the proposed application and scope of work.

Additional comments are identified in the attached application screening document.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- Staff suggests that a Task be added to the scope of work to include a stand-alone final report that summarizes the project and its benefits to river, stream, and riparian habitats, and a project closeout presentation to the AWPf Commission.

APPLICATION SCREENING
WPF2205 – Building Water Conservation Capacity and Outreach Capabilities with Local Governments in Rural Arizona

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
 - Not applicable for this project since site access and on-the-ground activities will not be necessary for this project.
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
 - It appears that the overall goals of this project are to assess strategies and promote water conservation practices in rural communities. The application does mention using riparian habitat and stream flow data (along with many other social, environmental, and land use data sets) as resources of concern that could be assessed to determine overall watershed conditions and ultimately identify municipal water conservation programs/actions. However, the application did not clearly demonstrate that the purpose of this water conservation project is directly related to maintaining, enhancing and restoring river and riparian resources, or fish and wildlife that are dependent on these resources as required by statute.
- The application is consistent with Commission policies.**
 - See above.
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
 - Not applicable for this project since site access and on-the-ground activities will not be necessary for this project.
- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**

- Not applicable for this project.

- Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2206	Type: Capital Project
Title: Dye Ranch Erosion Control and Wetland Improvement Project		
Applicant Name: Arizona Game and Fish Department		Calculated Amount: \$76,935*
AWPF Reviewer: Reuben Teran		Matching / Cost Share Funds: \$28,561

SUMMARY:

The purpose of the Dye Ranch Erosion Control and Wetland Improvement Project is to improve habitat along the ephemeral stream and meadow on Dye Ranch, a 35.92-acre parcel of the Chevelon Canyon Ranches Wildlife Area owned by the Arizona Game and Fish Commission. The project would involve restoration work along the stream, including repairing existing head-cuts, and restoring pool and wetland habitat so that they support year-round water. The project intends to reduce erosion, improve water quality, and aid floodplain development by allowing floodwaters to spread out.

9 existing head-cuts on the property are planned to be restored by 1) reshaping the stream channel and floodplain, 2) armoring sections of the stream and banks with rock within the 100-year floodplain, and 3) slope and widen sections of the stream and install buried vertical grade control structures or hand-built rock grade structures. The restoration of 4 naturally appearing and functioning wetlands along the stream is proposed by deepening the existing shallow basins along the channel, and using existing clay to create water impermeable layers that will line the bottoms of each wetland. The applicant also intends to armor the inlet of each wetland with rock, and the outlet with sod.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See the attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The application clearly identifies and demonstrates direct benefits to the unnamed ephemeral stream through the restoration of proper stream geomorphology and channel characteristics, restoring 4 associated wetlands, and associated riparian habitat.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

The project has a high potential to benefit wildlife resources by increasing permanency of surface water along the stream and reducing erosion in the watershed. The applicant also proposes to create and improve habitat for the northern leopard frog, which is planned to be translocated into the site following restoration activities to establish a self-sustaining population. The application also identifies potential benefits to other special status species that occur in the area including the Mexican spotted owl, northern goshawk, Allen's lappet-browed bat, Townsend's big-eared bat, Arizona myotis, western red bat, Arizona tiger salamander, and Arizona treefrog.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

Project methodologies are clearly presented and adequate. Permitting requirements may take longer than anticipated given the amount of earth moving and construction involved, the need to work outside of breeding bird seasons, and surface water permitting requirements. The timeline to complete the proposed project actions will need to be considered in a grant award contract schedule if the project is approved for funding.

Clarity and adequacy of the scope of work and deliverables

The scope of work is clearly presented and adequate. The applicant is anticipating that all erosion control and earthwork will be completed in 4 weeks, however this timeline will need to be evaluated further depending on weather conditions, materials, permitting requirements, etc.

Staff recommends adding progress report deliverables into the scope of work to facilitate for the erosion control, wetland restoration, and monitoring Tasks as applicable for project tracking and reimbursement purposes.

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and subcontractors are appropriate to implement the project as proposed.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The proposed project activities fall under the Chevelon Canyon Ranches Wildlife Area Management Operational Plan developed by the Arizona Game and Fish Department.

Monitoring

Objectives clearly identified

Monitoring objectives were identified and include overall habitat conditions, surface water availability, water quality, integrity of the erosion control structures, and wildlife surveys for bats and northern leopard frogs.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Although several monitoring concepts were discussed in the application, methodologies or protocols were not specifically described. While the concepts described would be adequate to evaluate the benefits to the unnamed stream and wildlife resources, staff recommends the development and submittal of a formal

monitoring plan (to include data sheets) be added to the scope of work of a grant award contract as a separate deliverable to provide a repeatable, long-term resource document for monitoring the project area.

Other Considerations:

Coordinated effort with state or watershed restoration programs

The application was not clear if this project is a coordinated effort with state or watershed restoration programs, but the applicant will be coordinating with other federal agencies and wildlife conservation organizations to implement the proposed project.

Public outreach

The project does not propose any public outreach activities; however, Dye Ranch is managed for wildlife and public recreational opportunities such as wildlife viewing and hunting.

Project will support local businesses

This project has the potential to support local businesses through the purchase of materials and the use of local contractors.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

The applicant is proposing to use an out of state consultant/contractor for the project. The applicant has selected this entity because of his reputation as a nationally recognized expert in restoring wetlands, specifically for amphibians, and for his proven track record of improving wetland habitat for Arizona wildlife. The applicant states that the added cost to the project budget is less than 10% of the total budget since his consultation rate is considerably less and includes travel and other associated costs. The applicant also states that he donates much of his time in providing the design plans for creating leopard frog design plans for Arizona projects (including this one) because of his interest in restoration of aquatic habitat in the southwest. The applicant further states that the contractor always hires a local excavator operator for the earthwork when he works in Arizona.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Arizona Sportsmen for Wildlife Conservation
- Apache-Sitgreaves National Forest, Black Mesa Ranger District
- US Fish and Wildlife Service, Arizona Ecological Services Office
- Bat Conservation International
- Thomas Biebighauser, Wetland Restoration and Training, LLC

Matching Funds

Matching fund are proposed to be provided by the following:

- Applicant - \$16,100
- Bat Conservation International - \$10,250
- Wetland Restoration and Training - \$2,211

GENERAL COMMENTS:

The Chevron Canyon Ranches Management plans identifies that there is a well [Dye Well: 55-628191] on the Dye Ranch property, but it does not appear that any well water will be used for the restoration activities

since water to be used on the project is identified as surface water.

*Staff noted a \$210 over calculation in the amount of requested funds under Task #4 Erosion Control, and a \$204 under calculation in the amount of requested funds under Task #7 Monitoring. The difference of \$6 has been reduced from the applicant's original grant request and is noted on the cover page of this document.

It appears some of the application matching funds figures may have been calculated for activities prior to the submittal of the grant application, and would not necessarily be available as cost share to implement the future grant application tasks. The matching funds amount on the cover page of this document has not been modified from what was provided on the grant application cover page.

TECHNICAL (project design, hydrology, biology):

Detailed plans for erosion control and wetland restoration were included as part of the scope of work. Based on the details provided in the application it does not appear that a restoration plan would be necessary to be included as a separate deliverable in a grant award contract.

Post restoration monitoring will be implemented, and some parameters were briefly described to assess habitat conditions (e.g., surface water availability, water depth, pH, electroconductivity, etc.), structural improvements, and wildlife use of the project area. As stated above, staff recommends the development and submittal of a formal monitoring plan (including sample data sheets) be added to the scope of work of a grant award contract.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

The physical and legal availability water for the project was partially demonstrated. The applicant states that water has been beneficially used on the property since November 1961. The application did contain a Statement of Claim of Right to Use Public Waters of the State of Arizona that was notarized on August 31, 2021 and submitted to the Arizona Department of Water Resources.

Clarification is needed regarding the costs associated with Task #3 Rock Hauling (\$24,524). The line item in the detailed budget states: *6 to 12" quarry basalt rock delivered to Dye Ranch (Brimhall Sand 8/18/21)*. This date is prior to the grant application deadline, and it is not clear if these expenditures have already taken place. AWPf policy indicates that any expenditures made prior to the execution of a grant award contract are not eligible for reimbursement.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- Reduction of any AWPf grant award in the amount of \$24,524 under Task #3 budget if it is determined that the quarry basalt rock intended for use on the project has already been purchased by the applicant and/or delivered to the project site.
- Documentation of an applicable surface water right, and/or a grant award contract clause identifying the need to obtain the applicable surface water right prior to ground disturbing activities.
- Addition of a project monitoring plan to the scope of work.

APPLICATION SCREENING
WPF2206 – Dye Ranch Erosion Control and Wetland Improvement Project

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
- The application is consistent with Commission policies.**
 - Clarification is needed regarding the costs associated with Task #3 Rock Hauling (\$24, 524). The line item in the detailed budget states: *6 to 12” quarry basalt rock delivered to Dye Ranch (Brimhall Sand 8/18/21)*. This date is prior to the grant application deadline, and it is not clear if these expenditures have already taken place. AWPf policy indicates that any expenditures made prior to the execution of a grant award contract are not eligible for reimbursement.
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - Partially demonstrated. The applicant states that water has been beneficially used on the property since November 1961. NOTE (taken from the grant application): “[Dye Ranch] Well: Drilled circa 1967, and currently in use, the Dye Well (55-628191) is approximately 500 feet in depth, with a water depth recorded at 400 feet. The well is reported to have 12 inch steel casing. Copperstate Drilling & Supply Inc. tested the well on November 30, 1993, finding: the well to be 800 feet deep, with water at 738 feet, and a 6” steel casing. Estimated production was 15 gallons per minute.”

- The application did contain a Statement of Claim of Right to Use Public Waters of the State of Arizona that was notarized on August 31, 2021 and submitted to the Arizona Department of Water Resources. A review of the official records of ADWR has not revealed any surface water right or claim that authorizes the storage of surface water, with the understanding that the Statement of Claim recently submitted is still under review. A contract clause to provide evidence of authority to impound surface water will need to be included as a deliverable should the application be selected for funding, and the applicable surface water right documentation will need to be submitted prior to ground disturbing activities that promote the retention of surface water. The applicant should be aware that this has the potential to delay the implementation of the project.

Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2207	Type: Capital Project
Title: Restoration of Tacna Marsh		
Applicant Name: Arizona Game and Fish Department		Requested Amount: \$113,589
AWPF Reviewer: Reuben Teran		Calculated Cost Share Funds: \$288,673* (see matching funds review)

SUMMARY:

The Arizona Game and Fish Department (AGFD) is proposing to restore Tacna Marsh, a wetland located in the Quigley-Achee Wildlife Area (QAWA), and within an oxbow of the Gila River. QAWA was acquired by the Arizona Game and Fish Commission in 1995 to conserve Tacna Marsh. Porous soils, changes to the water regime, wildfire, and invasive vegetation have all contributed to the degradation of Tacna Marsh. However, soil seepage has been identified as the primary cause of water and habitat loss at Tacna Marsh, and AGFD has been awarded \$320,000 in Heritage funding for the purpose of restoring Tacna Marsh. Other treatment methods of soil seepage were tested locally by the Wellton Mohawk Irrigation and Drainage District (compaction, spray-on liners, and bentonite clay), and they found synthetic liners to be the only sure method of reducing soil seepage sufficiently to conserve water in the area. Additionally, a more reliable water source is needed to supplement the current water supply, which is drainage water from the Wellton Mohawk Irrigation and Drainage District.

Arizona Water Protection funds are being requested to supplement existing Heritage funding, and will be used for the purchase and installation of a synthetic liner within each of three subdivisions of the wetland. Heritage funds will be used to prepare each subgrade (remove vegetation, regrade, install water control structures, etc.), drill a new solar powered well dedicated to the purpose of supplying the wetland with water, backfill soil over the synthetic liners, and plant a minimum of 4 acres of native vegetation. The overall goals of the project are to restore approximately 4.5 acres of wetland habitat, and 6 acres of riparian habitat, and increase public use of QAWA by providing fishing, waterfowl hunting, and wildlife viewing opportunities.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The project has a high potential to restore riparian vegetation and wetland habitat when soil seepage issues have been remedied. The project will also increase available surface water and include revegetation of native riparian species such as cottonwood, willow, in addition to mulefat, California bulrush, scratchgrass, and saltgrass.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

The application states that historically, Tacna Marsh provided valuable habitat for fishes, small game, federally listed species, and State species of conservation need. Restoration of the project site has a high potential to reestablish and support wildlife resources dependent on riparian and wetland habitats.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

The proposed methodologies, project designs, and schematics are clearly presented and appropriate for the proposed project.

Clarity and adequacy of the scope of work and deliverables

Overall the scope of work is clear and adequate for the proposed project actions. Depending on the overall project timeline and anticipated construction schedule, staff recommends the addition of progress report deliverables to the scope of work under each applicable Task to assist with project tracking and potential reimbursement(s) under activities to be funded through AWPf. Staff also recommends all project planning documents/deliverables (restoration, monitoring, etc.) be grouped together under one Task.

Expertise of applicant/personnel/subcontractors appropriate

The applicant and project personnel are appropriate to implement the project as proposed. All proposed construction activities will be facilitated through the hiring of outside contractors to be secured using the State of Arizona procurement process.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The proposed project follows general guidelines and suggested measures identified in the Quigley Wildlife Management Area Pond Enhancement – Preliminary Assessment document dated January 2019.

Monitoring

Objectives clearly identified

Proposed monitoring components will include photograph monitoring and water surface area monitoring to provide reference points for habitat health and project effectiveness.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

The application states that project monitoring will be implemented prior to and during each activity, and water measurements will be taken regularly as soon as the wetland begins to refill. In general, these methods should be adequate to capture the overall progress of the project and visual indicators of the project's habitat benefits.

Other Considerations:

Coordinated effort with state or watershed restoration programs

The application was not clear if the proposed project was a coordinated effort with other State or watershed restoration programs.

Public outreach

The project does not propose any public outreach activities; however, the Quigley Wildlife Management Area is managed for wildlife and public recreational opportunities such as fishing, waterfowl hunting, and wildlife viewing.

Project will support local businesses

This project has the potential to support local businesses through the purchase of materials and the use of local contractors.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

Not applicable.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Triskee Farms, LLC
- Wellton-Mohawk Irrigation and Drainage District

Matching Funds

Cost-share funding for the project is being provided by the applicant in the form of an Arizona Game and Fish Department Heritage Fund award of \$320,000. The applicant has made it clear that these funds are committed to this project as a cost-share, but should not be considered as a formal “match” to the grant so that they can be used to match other potential funding sources and/or grant programs that do require a project fund match.

*The amount of cost-share identified on the cover page of this document (\$288,673) only accounts for the calculated amount of cost-share budgeted for the project as described in the detailed budget pages.

GENERAL COMMENTS:

The Arizona Department of Water Resources Groundwater Permitting Wells Program has provided AWPf staff with general comments pertaining to the permitting requirements for drilling a well. These comments were not included as part of this staff review, but are attached for future project reference.

According to the application, the 3 ponds proposed for restoration are currently being supplied with irrigation water through a concrete lined ditch, and an existing groundwater well located on the property. A review of the official records of the Arizona Department of Water Resources (ADWR) has not revealed any surface water right or claim that authorizes the storage of surface water in Pond 1, Pond 2 or Pond 3. If surface water resources would be used in the future the applicant should be aware that evidence of authority to impound surface water would need to be obtained and submitted to ADWR.

TECHNICAL (project design, hydrology, biology):

None.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

None.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

None.

APPLICATION SCREENING
WPF2207 – Restoration of Tacna Marsh

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
- The application is consistent with Commission policies.**
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**
 - Administrative costs were not requested by the applicant.

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
 - Administrative costs were not requested by the applicant.
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - A letter from Wellton-Mohawk Irrigation and Drainage District has provided the applicant a supply of drainage water not to exceed 75 acre-feet per year.
 - Task 2 of the scope of work describes that that a new well is planned to be drilled (with non-AWPf funding) as part of the overall project. The notice of intent to drill a well and subsequent well construction information will need to be included as deliverables if the project is awarded funding.
- Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**

- Cost-share funding for the project is being provided by the applicant in the form of Arizona Game and Fish Department Heritage Funds. The applicant has made it clear that these funds are committed to this project as a cost-share, but should not be considered as a formal “match” to the grant so that they can be used for other potential grant programs that do require a project fund match.

memo

Arizona Department of Water Resources

To: Reuben Teran, Executive Director
From: Stella Murillo, Manager
Date: October 6, 2021
Re: Arizona Water Protection Fund Fiscal Year Grant Application, No. WPF2207

Comments: On behalf of the Groundwater Permitting and Wells Unit, I reviewed the Arizona Water Protection Fund Grant Application number WPF2207. The Applicant is Arizona Game and Fish Department (Applicant).

The Project Title is: Restoration of Tacna Marsh.

The proposed project is to ensure that the synthetic liners are installed protected from the environment, re-establish native vegetation, and provide the wetland with a new water source.

The Applicant proposes to drill one new well. The site location is not located within an Active Management Area (AMA) or an Irrigation Non-Expansion Area (INA).

The following documents must be provided to the Arizona Department of Water Resources to give approval for a new proposed well.

Please submit one application for the proposed well. DWR Form 55-40 Notice of Intention to Drill, Deepen, Replace or Modify a Well, along with the appropriate fees. The Well Driller selected must be an active Arizona licensed well driller.

Once the well is constructed, the well drillers will be responsible for submitting form 55-55 "Well Drillers Report and Well Log." Pursuant to Arizona Revised Statute (A.R.S) § 45-600(A): "A well driller shall maintain a complete and accurate log of each well drilled. Within thirty days of completion of the drilling of any well in this state, the driller shall file a well driller report with the director which shall include all information contained in the log of the well, including information on the casing of the well and, if the well is artesian well, the capping."

If the Applicant does not own the parcels where the proposed well is to be drilled, please provide a copy of the lease agreement or a letter of consent from the parcel owner authorizing approval for the proposed well with the above-mentioned forms.

Furthermore, pursuant to A.R.S. §(B), the registered well owner is to file a completion report within thirty days after the installation of pumping equipment. Department records show a completion report has not been filed for this well.

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2208	Type: Capital Project
Title: Habitat Restoration in the Gila River Riparian Corridor		
Applicant Name: Gila Watershed Partnership of Arizona		Requested Amount: \$97,455
AWPF Reviewer: Reuben Teran		Calculated Matching Funds: \$31,160* (see matching funds review)

SUMMARY:

The Gila Watershed Partnership of Arizona (GWP) is requesting for funding for the restoration of 75 acres of riparian land along the Upper Gila River, and will focus on maintaining previously treated sites to promote native plant establishment and survival in the wake of tamarisk decline. Between 2014 and 2021, the GWP removed tamarisk from 181.17 acres of critical habitat. Of those acres, 92.86 were retreated to control re-sprouts and 79.34 were planted with native vegetation. Additionally, 18.11 acres were treated to control secondary weeds. To continue restoring native-dominated plant communities along the river, the applicant is shifting their restoration focus away from primary tamarisk removal and toward active management of previously treated sites. The proposed project will build upon previous efforts by intensively re-treating 50 acres of tamarisk re-sprouts and secondary weeds to prevent these species from regaining dominance, and plant 15 acres of previously treated land with native species, including both seeds and nursery stock.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See the attached applicant screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The proposed project clearly identifies and demonstrates direct benefits to river, stream and riparian resources through the restoration of native riparian vegetation and habitat.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

The proposed project will enhance and restore native riparian vegetation and habitat for local and migratory wildlife resources, in addition to federally listed species.

Feasibility (Measures appropriate to address issues of concern)

Methodologies and designs clearly presented, appropriate and adequate

The proposed project methodologies and restoration activities are clearly presented and adequate.

Clarity and adequacy of the scope of work and deliverables

The scope of work is clearly presented. Although several existing plans are referenced in the application, staff understands that stand alone work plans will be developed specifically for this proposed project.

The application has only identified 1 report/deliverable to be submitted at the end of the project period for the restoration actions, monitoring activities, and outreach efforts. Staff recommends that progress reports be included in the scope of work to facilitate project tracking and reimbursement needs.

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and potential subcontractors are appropriate to implement the project as proposed.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The proposed project is being implemented under the objectives and guidelines of the following plans:

- Monitoring & Adaptive Management Plan for Rehabilitation in the Upper Gila Watershed of Southeastern Arizona.
- Riparian Restoration Framework for the Upper Gila River
- Restoration Plan for the Upper Gila River 2021 - 2022

Monitoring

Objectives clearly identified

The application has identified 8 overarching monitoring objectives to evaluate progress towards their restoration goals. These include:

1. Reduce total cover of tamarisk to $\leq 10\%$ at all treated sites within 5 years of initial removal.
2. Reduce total cover of priority secondary weeds to $\leq 25\%$ within 5 years of initial tamarisk removal.
3. Native phreatophyte species will comprise $\geq 75\%$ of the relative canopy cover of woody species in planted areas within 5 years of planting.
4. Survival of out-planted native phreatophytes will be $\geq 70\%$ within 18 months of planting.
5. Native woody upland species will comprise $\geq 75\%$ of the relative canopy cover of woody species in planted areas within 5 years of planting.
6. Survival of out-planted native woody upland species will be $\geq 50\%$ within 18 months of planting.
7. Native seeded species will comprise $\geq 15\%$ of aerial cover in seeded zones within 5 years of planting.
8. New focal native phreatophyte seedlings are observed in late summer (August-September) in at least 1 in 5 years along channel bank lines cleared of tamarisk.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

The application states that a project specific monitoring plan will be developed, but it should include methods to evaluate the following parameters:

- Vegetation cover surveys
- Survival of Out-Planting Surveys
- Survival of Seeding Surveys
- Photo Points
- Natural Recruitment Surveys

Other Considerations:

Coordinated effort with state or watershed restoration programs

The application was not clear if this project is specifically coordinated with other State or watershed restoration programs, but the applicant has been actively working to restore the Upper Gila Watershed for approximately 30 years.

Public outreach

The applicant is proposing to implement a multi-faceted public education and outreach program. The application identifies several potential activities including a media campaign, educational booths, volunteer events, and meeting/conference presentation(s). The scope of work also states that a specific outreach plan will be developed for this project.

Project will support local businesses

The proposed project has a high potential to support local businesses through the purchase of supplies and equipment for restoration efforts, native seed for revegetation, and contracting for invasive plant management activities.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

Not applicable.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Arizona Department of Forestry and Fire Management
- Conservation Legacy
- Graham County

Note: Three additional letters of support were included in the application, but were all were dated for November 2020 and were referenced as letters of support for a Bureau of Reclamation WaterSmart Cooperative Watershed Management grant proposal.

Matching Funds

The application states that matching/cost share funds for the project will be provided by:

- Arizona Department of Forestry and Fire Management (\$48,600)
- Conservation Legacy (\$7,560)

Letters of support have been submitted (see above) documenting their commitment of resources for the proposed project.

*Note: Task #4 identifies \$25,000 of matching costs for water quality monitoring supplies. However, none of the proposed monitoring objectives or methods identified water quality monitoring as part of the scope of work for the proposed project. The matching funds total identified on the cover page of this document is \$25,000 less than what is listed on the grant application cover page.

Staff also noted over 1000% overhead costs calculated for Task #5, and over 400% overhead costs calculated for Task #6 in the matching funds budget.

GENERAL COMMENTS:

None.

TECHNICAL (project design, hydrology, biology):

None.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

As noted on the grant application cover page, the applicant has received several previous AWPf grants. Previous grant 17-190WPF implemented similar project work as proposed in the current grant application which consisted of tamarisk and invasive plant treatments, and related revegetation activities, in project sites R03, R08, R09, R10, R11, and R18. The project sites identified for treatment in this fiscal year 2022 application (per Restoration Plan for the Upper Gila River 2021 – 2022) include R08, R09, R10, R11, R18, and R14. As such there is overlap in the proposed project areas for 5 sites previously treated/restored under grant 17-190WPF. These include sites R08, R09, R10, R11, and R18.

All AWPf grants contain an operation and maintenance clause that identifies the grantee's obligation to maintain grant assisted improvements, including revegetation sites, for a period of 20 years. While the application did not specify that funds requested will be used to maintain previously funded AWPf improvements and/or revegetation sites, the Commission should be aware of this as it relates to the applicant's previous obligations to maintenance of AWPf funded grant assisted improvements.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- A contract clause stating that AWPf funds shall not be used for the planting of mesquite, tamarisk or other nonnative high-water usage trees that consume water to a degree that is detrimental to water conservation efforts.
- Addition of progress report deliverables for Tasks #3 - #5 to facilitate project tracking and reimbursement needs, as necessary.
- Verification or current documentation that the water for irrigation of the revegetation sites is still available from Graham County Electric Cooperative, Inc.

APPLICATION SCREENING
WPF2208 – Habitat Restoration in the Gila River Riparian Corridor

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
 - As part of the Gila Watershed Partnership’s overall restoration and revegetation strategy for the Gila River their plans do reference the planting of mesquite and acacia trees in the upper terraces and floodplains, where appropriate. AWPf statutes states that mesquite or other high-water use plants are not eligible to fund with AWPf funds. Explicit contract terms will need to be included stating that AWPf funds shall not be used to plant these types of trees on this specific project if the application is selected for funding.
- The application is consistent with Commission policies.**
 - The application identifies the re-treatment of 5 restoration project sites that were previously treated during AWPf grant 17-190WPF. It was not clear if the current funding requested will be used to re-treat and/or maintain previous AWPf funded grant assisted improvements, which may conflict with the past grant’s Operation and Maintenance general provision. Additional details are noted in the AWPf staff review.
- The application identified the correct categorization of project type.**
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - Partially demonstrated. An undated letter providing assurance of a water supply was included in the application in reference to a Freeport-McMoRan Inc. project site that states the applicant irrigates restoration plantings using water purchased through the Graham

County Electric Cooperative, Inc. The water is obtained through a metered hydrant and transported to the site using a 2,500-gallon water truck. It is then pumped into a water storage tank and distributed to plantings via an irrigation line to irrigation basin zones. The restoration plans for the individual project sites do reference the use of irrigation basin zones. It was not clear if this same water will be used for the AWPF project site(s).

- Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2209	Type: Capital Project
Title: Ravenna & Pampas Grass Control Along the Colorado River from Glen Canyon Dam to Diamond Creek		
Applicant Name: RiversEdge West		Requested Amount: \$43,178
AWPF Reviewer: Reuben Teran		Documented Matching Funds: \$11,720* (see matching funds review)

SUMMARY:

This project will take place along the Colorado River within Grand Canyon National Park (GRCA) and Glen Canyon National Recreation Area (GLCA) and is a collaborative effort between the National Park Service (NPS), RiversEdge West (501(c)3 nonprofit organization), and Mariposa Ecological and Botanical Consulting. This project will involve the mapping and manual removal of Ravenna grass (*Saccharum ravennae*) and pampas grass (*Cortaderia selloana*) populations through Glen Canyon National Recreation Area and Grand Canyon National Park. Project activities will take place throughout the entire river corridor from Glen Canyon Dam River Mile 15 to Diamond Creek River Mile 225.0 (240 total river miles) and will continue to build on 28 years of invasive species control.

This project will involve two river trips and include a 4 day up-river trip from Lees Ferry to Glen Canyon Dam, and a 15-day oar-powered river trip from Lees Ferry to Diamond Creek. On both trips, crews will 1) revisit all known Ravenna and pampas populations mapped between 2012-2020, and 2) continue to map, monitor, and manually remove (i.e., clip all seed heads and dig up plants) all Ravenna grass and pampas grass along the Colorado River. The timing for this project is critical as the Ravenna and pampas grass populations are currently small and complete eradication is feasible within the next few years.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See the attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The project proposes to protect and enhance native riparian vegetation and habitat, and identifies direct benefits to the Colorado River and riparian resources.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

The project has a high potential to protect and maintain habitat for riparian dependent wildlife species.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

Detailed project implementation methodologies were not discussed in the application. The application only describes that Ravenna grass and pampas grass will be removed manually by clipping all seed heads and digging up the plants along the Colorado River corridor.

Clarity and adequacy of the scope of work and deliverables

The scope of work only contained 3 Tasks, with deliverables identified as Glen Canyon National Recreation Area Exotic Plant Management field datasheets for Tasks #1 and #2, and the project final report for Task #3.

Staff recommends adding an additional Task to the scope of work for the submittal of all applicable permits, agreements, authorizations, and environmental compliance documentation needed for the project.

Expertise of applicant/personnel/subcontractors appropriate

The applicant and identified project personnel are appropriate to implement the project as proposed.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

Specific project sites proposed for invasive species treatments in fiscal years 2021-2025 are identified in the FY2020 Annual Report to the Bureau of Reclamation titled: *[Long Term Experimental and Management Plan] LTEMP Non-Flow Vegetation Treatment Actions to Mitigate Glen Canyon Dam Operation Impacts on Riparian Vegetation along the Colorado River in Grand Canyon National Park.*

Monitoring

Objectives clearly identified

Project monitoring objectives were not described in the application. However, invasive plant locations and native species growing adjacent to treated areas is proposed to be included as part of the data collected for the deliverables under Tasks #1 and #2.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Specific project monitoring methods were not described in the application. However, invasive plant locations and native species growing adjacent to treated areas is proposed to be included as part of the data collected for the deliverables under Tasks #1 and #2.

Other Considerations:

Coordinated effort with state or watershed restoration programs

The application was not clear if this project is coordinated effort with other state or watershed restoration programs, but the proposed work does fall within the management guidelines of the National Park Service.

Public outreach

The scope of work for the project did not specifically identify a public outreach component. However the application did state that during the river trips that applicant would conduct outreach with as many private and commercial river trips as possible, and would present their results and efforts at the Grand Canyon River Guides-Guides Training Seminar in April of 2022 and at the RiversEdge West Conference in 2023.

Project will support local businesses

This project has the potential to support local businesses through the hiring of boatman, boat and associated camping gear rentals, and shuttle services.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

The application was not clear if out of state consultants would be used, but the applicant is based out of state in Grand Junction, Colorado.

Broad-based public involvement and support

There were no current letters of support submitted for the project. The application did contain a letter dated November 17, 2017 in support of an administrative access application to the river corridor in Grand Canyon National Park.

Matching Funds

The application states that matching funds will be provided by the following:

- | | |
|---|------------------|
| • Applicant | \$11,720 |
| • Grand Canyon Nation Park | \$ 8,101 |
| • <u>Glen Canyon National Recreation Area</u> | \$ 960 |
| | Total: \$ 20,781 |

*Note: Staff was not able to verify \$9,061 of the above total as there were no letters of support from the Grand Canyon National Park or Glen Canyon National Recreation Area, nor any indication if the identified funds have been formally committed to the project by these entities.

GENERAL COMMENTS:

None.

TECHNICAL (project design, hydrology, biology):

None.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

See attached application screening document.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- Written authorization or letter of support for the project from the National Park Service prior to the development of a grant award contract if the project is selected for funding.

- Addition of a Task for the submittal of all permits, agreements, authorizations, and environmental compliance documents applicable to the proposed project prior to the initiation of on the ground project activities.

APPLICATION SCREENING

WPF2209 – Ravenna & Pampas Grass Control Along the Colorado River from Glen Canyon Dam to Diamond Creek

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
 - Although all parts of the grant application field requirements were filled in, some of the documents anticipated to be included in the application pertaining to control and tenure and partnerships were not found. These are described below.

- The application contained adequate demonstration of control and tenure.**
 - Not fully demonstrated. The application states *“This is a collaborative effort between RiversEdge West, Grand Canyon National Park and Glen Canyon National Recreation Area. Because of the nature of this collaboration, the grant applicant will have permission for work and access. All permits will be secured through the National Park or National Recreation Area.”*
 - The application also states *“This grant proposal is a collaborative effort between Grand Canyon National Park, Glen Canyon National Recreation Area and RiversEdge West. All entities agree to collaborate and fulfill their obligations upon receiving funding for this project.”*
 - There were no letters of support or acknowledgement of the project submitted by the National Park Service for this application.
 - The application did contain the following statement *“The GRCA Science and Resource Management Division has issued Mariposa Ecological and Botanical Consulting a Scientific Research and Collecting Permit (GRCA-2020-SCI-0008) to conduct work within GRCA for the next several years and an administrative river permit for October 2021 with the promise of at least one administrative river permit a year.”* However, as noted above there was no documentation or letter of support or acknowledgement of this statement provided by the National Park Service.

- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**

- The application is consistent with Commission policies.**

- The application identified the correct categorization of project type.**

- The application demonstrates compliance with five percent administrative costs maximum.**
 - Administration funds were not requested in the application.

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
 - Administration funds were not requested in the application.

- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
 - Not fully demonstrated. The application states *“This is a collaborative effort between RiversEdge West, Grand Canyon National Park and Glen Canyon National Recreation Area. Because of the nature of this collaboration, the grant applicant will have permission for work and access. All permits will be secured through the National Park or National Recreation Area.”*
 - The application also states *“This grant proposal is a collaborative effort between Grand Canyon National Park, Glen Canyon National Recreation Area and RiversEdge West. All entities agree to collaborate and fulfill their obligations upon receiving funding for this project.”*
 - There were no letters of support or acknowledgement of the project submitted by the National Park Service for this project.
 - The application did contain the following statement *“The GRCA Science and Resource Management Division has issued Mariposa Ecological and Botanical Consulting a Scientific Research and Collecting Permit (GRCA-2020-SCI-0008) to conduct work within GRCA for the next several years and an administrative river permit for October 2021 with the promise of at least one administrative river permit a year.”* However, as noted above there was no documentation or letter of support or acknowledgement of this statement provided by the National Park Service.

- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - N/A. Water will not be used on this project.

- Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**
 - Not fully demonstrated. The application states *“This is a collaborative effort between RiversEdge West, Grand Canyon National Park and Glen Canyon National Recreation Area. Because of the nature of this collaboration, the grant applicant will have permission for work and access. All permits will be secured through the National Park or National Recreation Area.”*
 - The application also states *“This grant proposal is a collaborative effort between Grand Canyon National Park, Glen Canyon National Recreation Area and RiversEdge West. All entities agree to collaborate and fulfill their obligations upon receiving funding for this project.”*

APPLICATION SCREENING

WPF2209 – Ravenna & Pampas Grass Control Along the Colorado River from Glen Canyon Dam to Diamond Creek

- There were no letters of support or acknowledgement of the project submitted by the National Park Service for this application.
- There were no letters from the National Park Service officially committing match or project cost share in the application for the project.

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 2, 2021	Application Number: WPF2210	Type: Capital Project
Title: Enhancement and Maintenance Plans and Designs for Three Rio De Flag Perennial Ponds and Related Wetlands		
Applicant Name: City of Flagstaff		Requested Amount: \$101,115
AWPF Reviewer: Reuben Teran		Matching Funds: \$37,560

SUMMARY:

The purpose of this project is to develop integrated feasibility of designs, restoration plans, and project implementation budgets for three riparian-wetland proposed projects at Cheshire Pond, Frances Short Pond, and the Rio Wetlands. These three City of Flagstaff-owned reaches are located along perennial reaches of the Rio de Flag River (by nature an intermittent river system and riparian corridor) which flows through the City of Flagstaff, AZ. The four main components of the project are to 1) assess structural condition of the Cheshire Dam and riparian-wetland function of Cheshire Pond, 2) assess nutrient reduction strategies of Frances Short Pond, 3) assess future flood mitigation strategies for Rio Wetlands, and 4) ultimately develop detailed management and maintenance plans for all three project sites.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

Implementation of the proposed feasibility study will provide the applicant with resources to investigate and develop pond management and maintenance plans for both Cheshire Pond and Frances Short Pond, and a wetlands health plan (including a management and maintenance plan) for the Rio Wetlands. If the projects are found to be feasible, they should identify future restoration projects to enhance riparian habitat, water quality, and some hydrological functions along the Rio de Flag River.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources

Although implementing the feasibility study itself will not have a direct impact to wildlife resources, the development of management and maintenance plans for the future restoration of Cheshire Pond, Frances Short Pond, and the Rio Wetlands should have a high potential to improve fish and wildlife habitats.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

Although specific methodologies and data to be collected as part of the feasibility study was not fully described in the application, the overall plans to hire engineering firms and scientific consultants to appear appropriate and to gather the necessary information to develop management and maintenance plans for the three project areas.

Clarity and adequacy of the scope of work and deliverables

The proposed scope of work and deliverables were clear and adequate.

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and proposed use of subcontractors are appropriate to implement the project.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

- The application states that this proposal builds on previously funded watershed planning efforts led by the Watershed Alliance for the Rio de Flag, a collaborative watershed partnership to restore riparian habitat within the Rio de Flag watershed.
- The application states that plans for The Rio de Flag Flood Control Project (anticipated to be completed over the next five years) upstream of the Rio Wetlands has the potential to adversely impact the Rio Wetlands downstream morphology and hydrology through sedimentation and increased flood flow since it currently does not include plans for downstream impacts.
 - *It was not clear if the applicant intends to help incorporate both planning efforts together to avoid potential impacts or changes to any AWWP funded planning efforts, or if the Rio de Flag Flood Control Project should be completed first before any planning efforts are made to the Rio Wetlands.*
- The application states that the City of Flagstaff prepared an operations and management plan for the Frances Short Pond in that was revised in 2016, but the plan did not explore nutrient reduction strategies.
 - *While the proposed feasibility study will be exploring nutrient reduction strategies, it was not clear if a totally new operations and management plan will be developed as part of this feasibility study project, or if the existing (2016) plan will be updated to include the nutrient reduction strategies information obtained through this project.*

Monitoring

Objectives clearly identified

Monitoring objectives were not specifically identified in the application. However, consultants will be hired to 1) assess the riparian-wetland function of Cheshire Pond and the structural engineering of Cheshire Dam, 2) assess feasible management strategies for Frances Short Pond through a nutrient reduction study, and 3) conduct a drainage study and develop a detailed wetlands health plan for the Rio Wetlands.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Specific methods were not described in the application. These may be described in the future feasibility design plans.

Other Considerations:

Coordinated effort with state or watershed restoration programs

As noted above, the proposal builds on watershed planning efforts led by the Watershed Alliance for the Rio de Flag.

Public outreach

The application proposes to implement one public field trip and/or open house(s) for each of the three project sites to communicate the issues and potential solutions identified through completion of the work outlined in Tasks 1-4 of the proposed project. All project sites appear to be identified as multiuse riparian-wetland community amenities, and the applicant proposes to coordinate with Watershed Alliance for the Rio de Flag partners (including Friends of the Rio de Flag, Coconino County Engineering, and Willow Bend Environmental Education Center) to provide assistance in promoting the public field trip(s) and/or open house(s) through listservs and social media.

Project will support local businesses

Implementation of this feasibility study should support local businesses if they use local engineering firms, contractors, and consultants.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

The use of out of state consultants was not identified in the grant application.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

- Coconino County Engineering
- Friends of the Rio de Flag
- Willow Bend Environmental Education Center

Matching Funds

Matching fund are proposed to be provided by the following:

Applicant - \$37, 560

GENERAL COMMENTS:

- The application states that Frances Short Pond is a man-made structure that is built into the bed of the Rio de Flag, but it was not clear if it ever receives and/or stores surface water flow. The application states that water levels of Frances Short Pond are augmented by reclaimed water during dry periods or when water quality falls below the level required to support stocked fish, and the City of Flagstaff maintains reclaimed water rights for this pond. A review of the official records of the Arizona Department of Water Resources (ADWR) has not revealed any surface water right or claim that authorizes the storage of surface water in Frances Short Pond. If this pond does retain surface

water flows, coordination with ADWR Surface Water program is recommended to ensure that evidence of authority to impound surface water is obtained, if necessary.

- It was not clear if the Rio Wetlands appropriate surface water from the Rio de Flag. The Rio Wetlands may require a surface water right if it is retaining surface water or, if only detaining water, a maintenance plan should be in place to assure that water will not be retained in the future. Coordination with ADWR Surface Water program is recommended to ensure that evidence of authority to impound surface water is obtained, if necessary.
- A review of the official records of ADWR has revealed that the surface water right that authorizes the storage of surface water in Cheshire Pond, Certificate of Water Right No. 2789, does not list wildlife, including fish as a beneficial use. Coordination with ADWR Surface Water program is recommended to ensure that the current Certificate of Water Right is applicable for the planned or current beneficial water use(s), if necessary.

TECHNICAL (project design, hydrology, biology):

- See suggested contract conditions below.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

The implementation of this project will rely heavily on the use of subcontractors. The applicant needs to be aware that any subcontractor that is being paid with AWPf funds is also limited to the 5% maximum overhead/administration costs for the contracted work, per State statute. The applicant will need to cover any additional overhead costs that may be charged by their subcontractors.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- Clarification/Determination from the Commission if Task #4: Rio Wetlands Flood Mitigation and Wetlands Health should be included in the project scope of work given the uncertainties of the planned Rio de Flag Flood Control Project.

APPLICATION SCREENING

WPF2210 – Enhancement and Maintenance Plans and Designs for Three Rio De Flag Perennial Ponds and Related Wetlands

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- ☒ **The application is complete (based on the scope of work, funding, and required documents).**
 - NOTE: The grant application was digitally signed and displays in eCivis file download, but did not show up on the AWPf website review documents.
- ☒ **The application contained adequate demonstration of control and tenure.**
- ☒ **The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
- ☒ **The application is consistent with Commission policies.**
- ☒ **The application identified the correct categorization of project type.**
- ☒ **The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- ☒ **Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- ☒ **Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
- ☒ **Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - For the purposes of the proposed project water will not be used directly, but the future implementation of any designs and/or plans funded by AWPf may require clarification, updating, or obtaining applicable surface water rights.
- ☒ **Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**
 - Matching funds are only being provided by the applicant. Contractors will be hired to implement the primary work activities, and facilitated through the applicant's procurement process.

**FY 2022
ARIZONA WATER PROTECTION FUND
STAFF REVIEW**

Review Date: November 4, 2021	Application Number: WPF2211	Type: Capital Project
Title: Kirkland Restoration of Proper Stream Channel Characteristics Project		
Applicant Name: Triangle Natural Resource Conservation District		Requested Amount: \$230,600
AWPF Reviewer: Reuben Teran		Matching Funds: \$80,744

SUMMARY:

The Triangle Natural Resource Conservation District (Triangle NRCDD) is proposing to mediate erosion and flooding problems on Kirkland Creek, beginning just below the Burlington Northern Santa Fe (BNSF) Railroad bridge crossing adjacent to agricultural lands and the small community of Ruger Ranch. 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 on nearby private lands. 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.

Restoration of Kirkland Creek is proposed to be accomplished by restoring the stream channel characteristics 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; and bank armoring, revetments, 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 is intending to return Kirkland Creek to a more historical function, whereby 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 to private properties is minimized.

APPLICATION SCREENING FOR COMPLETENESS AND CONSISTENCY WITH COMMISSION POLICIES:

See the attached application screening document.

APPLICATION EVALUATION CRITERIA:

Overall assessment of the how the application demonstrates that the proposed project positively meets the evaluation criteria and purpose of the program:

- High
- Medium
- Low

Project Will Enhance, Maintain and/or Restore River, Stream and Riparian Resources

The project proposes to restore proper stream channel characteristics and hydrologic functions of Kirkland Creek that have been altered through the construction of a railroad bridge crossing. It appears that the primary focus of this project is flood protection and erosion mitigation, but the application did not propose

any post restoration monitoring activities (e.g., biologic, hydrologic, vegetation, etc.) that would assess how the vegetation removal, bank protection, and sediment redistribution activities may ultimately improve the riparian habitat or water quality/quantity. Current monitoring activities proposed include photo points and drone monitoring.

Project Will Benefit Fish and Wildlife Resources Dependent on River, Stream and Riparian Resources
Potential benefits to fish and wildlife resources were not described in the application. However, a proper functioning intermittent stream does provide important riparian habitat and would benefit local wildlife resources.

Feasibility (Measures appropriate to address issues of concern identified above)

Methodologies and designs clearly presented, appropriate and adequate

The project intends to direct floodwaters back within the main channel to mitigate active erosion and natural resource damage, and to protect the adjacent and down-stream properties. To accomplish these goals the applicant plans to remove accumulated sediments and vegetation within the main channel, increase bank height, and add erosion revetment. Although specific methodologies were not described in the application, the proposed actions with appropriate engineering designs and oversight should be adequate to implement the project as proposed.

Clarity and adequacy of the scope of work and deliverables

Overall the scope of work did not contain a lot of detail, but the general Tasks described should be adequate to help facilitate the implementation of the project. Staff will need to work with the applicant on developing a more detailed scope of work if the project is selected for funding, including the identification of any other necessary permits.

- *Staff recommends the development and submittal of a project monitoring plan as part of the scope of work to clarify data collection methods and locations, and to provide a repeatable reference guide for long term monitoring of the project area.*
- *Staff recommends the inclusion of written progress report deliverables to supplement the photo deliverables described for Tasks #3 and #5.*

Expertise of applicant/personnel/subcontractors appropriate

The applicant, project personnel, and use of engineering subcontractors are appropriate to implement the project as proposed.

Description of the relationship between any existing plans, reports and/or information relevant to the proposed project

The application was not clear if there are any existing plans relevant to the proposed project. It is also not clear if there is any funding or mitigation support from the BNSF Railroad since the application indicates that the reconstruction of the bridge is a root cause of the stream channel flooding and bank erosion issues in this section of Kirkland Creek.

Monitoring

Objectives clearly identified

The application states that baseline and post construction monitoring will be conducted in the project area

but monitoring objectives were not clearly identified. The application did not mention if data has been previously collected to establish baseline conditions related to the frequency or magnitude of flooding, or if these factors play a significant role in the amount of sedimentation and erosion seen in the project area.

Methods clearly presented, appropriate and adequate to evaluate benefits to rivers, streams and riparian resources and/or dependent fish and wildlife resources

Monitoring will consist of baseline photo points drone project monitoring, but methods and photo point locations won't be identified until the time of project implementation. The project budget and scope of work did not propose to include any funding to monitor hydrologic, biologic, or vegetation conditions of the project area.

- *Staff recommends the development and submittal of a project monitoring plan as part of the scope of work to clarify data collection methods and locations, and to provide a repeatable reference guide for long term monitoring of the project area.*

Other Considerations:

Coordinated effort with state or watershed restoration programs

The application was not clear if this project is a coordinated effort with other State or watershed restoration programs.

Public outreach

Task #6 in the scope of work made a brief reference to community coordination, but it was not clear what this action would entail. The application was clear that the flooding and erosion issues are affecting many private landowners in the vicinity of the project and there is strong local resident support for this project. Public outreach appears to be a very important component of the project.

Project will support local businesses

The project has the potential to support local businesses through the purchase of rock materials and native grass seed, and the use of local engineering and construction contractors.

If the applicant is proposing to use out of state consultants, there is adequate justification for their use and associated travel costs

The application did not identify if out of state consultants would be used for this project.

Broad-based public involvement and support

Letters of support for the project have been submitted by:

(Dated in 2018 and included in the application)

- Jorge and Gustavo Sepulveda
- Pem Meyer
- Steve Hampton
- Joe and Cathi Cobey
- Keith and Angie Levin
- Judd Logan
- Pamela and Kennedy Denney
- Tom Ritter
- George Fornara

- Chris Viterbo
- Tom Bill Johnson
- Renée Howes
- Jeff Trampush
- Steve Hampton
- Name/Signature Illegible – Resident of Kirkland, AZ

(Dated in 2021 and received during the public comment period)

- Anna Mary Glabb, President of Rigden Ranch, Inc.
- Cindy Eschenroeder
- Joe and Cathi Cobey
- Pamela Denney
- Renée Howes
- Ruger Ridge Home Owners Association
- Karen Fann, President of the Arizona State Senate
- Tom and Melanie Johnson
- Tom Ritter
- Harry Oberg, Yavapai County Board of Supervisors, District 1
- Laszlo Oberlander
- Judy Burges, Arizona House of Representatives, District 1
- James and Shannon Nafsey
- Diego Creus
- Larry and Barbara Nelson
- Marilyn Orcutt
- Shannon Farrah
- Steve Hampton

Matching Funds

Project matching funds are proposed to be provided by:

- Applicant - \$80,744

GENERAL COMMENTS:

- An application for this project was submitted in the fiscal year 2019 grant cycle but was not selected for funding.
- The application cover page noted that the project was located in the Prescott Active Management Area, but the project is actually located outside of an Active Management Area.

TECHNICAL (project design, hydrology, biology):

Details about how the applicant plans to restore the Kirkland Creek stream channel were only briefly described. Staff understands that an engineering firm will be hired to develop specific restoration and construction plans, but those will be submitted as grant award contract deliverables. Based on the actual scope of work other permitting requirements may be necessary and included as grant award deliverables.

ADMINISTRATIVE, POLICY, INSTITUTIONAL FACTORS:

- See the attached application screening document.

CONTRACT CONDITIONS THAT WILL NEED TO BE ADDED:

- Clarification on the specific landowner(s) where project work will be implemented, in addition to the formal project access and implementation agreement(s) prior to the development of a grant award contract if the project is selected for funding.
- Addition of a project monitoring plan to the scope of work. Commission determination is requested if other monitoring protocols (e.g., biologic, hydrologic, vegetation, etc.) should be included in the scope of work.
- Addition of written progress report deliverables for construction and monitoring Tasks.

APPLICATION SCREENING

WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics Project

Policies and Procedures Manual Criteria

ADWR staff screens the applications for meeting certain criteria, including:

- The application is complete (based on the scope of work, funding, and required documents).**
- The application contained adequate demonstration of control and tenure.**
 - The application states that the Triangle NRCD is working closely with the landowner of two acres that will need treatment. Multiple letters of support for the project were submitted by affected and/or nearby landowners, but it was not clear who the specific landowner(s) is or what work will be implemented on the specific property(s). Formal agreements with this landowner(s) will need to be added as project deliverables if the application is selected for funding.
- The application does not contain activities that are risky, unlawful, or outside the scope of the AWPf.**
 - The application states that due to the reconstruction of new bridge piling in the Kirkland Creek channel for the Burlington Northern Santa Fe (BNSF) Railroad, bank erosion and over-land flooding issues have been exacerbated the flooding in the proposed project area. It is not clear if may be a liability issue between the BNSF Railroad and the local landowners.
- The application is consistent with Commission policies.**
- The application identified the correct categorization of project type.**
 - The project type on the application cover page was noted as Water Conservation, but based on the scope of work the project should be identified as Capital.
- The application demonstrates compliance with five percent administrative costs maximum.**

Grant Application Manual Eligible Applications Criteria

Grant applications must meet all the following requirements to be considered eligible for evaluation during the FY 2022 grant cycle:

- Administrative costs are limited to a maximum of 5% of the total AWPf project funds requested.**
- Applicant has demonstrated legal and physical access as well as authority to implement the project in the area where the grant tasks are to be performed. After grant awards have been determined, signed cooperative agreements with all parties granting such access and authority, will need to be provided to the AWPf in a timely manner prior to the finalization of any contracts.**
 - The application states that the Triangle NRCD is working closely with the landowner of two acres that will need treatment. Multiple letters of support for the project were submitted by affected and/or nearby landowners, but it was not clear who the specific landowner(s) is or what work will be implemented on the specific property(s). Formal agreements with this

landowner(s) will need to be added as project deliverables if the application is selected for funding.

- Applicant has provided appropriate documentation that any water to be used in the project is legally and physically available to the applicant for the stated purpose.**
 - The application has not proposed the use of any water for the project or project activities. The application budget states that funds will be used to purchase native grass seed, but does not identify any costs or project actions related to irrigation or water use to support this native grass establishment.

- Applicant has demonstrated that vital partnerships, funding, etc. have been committed at the time of the application or submitted letters of support from the appropriate entities with a plan to obtain these critical elements prior to grant award.**
 - Match funding is being provided by the applicant.

 - The application states that the Triangle NRCD is working closely with the landowner of two acres that will need treatment. Multiple letters of support for the project were submitted by affected and/or nearby landowners, but it was not clear who the specific landowner(s) is or what work will be implemented on the specific property(s). Formal agreements with this landowner(s) will need to be added as project deliverables if the application is selected for funding.



Town Manager's Office
202 N. State Route 89
Chino Valley, AZ 86323

928-636-2646
928-636-2144
www.chinoaz.net

October 18, 2021

Arizona Water Protection Fund
Arizona Department of Water Resources
Attn: Reuben Teran
P.O. Box 36020
Phoenix, Arizona 85067

RE: Letter of Support for WPF2202 Grant Application from the Coconino Plateau Watershed Partnership (CPWP)

Dear Mr. Teran,

The Town of Chino Valley, Arizona, within the Prescott Active Management Area and located at the headwaters of the Upper Verde River would like to provide our comments to the Arizona Water Protection Fund in full support and recommendation to fund the proposed Grant WPF2202 with the Coconino Plateau Watershed Partnership (CPWP). Northern Arizona has unique and dynamic challenges unlike other parts of the State that require better knowledge, more due-diligence, and tools to understand impacts of groundwater pumping on our vital rivers, streams, and springs.

Chino Valley has embarked on a very similar endeavor to better understand current and future impacts on the Upper Verde River and the springs that provide the essential baseflows to this fragile river system. The Town of Chino Valley has joined several coalitions and regional organizations to better partner with other smaller organizations and NGOs like the Coconino Plateau Watershed Partnership (CPWP), to ensure the greatest amount of stakeholder benefits and input as possible.

The Coconino Plateau Watershed Partnership (CPWP) is a well-established and organized coalition with a mission that supports these activities and planning. The Town of Chino Valley sincerely hopes this proposed project will be evaluated and seen as a high priority project that will benefit a very large region and provide the required tools for making more sustainable water resource and watershed decisions and allow for better aquifer management.

Again, the Town of Chino Valley strongly supports this grant and would be happy to address any questions you may have regarding our support of this project. You may reach our Water Advisor Mark Holmes, P.G. via phone at 928-277-5253 or email at: mark.holmes.llc@gmail.com.

Thank you for your time in the review of this grant and our comments and we look forward to seeing the results of the upcoming grant cycle.

Sincerely,

A handwritten signature in blue ink that reads "Cindy Blackmore".

Cindy Blackmore
Town Manager
Town of Chino Valley

Re: Notice of Public Comment Period for AWPf Fiscal Year 2022 Grant Applications

1 message

Sharon Masek Lopez [REDACTED]
To: Reuben Teran <rteran@azwater.gov>
Cc: Ron Tiller <Tiller.Ronald@azdeq.gov>

Wed, Sep 15, 2021 at 9:08 AM

Dear Reuben,

As a former Principal Investigator and Executive Director of Oak Creek Watershed Council, and as a hydrologist and water quality specialist with over 25 years experience in watershed protection in Arizona, I wholeheartedly endorse ADEQ's Watershed Protection Fund proposal titled "*The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health*." Reducing soil erosion in the Oak Creek watershed is critically important to protect environmental and human health.

Eroded sediment that settles on the bottom of the creek serves as a reservoir of *E. coli* bacteria. When the sediment is disturbed by storm events or recreational activities in the creek, *E. coli* bacteria mix with the water column and cause exceedences of the water quality standards.

I applaud ADEQ for their very practical efforts to reduce erosion and sedimentation. Such actions can directly reduce water quality impairment. By effectively partnering with many like-minded organizations, ADEQ multiplies the impact of the Watershed Protection Fund.

Wishing you all the best for a successful round of grant funded projects.

Sharon

Sharon Masek Lopez
928.525.1980 office
[REDACTED] mobile

On Wed, Sep 15, 2021 at 8:01 AM Reuben Teran <rteran@azwater.gov> wrote:

Interested Party:

Please see the attached Notice of Public Comment Period for Arizona Water Protection Fund Fiscal Year 2022 Grant Applications. Thank you.

Reuben Terán | Executive Director

Arizona Water Protection Fund

Arizona Department of Water Resources

1110 W. Washington Street, Suite #310 | Phoenix, AZ 85007

602-771-8525 | rteran@azwater.gov | www.azwpcf.gov

—
To unsubscribe, send email to awpfdistributionlist+unsubscribe@azwater.gov

—
To unsubscribe from this group and stop receiving emails from it, send an email to WaterProtectionFundDistributionList+unsubscribe@azwater.gov.



County Comments on FY2022 AWPf application WPF2205

1 message

Apel, Mark <MApel@cochise.az.gov>

Tue, Sep 21, 2021 at 3:13 PM

To: "rteran@azwater.gov" <rteran@azwater.gov>

Cc: "Watkins, Jackie" <JWatkins@cochise.az.gov>, "capehart@email.arizona.edu" <capehart@email.arizona.edu>, "Hullinger, Ashley - (hullinger)" <hullinger@email.arizona.edu>, "Judd, Peggy" <PJudd@cochise.az.gov>

Dear Mr. Teran:

Thank you for the opportunity to comment on AWPf application WPF2205 ***Developing Water Conservation Capacity and Outreach Materials with Local Governments in Rural Arizona***. Cochise County recently participated in the Sonoran Institute's Growing Water Smart workshops and developed a Team Action Plan that includes water conservation outreach objectives beyond the Sierra Vista Subwatershed. There was consensus on our team, which also included the City of Benson's Planning Director, that UA Cooperative Extension's Water Wise program is a good model for outreach and information that could be extended more broadly and uniformly (in terms of messaging) around the county and other incorporated cities like Benson and Willcox. While it seems that this proposal could really increase the capacity for water conservation outreach resources, it also seems to be focused only on the San Pedro River. The UA Cooperative Extension Water Wise program has conducted science-based outreach and education for over 25 years in the Sierra Vista Subwatershed of the San Pedro Watershed, so there is little that this proposal could offer this part of the county, including the City of Sierra Vista, that wouldn't be redundant with all the work that has already been done in this arena. However, this proposal could very well benefit the residents of the Benson Subwatershed and Lower San Pedro River (Benson, Cascabel). In addition, the residents and city governments of the Willcox and Douglas Basins of our county could also benefit greatly from the outreach resources that are being proposed here, especially as they pertain to agricultural water conservation and efficiency. The County hopes that there is some flexibility built into this proposal and process that would allow consideration of these other rural areas in Cochise County. Thanks again for your invitation for input on this proposal.

Mark Apel

Environmental Projects Coordinator

Cochise County Engineering and Natural Resources

1415 Melody Lane, Building F

Bisbee, AZ 85603

www.cochise.az.gov

Email: mapel@cochise.az.gov

520-432-9306

Gila Watershed Partnership

1 message

Dustin Welker <DWelker@graham.az.gov>
To: "rteran@azwater.gov" <rteran@azwater.gov>

Tue, Sep 21, 2021 at 5:23 PM

Mr. Teran,

I would like to provide my official support, along with Graham County, for the Gila Watershed Partnership's grant application through the Arizona Water Protection Fund. The Gila Watershed Partnership (GWP) has been a great partner to Graham County and has an exceptional staff with a successful track record of implementing projects to improve water quality and protect and improve the riparian systems along the Gila River. The Gila River is the life blood of Graham County and we would like to strongly advocate for the successful award of the project Habitat Restoration in the Gila River Riparian Corridor.

*Sincerely,****Dustin Welker***

County Manager

Graham County

928-428-3250



Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 12, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

The Triangle NRCD is attempting to mitigate these issues that impact both my community and the Lower Colorado River watershed. Water quality and quantity in Arizona is a topic that we can all relate to as community members, farmers or ranchers, and conservationists. That is why I support the District's mitigation efforts and their appeal to the WPF for grant funds.

I am an owner of property upstream from the affected area (Rigden Ranch, Inc.) and I am very much in favor of any work that can be done to help with this problem.

Sincerely,



Anna Mary Glaab
President – Rigden Ranch, Inc.
10800 S. Kirkland Valley Road
Kirkland, AZ 86332
Telephone: 928-899-8861
Email: [REDACTED]

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 18, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211)

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211).

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes down stream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, I am impacted by this issue as access to my land is affected by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRC and their efforts to address this ongoing issue.

Sincerely,

Cindy A Eschenroeder

Cindy A Eschenroeder


Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 28, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211)

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211).

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, I am impacted by this issue as access to my land is affected by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I strongly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,



Diego Creus



Cell 



Water Protection Fund

1 message

Shannon Nafsey <[REDACTED]>
To: rteran@azwater.gov

Thu, Oct 28, 2021 at 8:52 PM

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, AZ 85007

October 28, 2021

RE: Letter of support for the Triangle Natural Resource Conservation District's grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project. (WPF2211)

To The Arizona WPF Grant Selection Committee:

We are writing to express our support of the Triangle Natural Resource Conservation District's grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211).

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, we are impacted by this issue as access to our land is affected by the overland flooding and erosion caused by the change in Kirkland Creek's historical channel. We firmly support the Triangle NRCD and their efforts to address this ongoing issue.

Respectfully,

James and Shannon Nafsey



Property Owners:
Ruger Ridge Lot 8



Reuben Teran <rteran@azwater.gov>

Kirkland Restoration of proper stream channel characteristic project WPF2211

1 message

hamptoncath [REDACTED]

Sat, Oct 23, 2021 at 10:45 AM

Reply-To [REDACTED]

To: "rteran@azwater.gov" <rteran@azwater.gov>

October 23, 2021

To whom it may concern:

We have lived in Kirkland since the early 1950's and have seen a drastic change in the water flow since the railroad erected a new bridge years ago. My father was foreman for the Bard Ranch (now known as Ruger Ranch) for years. The old previous bridge that they replaced worked fine and the water channel flowed correctly and there were no problems but when the railroad replaced it with the new bridge they put all the pillars at a angle that changed the flood waters immensely. Now the flood waters are a totally different angle and go back and forth and have caused a humongous change in the flow of water which has caused acres of flooded waters going all different ways.

We all need help to correct this problem as we live downstream of this disaster. So much land has been destroyed and the problem just keeps getting worse. We fear that not only will it take more land but if it is not corrected our homes will be destroyed.

We would very much appreciate your support for this project as we can not fix this by ourselves. Thanking you in advance for your help on this project.

Joe and Cathi Cobey
P O Box 330

[REDACTED]
Kirkland, AZ 86332

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 18, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211)

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211).

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, I am impacted by this issue as access to my farm/ranch/home/land is affected by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,

Larry and Barbara Nelson

Ruger Ridge #15



Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 25, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211)

To the Arizona WPF Grant Selection Committee:

I am writing to you as a Kirkland resident [REDACTED], Kirkland, AZ 86332, parcel #202-14-097) to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211).

Since we moved to our recently built ranch property 14 months ago, we have experienced the Kirkland Creek running/flooding several times. The only access to our property, that is 1 of the 17 parcels in the Ruger Ridge subdivision, is through the creek and while our property is not immediately next to the wash, our access to our property is usually affected when it rains. Every time there is significant rain fall and the creek runs, we are stranded for a few days, possibly 1-2 weeks (like last time) until the flooded land dries up enough to allow for some heavy machinery to come in that can remove the accumulated sand from the road that goes through the wash. In the past years, the required work to restore access was just a small section of the wash, but the last big flood at the end of July, 2021 deposited a lot of fresh sand and there was quite a bit of water to flood over land just West of the wash. When this happens, the area, including the road outside of the wash, turns into a muddy mess for a 1/4 mile stretch of the road and makes it impossible to cross.

I would like the situation to be improved so that the flood water stays in the channel of the creek rather than flood over land and cause us extra work to plow in a long section of road every time it rains. The WPF2211 project would help significantly and improve the situation by removing a lot of the accumulated sand that currently forces the flood water to leave the usual channel of the wash and come over land.

Sincerely,



Laszlo Oberlander
[REDACTED]

PO Box 85
[REDACTED]
Kirkland, AZ 86332



Kirkland Creek grant application (WPF2211)

1 message

Marilyn Orcut [REDACTED]
To: "rteran@azwater.gov" <rteran@azwater.gov>

Thu, Oct 28, 2021 at 6:25 PM

I am writing to express my personal support for this project. Though our board sent a letter, I am the board member who has lived her the longest. It's been over 9 years since we arrived and I've watched as damage has increased.

The pictures included in the boards letter are from me. It was impossible for 8 days to get into the property. The damage around the railroad trestle extended into deep gullies. After the water receded the gullies extended to within 2 ft of our access. It was through repeated text messages to the bridge inspector with pictures that the maintenance crew came out to rectify the situation. It took 2 days with equipment for gullies to be filled. However, it was simply moving debris stuck in cross members, and moving sand and dirt into gullies, so there is every reason to believe it will happen again. The gullie closest to our access sloped down 10 ft. It then connected to a much deeper one right by the pillars, approximately 20 ft deep. Anyone coming home at night who inadvertently went off the path was in danger of being nose down in the deep hole.

I urge you to give this project serious consideration.

Marilyn Orcutt, President
Ruger Ridge Property Owners Association

Sent from my Verizon, Samsung Galaxy smartphone
Get [Outlook for Android](#)



WPF2211 Kirkland Restoration of Proper Stream Channel Characteristics Project

1 message

Pamela DENNEY [REDACTED] >
To: "rteran@azwater.gov" <rteran@azwater.gov>

Sun, Oct 24, 2021 at 5:11 PM

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 24, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes down stream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

My home on my family's ranch sits by the creek and I am personally impacted by this issue of the over-land flooding and erosion caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,

Pamela L. Denney

Pamela L. (Ritter) Denney
[REDACTED]

PO Box 66

Kirkland, AZ 86332

Cell: [REDACTED]

Email [REDACTED]

Sent from [Mail](#) for Windows

RECEIVED

OCT 16 2021

LEGAL
DEPT OF WATER RESOURCES

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 12, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics
Project: WPF 2211

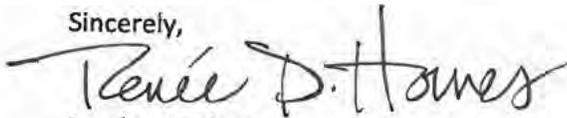
To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a relocated BNSF Railroad bridge crossing in the 70's, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes down stream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally I am impacted by this issue as my farm/ranch/home/land by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I am the property owner where the relocated Railroad Bridge Crossing is located and the first point of impact from that relocation. I personally experienced severe property loss and loss of valuable topsoil resulting in excessive erosion. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,



Renée D. Howes

[REDACTED]
Kirkland, AZ 86338
[REDACTED]

JUDY BURGES
1700 WEST WASHINGTON, SUITE H
PHOENIX, ARIZONA 85007-2844
CAPITOL PHONE: (602) 926-3256
TOLL FREE 1-800-352-8404
jburges@azleg.gov



COMMITTEES:
NATURAL RESOURCES,
ENERGY & WATER
Vice-Chairman
GOVERNMENT & ELECTIONS
MILITARY AFFAIRS & PUBLIC
SAFETY

DISTRICT 1

Arizona House of Representatives

Phoenix, Arizona 85007

October 11, 2021

Arizona Department of Water Resources
Attn: Mr. Reuben Teran, Executive Director
P. O. Box 36020
Phoenix, AZ 85067

RECEIVED

OCT 25 2021

LEGAL
DEPT OF WATER RESOURCES

RE: WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics Project

Dear Mr. Teran:

It is with much enthusiasm that I express support for the Triangle Natural Resource Conservations District grant. This project would help mitigate the Kirkland's stream flow that was inadvertently changed after construction of a new bridge crossing the creek.

Changes in the historic flow have caused erosive flooding, bank erosion and downstream sediment deposits that all contribute to concerns as flooding occurs. The new flow forces water overland resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters in downstream communities.

The Triangle NRC is attempting to mitigate these issues that impact my local communities and the Lower Colorado River watershed. Water quality and quantity in Arizona is a topic that we can all relate to as community members, farmers or ranchers, and conservationists.

Sincerely,

A handwritten signature in cursive script that reads "Judy Burges".

Representative Judy Burges
District #1



Ruger Ridge Home Owners Association

PO Box 356

Kirkland, AZ 86332

October 15, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project: WPF2211

To: The Arizona WPF Grant Selection Committee:

As the Board of Directors of Ruger Ridge Property Owners Association, we felt it necessary to state that this directly affects all 14 property owners of our development, and we are in support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project WPF2211.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion.

Our owners are personally impacted by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel as the only access to their property is through the channel of the creek. The damage to the channel at the BNSF railroad bridge crossing this year was not only significant, but was a safety concern for anyone accessing their property. In addition to the damage to the channel, the over-flooding extended ¼ mile beyond this area and caused severe damage to the road while flooding the adjacent parcels. We staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Marilyn Orcutt, President

Laszlo Oberlander, Vice President and Secretary

Joy Parrish, Treasurer













KAREN FANN
SENATE PRESIDENT
FIFTY-FIFTH LEGISLATURE
1700 WEST WASHINGTON, SENATE
PHOENIX, ARIZONA 85007-2844
PHONE: (602) 926-5874
kfann@azleg.gov
DISTRICT 1



COMMITTEES:
Rules, Chairman

Arizona State Senate

October 21, 2021

Arizona Department of Water Resources
Reuben Teran, Executive Director
P.O. Box 36020
Phoenix, AZ 85067

RE: WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics Project

Dear Mr. Teran:

It is with great pleasure that I provide my support for the Triangle Natural Resource Conservation District (Triangle NRCD) to receive grant funding for the purposes of executing the Kirkland Restoration of Proper Stream Channel Characteristics Project. As the Arizona Senator representing the area of Kirkland Creek, I appreciate how this project improves infrastructure while providing flood protection to the properties of the surrounding community and the public.

My position in public service often requires me to make decisions about a wide range of programs, projects and initiatives, which has allowed me the opportunity to understand the importance of projects like the Kirkland Restoration of Proper Stream Channel. In doing so, I look for sensible proposals that actually improve peoples' lives. I believe the Kirkland Restoration Project will do just that. It is of the utmost importance that improvements are made to address the current situation at Kirkland Creek. The outer banks of the river have eroded, causing extensive overbank flooding that damages property, adversely affects the surrounding environment and worst of all, puts people in danger. The Triangle NRCD's plan will mitigate these issues, restoring the stream and returning Kirkland Creek to its historical function.

Therefore, I am confident in the Triangle NRCD's ability to see this project through to its completion and fix the issues that have been affecting the surrounding community for several years. I look forward to following up on the success of this project after its completion.

Sincerely,

A handwritten signature in cursive script that reads "Karen Fann".

Karen Fann
President
Arizona State Senate

cc: Harry Oberg, Yavapai County Supervisor
Phil Bourdon, Yavapai County Administrator

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 28, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211)

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project (WPF2211).

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, I am impacted by this issue as access to my farm/ranch/home/land is affected by the overland flooding/erosion caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,

Shannon Farrah

Please contact with questions at [REDACTED]

ish (United States)

Focus



MacBook Pro

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

RECEIVED

NOV 02 2021

LEGAL
DEPT OF WATER RESOURCES

October 18th, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes down stream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

The Triangle NRCD is attempting to mitigate these issues that impact both my community and the Lower Colorado River watershed. Water quality and quantity in Arizona is a topic that we can all relate to as community members, farmers or ranchers, and conservationists. That is why I support the District's mitigation efforts and their appeal to the WPF for grant funds.

Personally, I am impacted by this issue as my farm/ranch/home/land by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I staunchly

support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,

A handwritten signature in black ink, appearing to read "Steve Hampton", written in a cursive style.

Steve Hampton



Support Letter for WPF2211 Kirkland Restoration of Proper Stream Channel Characteristics Project

1 message

Melainie Johnson >
Reply-To: Melainie Johnson >
To: "rteran@azwater.gov" <rteran@azwater.gov>

Wed, Oct 20, 2021 at 12:30 PM

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 20, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes down stream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

The Triangle NRCD is attempting to mitigate these issues that impact both my community and the Lower Colorado River watershed. Water quality and quantity in Arizona is a topic that we can relate to as community members and ranchers. This is why I support the District's efforts and their appeal for grant funds.

Sincerely,

Tom and Melainie Johnson

[REDACTED]
PO BOX 68
Kirkland, AZ 86332
[REDACTED]



Reuben Teran <rteran@azwater.gov>

Kirkland Restoration of Proper Stream Channel Characteristics Project WPF2211

1 message

Ritter328

Sun, Oct 24, 2021 at 5:48 PM

Reply-To:

To: "Rteran@azwater.gov" <Rteran@azwater.gov>

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 24, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, my four generation ranch is impacted by downstream sediment deposits caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,

Tom Ritter

PO Box 10
Kirkland, At 86332
[REDACTED]



Harry B. Oberg, District 1
YAVAPAI COUNTY BOARD OF SUPERVISORS

1015 Fair Street
Prescott, AZ 86305
Phone: (928) 771-3206
district1@yavapaiaz.gov

September 17, 2021

Arizona Department of Water Resources
Attn: Reuben Teran, Executive Director
P.O. Box 36020
Phoenix, AZ 85067

RE: WPF2211 – Kirkland Restoration of Proper Stream Channel Characteristics Project

Dear Mr. Teran,

This letter is written to express my support of the Triangle Natural Resource Conservation District's (NRCD) Arizona Water Protection Fund application, Kirkland Restoration of Proper Stream Channel Characteristics Project.

It is my opinion that the changes in Kirkland Creek have added to the erosion/sedimentation and flooding issues experienced by the local community, as well as disrupting the sediment balance of the creek downstream. The project is designed to return the watercourse to its natural state, protecting the community from flooding, and restoring the balance of the creek in the area and downstream.

The County and Flood Control District are willing participants and are available to assist in the project in any way needed.

Sincerely,

A handwritten signature in black ink that reads "Harry B. Oberg".

Harry Oberg, District 1
Yavapai County Board of Supervisors

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 27, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, I am impacted by this issue as my farm/ranch/home/land by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,



Louis

Thomas Lewis Marlow

[REDACTED]
Kirkland, AZ. 86332
[REDACTED]

Arizona Water Protection Fund
1110 W. Washington, Suite 310
Phoenix, Arizona 85007

October 27, 2021

RE: Letter of Support for the Triangle Natural Resource Conservation Districts' grant application to the Arizona Water Protection Fund for the Kirkland Restoration of Proper Stream Channel Characteristics Project

To the Arizona WPF Grant Selection Committee:

I am writing to express my support of the Triangle Natural Resource Conservation Districts' grant application for the Kirkland Restoration of Proper Stream Channel Characteristics Project.

Since the construction of a BNSF Railroad bridge crossing, Kirkland Creek has experienced unmitigated, erosive flooding due to the significant change in the channel's historic flow. Bank erosion and downstream sediment deposit is of concern in this area because when flooding occurs, the new flow of the creek forces water over land, resulting in property damage, as well as significant changes downstream with sediment buildup and channel erosion. Sedimentary deposits caused by flooding and erosion damage the watershed and pollutes waters downstream.

Personally, I am impacted by this issue as my farm/ranch/home/land by the over-land flooding/erosion caused by the change in Kirkland Creek's historical channel. I staunchly support the Triangle NRCD and their efforts to address this ongoing issue.

Sincerely,



Louis

Thomas Lewis Marlow

[REDACTED]
Kirkland, AZ. 86332
[REDACTED]

Verde River Riparian Restoration – Highway 89A to Bignotti



Tracy Stephens
Habitat Restoration
Program Manager

Verde River Riparian Restoration – Highway 89A to Bignotti

- Introduction to Friends of the Verde River and our mission
- Verde Watershed Restoration Coalition
- Project tasks/scope of work
 - Monitoring, treatment, landowner outreach, volunteer events
 - Pond restoration plan



Friends of the Verde River

Mission Statement

Friends of Verde River works collaboratively for a healthy Verde River System.

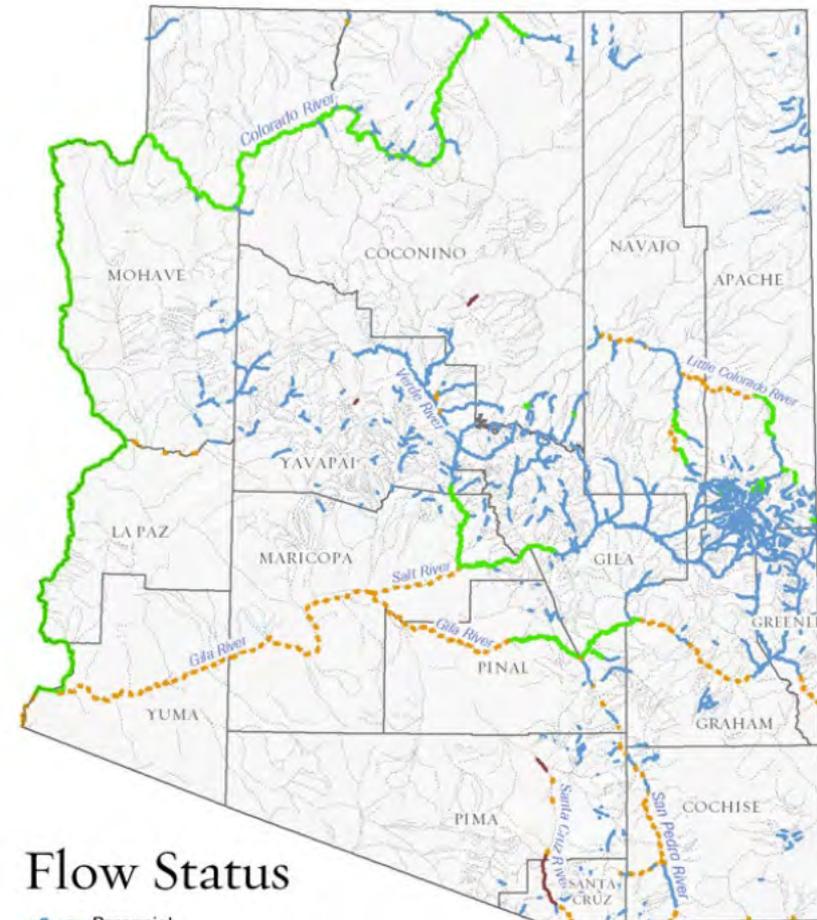
Vision Statement

We envision a healthy, flowing Verde River and tributaries that support our natural environment, vibrant communities, and quality of life for future generations.



The Verde River

- One of the last perennial rivers in AZ



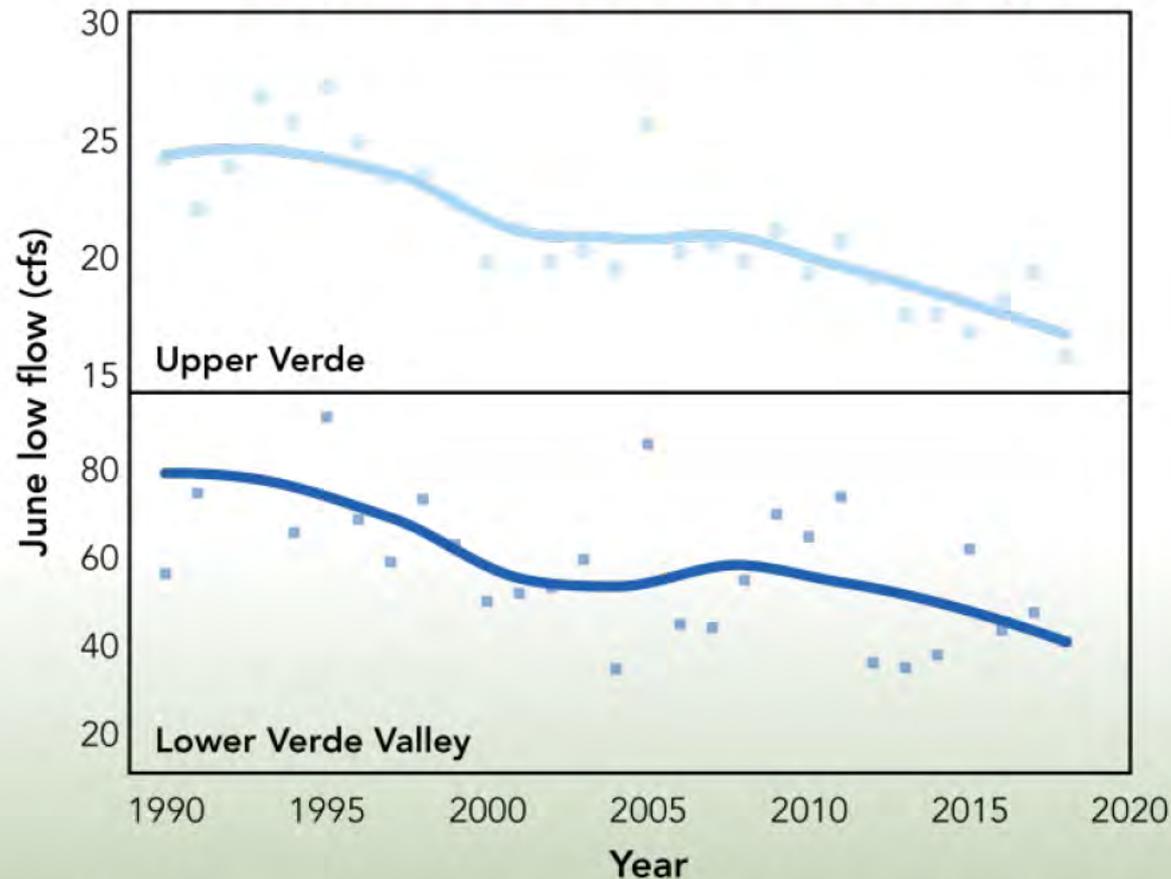
Flow Status

- Perennial
- Formerly Perennial
- Regulated
- Effluent Dominated (May Be Formerly Perennial)
- Intermittent or Ephemeral

The Nature Conservancy
Protecting nature. Preserving life.

Flow status data created from TNC Freshwater Assessment, available from azconservation.org.

Verde River flow is declining



Since 1990, flow in the Verde River and its tributaries has been steadily declining. From 1990 to 2018, Verde River June low flow declined 32% in the Upper Verde (top panel) and 46% in the Lower Verde Valley (bottom panel). Trends are based on the mean June 7-day low flow in cubic feet per second (cfs), measured by the U.S. Geological Survey.

Wild and Scenic

- The only two in Arizona



Verde Watershed Restoration Coalition

Stakeholder-driven

- >25 organizations (federal, state, municipal, tribal, non-profit)
- >235 private landowners

Watershed-wide approach to restoration

- *Mission: VWRC, functioning as a collaborative, ensures that conservation efforts are effectively implemented by being strategic and focused on project development and adaptive management.*
- *Vision: The members of the Verde Watershed Restoration Coalition envision a healthy, flowing Verde River system that sustains the natural environment and its communities with vibrant economies.*

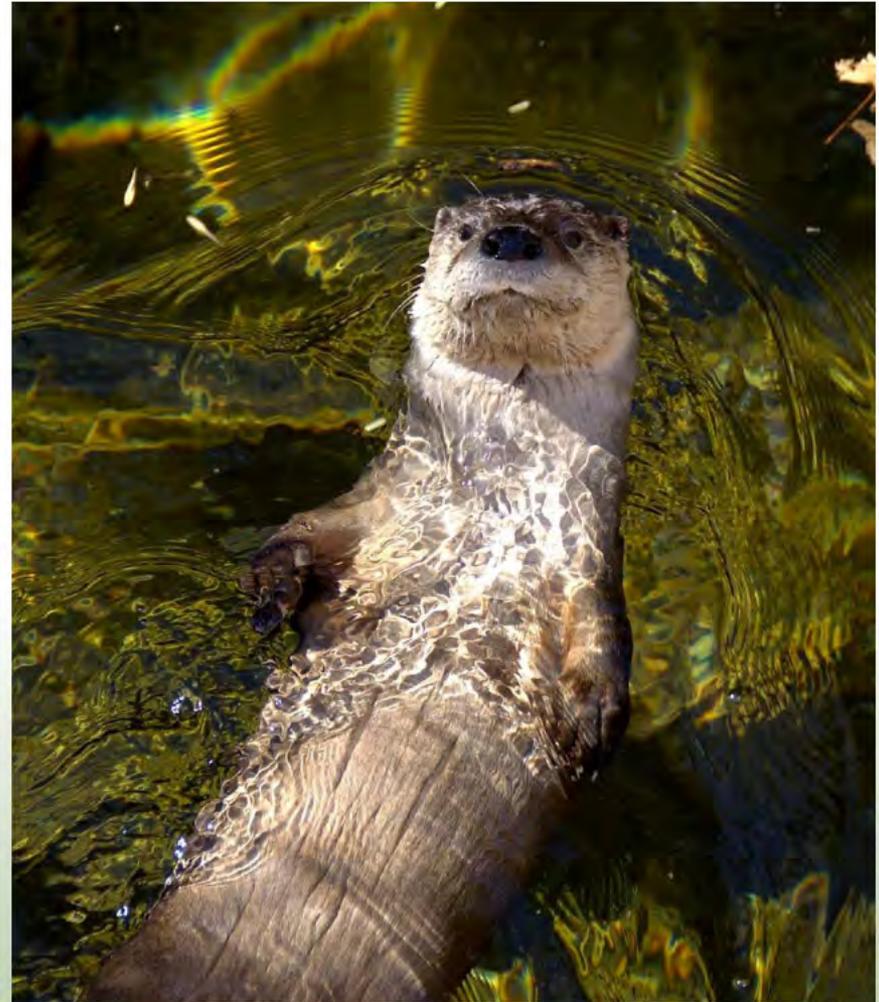


VWRC Partners



VWRC Conservation Objectives

- Habitat restoration
 - Riparian plant management
 - Habitat connectivity and corridors
- Reduce accelerated erosion
- Address water quality drivers
- Provide volunteer and educational opportunities



Project Components

1. Monitoring the Verde River project area
2. Treating target invasive plants
3. Planning and implementation of landowner outreach and volunteer events to engage the community and educate people about the threats from invasive riparian plants
4. Developing restoration plans for an artificial pond to increase its habitat values.

Riparian Plant Management Target Invasives

- Tree of heaven (*Ailanthus altissima*)
- Giant reed (*Arundo donax*)
- Russian olive (*Elaeagnus angustifolia*)
- Saltcedar (*Tamarix* spp.)



Ecological Impacts

- Wildlife habitat
- Channel morphology
- Soil chemistry
- Decrease diversity
- Ecosystem stability



Economic Impacts

- Tourism Industry
- Reduced wildlife viewing
- Restricted recreational access
- Lower quality experience



Methods

- Map,



Methods

- Map,
- Treat,



Methods

- Map,
- Treat,
- Monitor
 - Regrowth
 - Native Recruitment

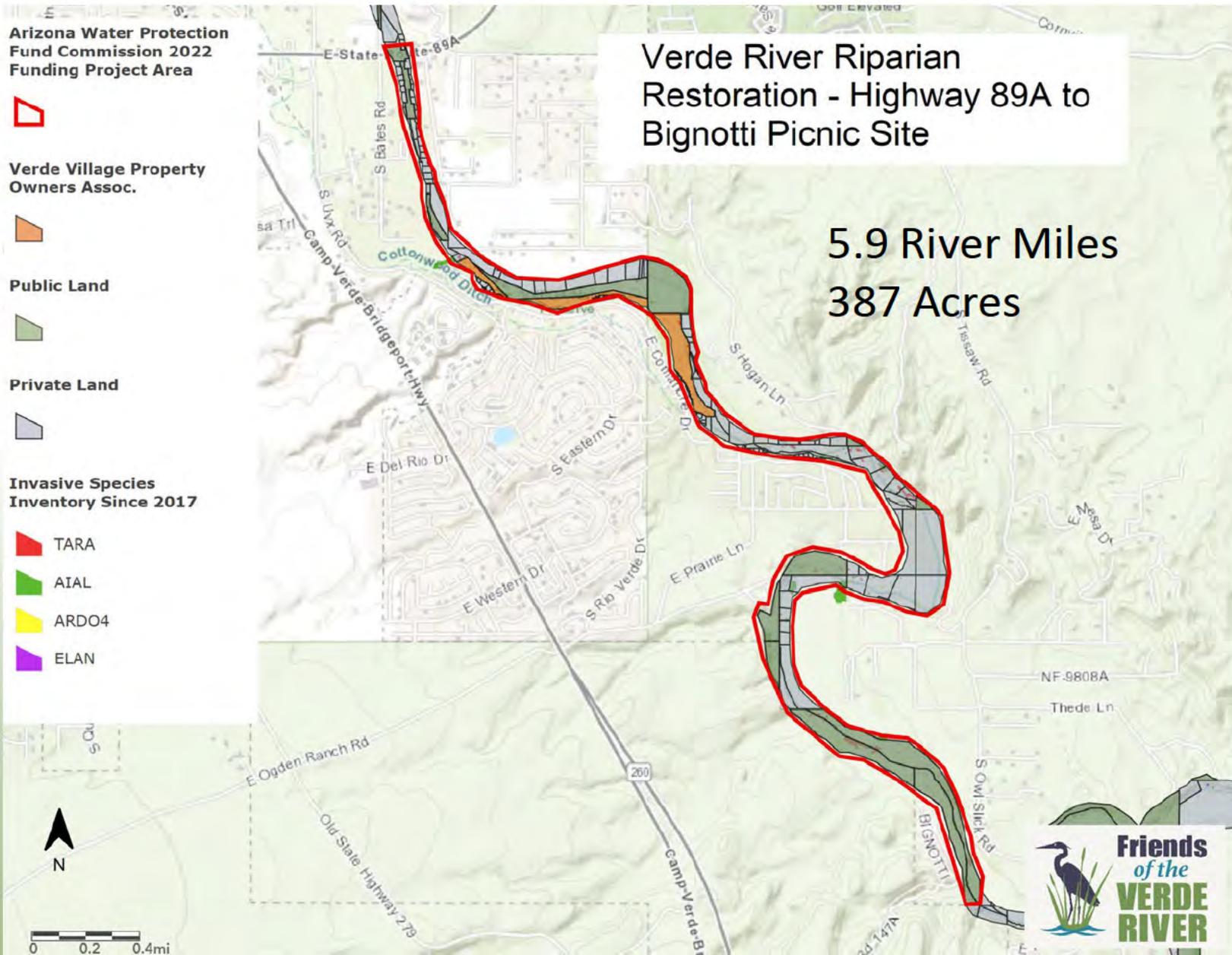


Restoration Crew Work

- Mapping and inventory
 - >11,000 acres
- Invasive treatment
 - >10,350 acres



89A – Bignotti Project Area



89A – Bignotti Project Area



89A – Bignotti Project Area

- Before and after



2014



2021

Pond Restoration Planning



Pond Restoration Planning

Develop detailed restoration plans

- restore river flows
- improve water quality
- safeguard human health



WPF Review



- Volunteer events
- supplies
- Pond design plans

89A to Bignotti - Scope of Work

- Monitoring
 - Treatment effectiveness and planning
- Treatment
- Outreach and volunteerism
- Pond Restoration Plan Development



Thanks!



verderiver.org



**ASSESSING AQUIFER WITHDRAWALS TO SUSTAIN
BASEFLOW IN STREAMS AND SPRINGS -
COCONINO/REDWALL-MUAV AQUIFER MODELING
PROJECT PHASE 2**

WPF 2202

Coconino Plateau Watershed Partnership

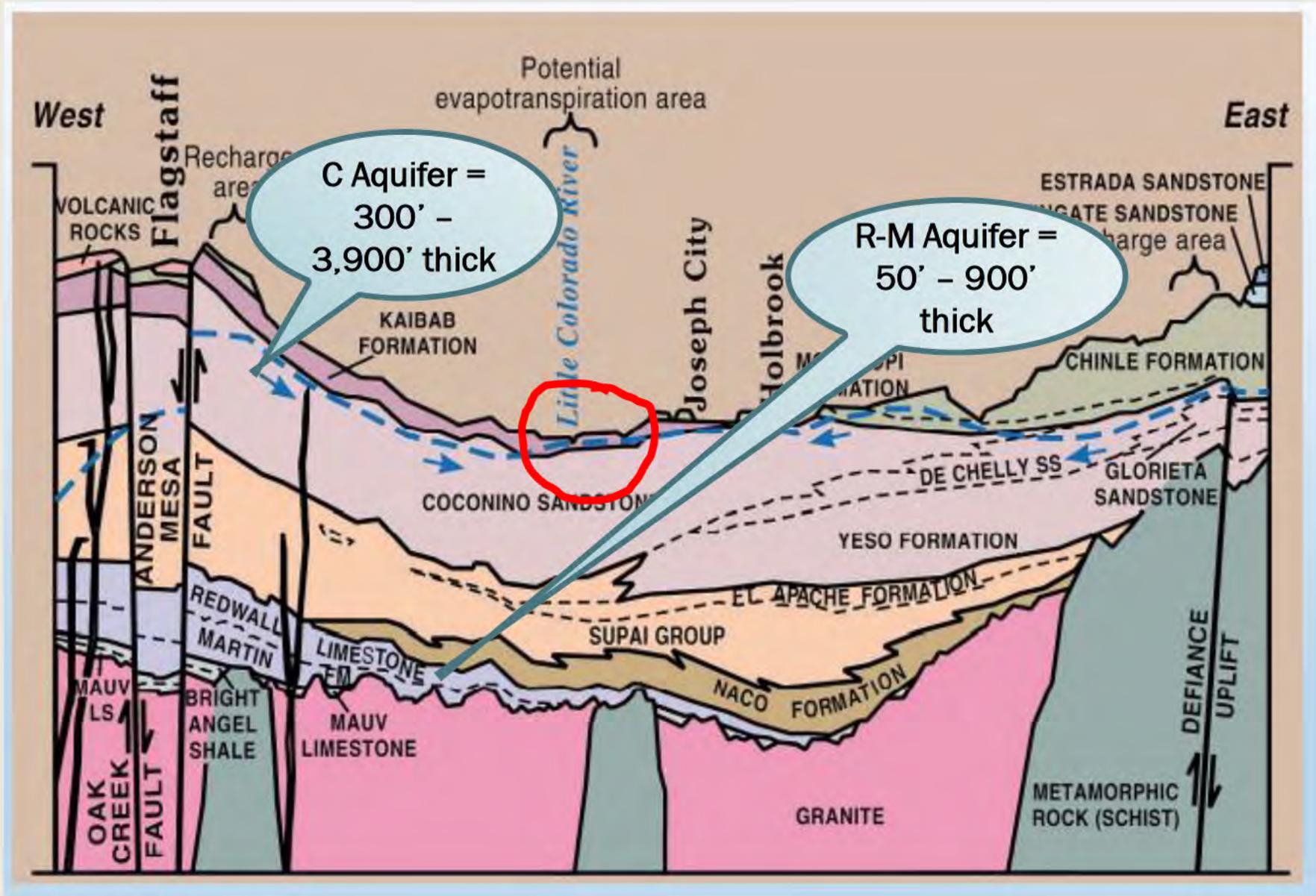
Ron Doba, Coordinator

Goals

- Protect surface water and spring flows that support riparian vegetation and species.
- Protect groundwater aquifers that support domestic, agricultural, industrial and environmental needs from over pumping and depleting surface water supplies that many existing land users rely on.
- Provide criteria for evaluating the sustainable use of water resources.

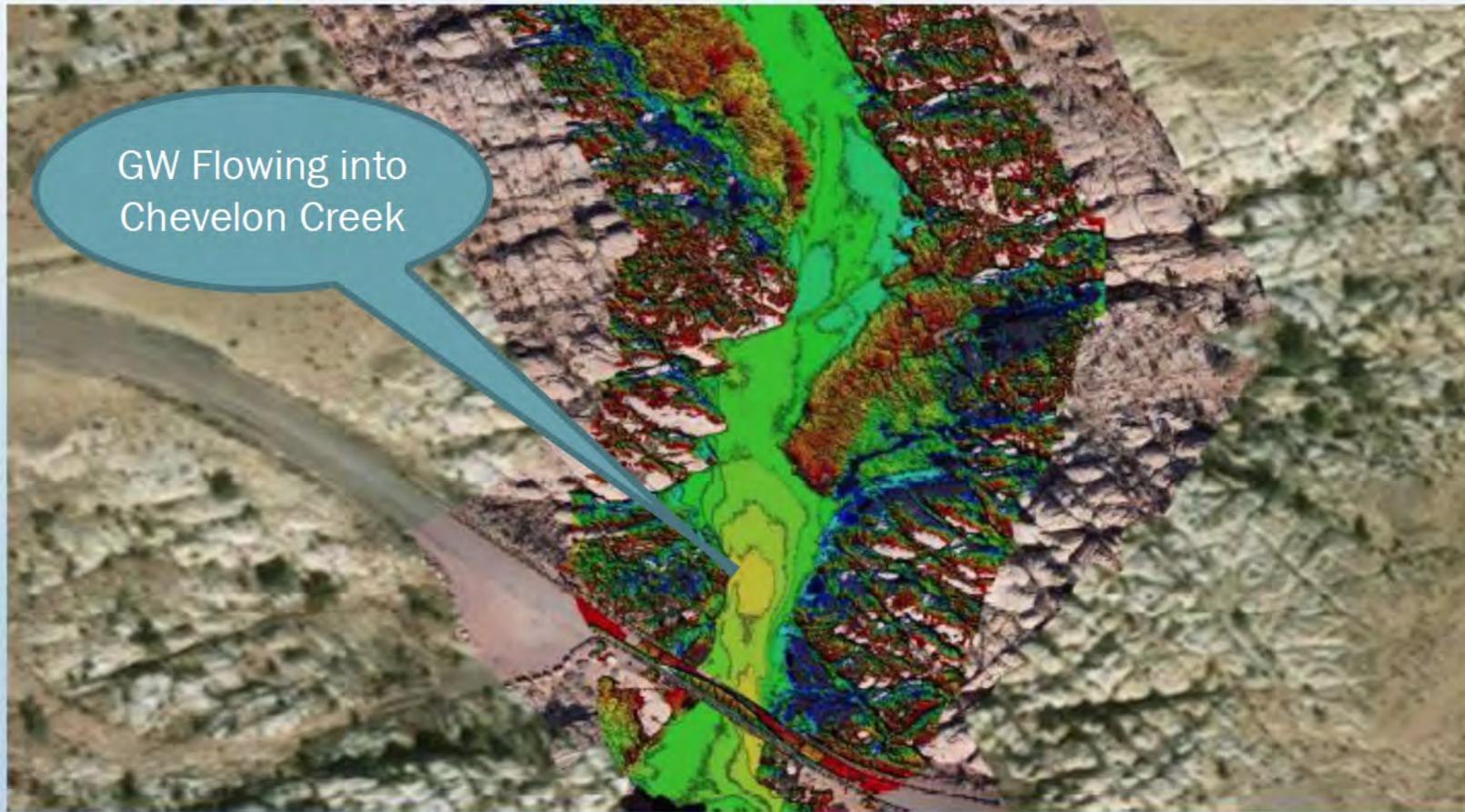
Criteria for a Determination of an Adequate Water Supply Outside of an Active Management Area

- Rule 12-15-716
 - *Maximum 100 year depth to water level will not exceed 1,200'*
 - *The Director MAY lower the depth to water if the applicant can show the water is available and financial capability exists to pump it*
- ***No consideration exists for impacts to surface waters***



Cross Section Courtesy of USGS

SEEPAGE INVESTIGATION:



GW Flowing into
Chevelon Creek

**Unmanned Aircraft
Systems (UAS)
Thermal Imagery**

Chevelon Creek
Geoff DeBenedetto (USGS)

Courtesy of USGS

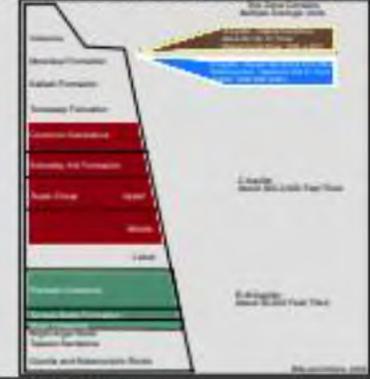
Coconino Plateau Water Source Menu Maps

Generalized Depiction of Groundwater Aquifers

Map Features

- Perched Water Bearing Zones - Unconfined groundwater separated from an underlying main body of groundwater by an unsaturated zone. Source: Groundwater and Wells, Second Edition, 1996
- D Aquifer
- N Aquifer - Underlies the D Aquifer
- C Aquifer - Underlies the N Aquifer
- R-M Aquifer - Underlies the C Aquifer
- Aquifers with Total Dissolved Solids (TDS) greater than 1,500 milligrams per liter
- Springs with flow of 1,000 gallons per minute or greater

Generalized Hydrogeologic Section of the Coconino Plateau



References - Data and Data Sources

Alford, J. L., et al. 2013. Hydrologic Characterization and Storage Site Characterization of the Coconino Plateau Watershed in Northern Arizona. U.S. Geological Survey Scientific Investigations Report 2013-5003. 340 p. <http://pubs.usgs.gov/ofr/2013/5003/>

Arizona Department of Water Resources. 2008. Arizona State Water Control Plan. Section 7. Planning and Policy. Department of Water Resources, updated March 2014. 188 p. <http://www.arizona.gov/portal/services/Planning/PDF/ArizonaStateWaterControlPlan7.pdf>

Arizona Department of Water Resources. 2010. Arizona State Water Control Plan. Section 7. Planning and Policy. Arizona Department of Water Resources, updated March 2014. 188 p. <http://www.arizona.gov/portal/services/Planning/PDF/ArizonaStateWaterControlPlan7.pdf>

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Beck, D. J., Papp, M. J., and Manning, P. B. 2004. Regional Hydrogeology and Groundwater Budget for the Coconino Plateau, Coconino and Yavapai Counties, Arizona. U.S. Geological Survey Scientific Investigations Report 04-102. 97 p. <http://pubs.usgs.gov/ofr/2004/102/>

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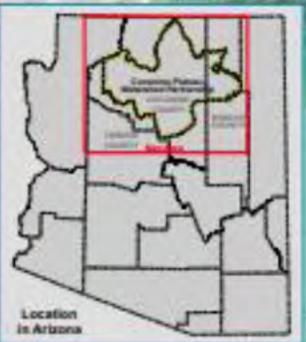
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R-M Aquifer = 50' - 900' thick

C Aquifer = 300' - 3,900' thick



COCONINO PLATEAU

Prepared by the Coconino Plateau Technical Advisory Committee for the Coconino Plateau Watershed Partnership
April 2015

RECLAMATION
Managing Water in the West

Sheet 2 of 3

Who uses the Coconino and Redwall-Muav Aquifers?

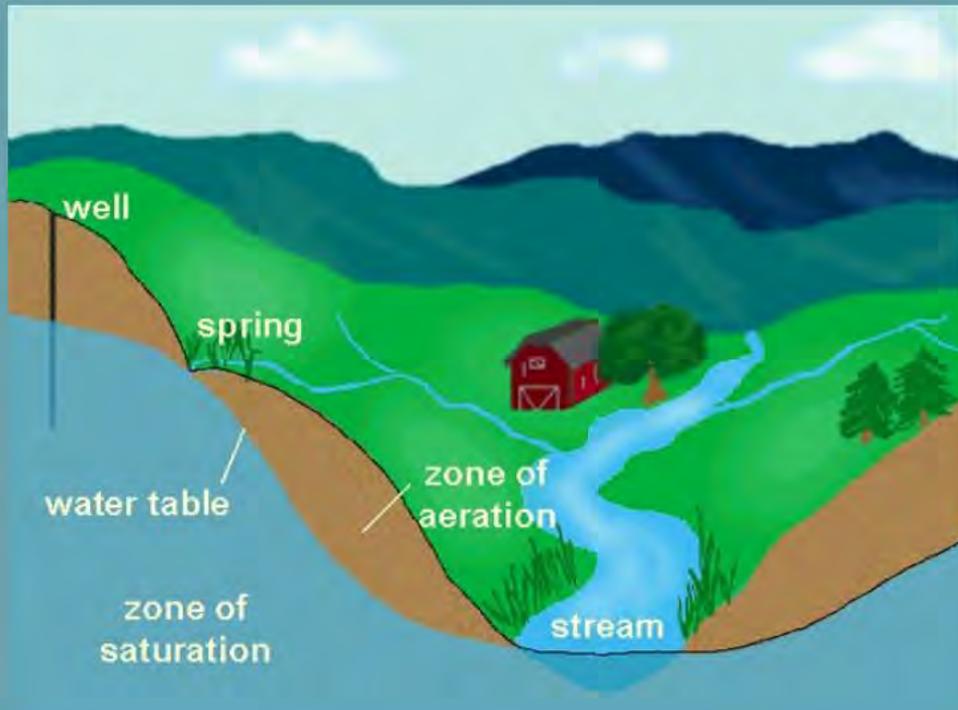
C Aquifer:

*Flagstaff *Pinewood *Snowflake *Cholla Power *Holbrook
*Winslow *Forest Highlands *Fox Ranch *Leupp *Twin Arrows
*Cameron *Flag Ranch *Kachina *Bellemont
*Joseph City *Nova Biofuel *Doney Park

R-M Aquifer:

*Ashfork *Supai *Tusayan *Grand Canyon Village
*Oak Creek *Sedona *Seligman *Williams

Simulated Change in Groundwater Discharge at Environmental Areas of Concern



- Average decrease in flows in rivers, creeks and springs after reducing aquifer saturation by 25% and considering a fixed natural recharge decrease for climate change was 26%, some areas as high as 100%.
- Average decrease in flows in rivers, creeks and springs after reducing aquifer saturation by 50% and considering a fixed natural recharge decrease for climate change was 30%, some areas as high as 100%.
- **It is not acceptable to consider criteria for determination of adequate water supply that will cause springs and streams to dry up in the future.**

What have we learned so far?

- The demand data in the model was based on 2011 WRDC projections that may be too high and need to be verified
- The LIKELY maximum groundwater demands for the wellfields in the model need to be determined
- The stream package input calibration was not included in the scope for the prior scenario runs
- Spring hydrology data needs to be verified and updated with the Springs Stewardship Institute
- Spatial effects of climate change need to be considered using NAU information in lieu of a fixed climate change factor
- Additional model scenarios should be run, such as a maximum per year reduction in water level
- As an example, there is a need to determine the individual impact of each wellfield using one selected model scenario
- The model is a valuable tool that should be made available publicly

Responses to Staff Review

- ✓ **The data from the modeling efforts will be used to provide benefits to fish and wildlife resources by protecting them from being impacted by excessive groundwater pumping. Current criteria for a determination of an adequate water supply outside of an AMA offers no protection for these resources.**
- ✓ **The hypothesis for the project is that by determining GOOD criteria for adequate water supply for users of the Coconino and Redwall-Muav Aquifers fish and wildlife resources (water) will be protected.**
- ✓ **The CPWP will solicit a modeling firm by advertising and selection will be based on qualifications and the ability to meet the project budget. Any business that requires surface waters will benefit by the sustainability of these water resources (recreation, agriculture).**

Responses to Staff Review

- ✓ **The ADWR Regulatory Agenda for 2021 identifies “Amendment of Assured and Adequate Water Supply Rules (12 A.A.C. 15, Article 7) to modify the criteria for demonstrating physical availability of groundwater in the Coconino and Redwall aquifer systems in northern Arizona” as rulemaking under consideration. The Regulatory Agenda for 2022 is not published yet. Documentation can be provided if requested that identifies the rule change being proposed by the Governor’s Groundwater Work Group in 2017 and consideration by ADWR. This is not a new issue but one that is taking years to occur as a result of funding availability and staffing changes.**
- ✓ **It is recognized that modification of Rule 12-15-716 would not be conditioned on the support of the CPWP. The CPWP represents stakeholders using and effected by the Coconino and Redwall-Muav Aquifers. ADWR has indicated (presentation by Brad Hill to CPWP 10/27/2017 and available on the CPWAC website) it is necessary for the CPWP, as a stakeholder group to support the proposed 50% aquifer saturation criteria. The CPWP TAC was requested in June of 2018, by ADWR, to assist in the stakeholder process. As a result, aquifer modeling was initiated using a WaterSMART grant from Reclamation in 2018.**
- ✓ **Data collection on water demands, updated demand projections and spring hydrology will be obtained and input in the model for running scenarios. Scientific research is conducted using a theoretical approach by refining the model to determine the results from running scenarios.**

Thank you!

Questions?

Little Green Valley Fen Restoration Feasibility Study



National Forest
Foundation

National Forest Foundation

Chartered by Congress, the National Forest Foundation was created in 1993 with a simple mission: *bring people together to restore and enhance our National Forests and Grasslands.*



Little Green Valley Fen Restoration Feasibility Study

Project Area: **Little Green Valley Fen**, a 15-acre unique wet meadow within **Green Valley Creek**, a **priority watershed** on the Payson District of the Tonto National Forest which flows into the Salt River

Direct Benefits: Gather needed information through **feasibility study** to evaluate restoration approaches for re-wetting Little Green Valley Fen and extending the perennial flow of Green Valley Creek. Develop an **implementation plan and budget** to carry out the findings of the study

Indirect Benefits: Benefit watershed condition through future plan implementation by **reducing sedimentation** into the Salt River Watershed, **increase groundwater levels** in Little Green Valley, **restoring wet-meadow function, extending perennial flow** of Green Valley Creek, restoring **aquatic habitat** and improving **riparian habitat** extending along the creek

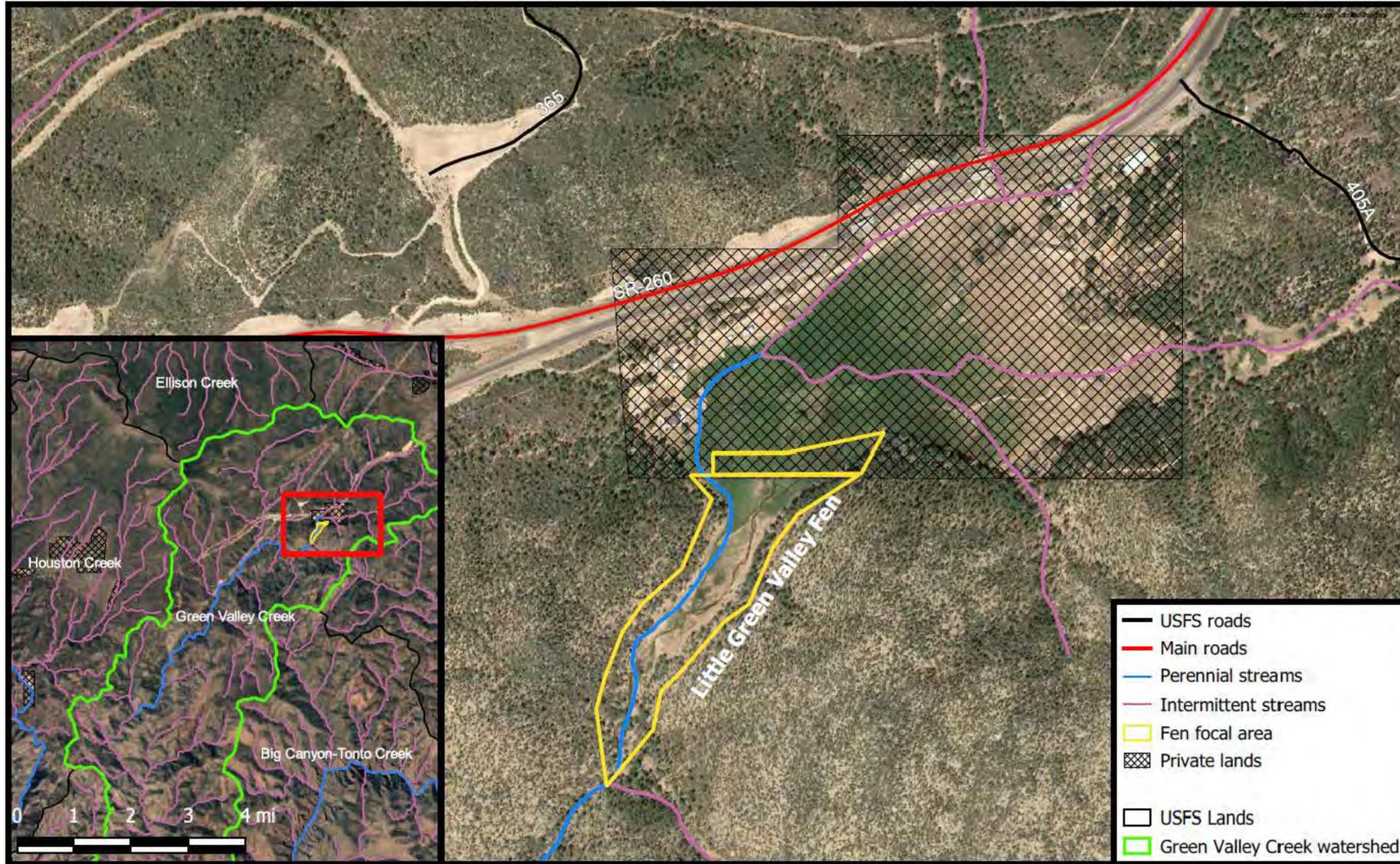
Public Involvement: The Tonto National Forest has conducted the **Green Valley Creek Watershed Restoration Action Plan (WRAP)** which prioritizes actions to restore the Fen. The WRAP is broadly supported by stakeholders on the Tonto National Forest. Through the feasibility study, **stakeholders will be engaged** in a collaborative workshop to determine next steps. The neighboring private landowner, **Earnhardt Ranches**, is supportive and interested in participating.

What is a fen?

- Fens are an important and unique peat-forming wetland that rely on groundwater input and take thousands of years to develop
- Extremely rare in Arizona
- Important sites of groundwater discharge
- Indicators of watershed health
- Filter sediment, reduce runoff and downstream erosion into perennial waterways
- Biodiversity hot spot



Little Green Valley Fen



0 0.1 0.2 0.3 0.4 0.5 0.6 mi





Problems

- Head cut has dewatered the Fen and caused significant erosion
- 1200 foot-long, 10 foot-deep, 20-foot-wide gully persists
- Downstream water quality issues: DO exceedance
- Decrease in length of perennial flow below the Fen
- Nick areas identified that are vulnerable to additional head cutting in the meadow





Activities to address Fen restoration

Activity	Timeline	Leverage
Reduce head cut migration	Early 2000s	AZ Dept. of Transportation in-kind support
Watershed Restoration Action Plan	Signed 2021	Tonto National Forest in-kind support
Implement enclosure to reduce ungulate pressure and improve hydrological function	Contract awarded, start in winter 2021	TNF and NFF: \$160,000
Conduct Restoration Feasibility Study	2022	TNF and NFF match to AWP request (at least \$17,252)
Implement plan to restore hydrologic function (Forest and adjacent private land)	2023	TBD: Water replenishment credit funding opportunities offer significant funding opportunities



Current Proposal: Restoration Feasibility Study

Goal: Develop an implementation plan and budget for restoring Little Green Valley Fen by:

1. Engaging contractor(s) to study feasibility of both form and process-based restoration scenarios for the fen
2. Gather monitoring data in order to assess condition and trend of the Fen after exclosure installation
3. Synthesize the information obtained through objectives 2 & 3 and conduct a workshop and site visit to bring together relevant stakeholders and decide on a path forward

Ultimate goal: Restore hydrologic function of the meadow and extend the perennial flow of Green Valley Creek



Task		Date	Funds Request
Task 1	Authorizations and Agreements	Prior to initiation of applicable work	\$0
Task 2	Develop and Submit Project Plans	March 31, 2022	\$2,445
Task 3	Request for Proposals and Contractor Selection	April 30, 2022	\$2,505
Task 4	Implement Feasibility Study	November 15, 2022	\$58,680
Task 5	Implement Monitoring Plan	November 15, 2022	\$7,650
Task 6	Develop Fen Restoration Implementation Plan and Budget	January 31, 2023	\$3,278
Task 7	Final Report and Oral Presentation	March 31, 2023	\$2,445

Total Request: \$77,003
Match: \$17,252





Conclusion

- This project will gather needed information through a **feasibility study** to evaluate restoration approaches for re-wetting Little Green Valley Fen and extending the perennial flow of Green Valley Creek
 - Outputs will include an implementation plan and budget
 - Study will include enough detail to assess if future structures will require a surface water right
- Project includes match as well as significant leverage with past and future phases of work
- Implementation of plan will provide watershed benefits by **reducing sedimentation** into the Salt River Watershed, **increase groundwater levels** in Little Green Valley, **restoring wet-meadow function, extending perennial flow** of Green Valley Creek, restoring **aquatic habitat** and improving **riparian habitat** extending along the creek
- Opportunity to extend work on to neighboring private lands
- Priority of Tonto National Forest and stakeholders through Watershed Restoration Action Plan

Questions?

Thank you!

Sasha Stortz
AZ Program Manager, Southwest
Region
ssortz@nationalforests.org

nationalforests.org



National Forest Foundation

The Path to Protection at Oak Creek: Social Trail Rehabilitation for Watershed Health

WPF2204

Ron Tiller

Arizona Department of Environmental Quality

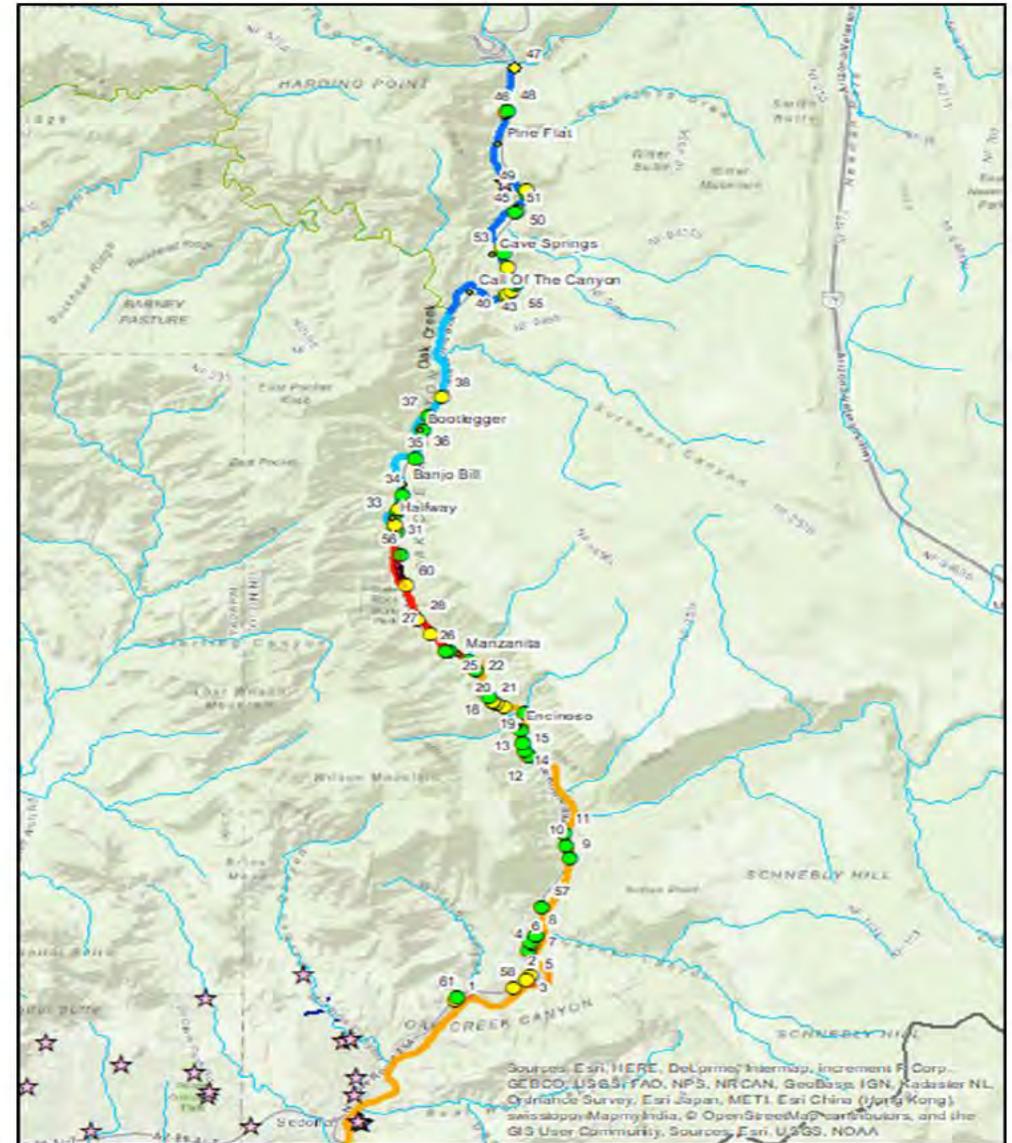
in collaboration with:

U.S. Forest Service, Coconino National Forest, National Forest Foundation,
Natural Channel Design, Conservation Legacy, and Oak Creek Watershed Council

16 November 2021



- Oak Creek is impaired for *E. coli* along its entirety
 - risk to human health during recreation season
- ADEQ and other orgs working together to reverse declining water quality, particularly Oak Creek Canyon
 - Tackling projects approved in the Oak Creek WRAP
 - Delisting reaches of Oak Creek
- Social trail rehabilitation is part of a package of three complementary projects
 - Roadside closures. ADOT closed unauthorized parking where people were recreating along the creek
 - Areas lacking toilets, trash receptacles, pet waste stations, *or formal trails.*
 - Closed 27 of 60 roadside parking areas
 - Litter Clean-ups. On-going clean-ups in high-use and roadside parking areas by OCWC.



The Setting (continued)

- People using social trails
 - Cause erosion and sediment to creek
 - Leave trash, human and pet waste
 - attracts nuisance wildlife
 - Create conduits for feces to creek via overland flows
 - Rainfall and snowmelt
 - ~ 200 trails rehabbed, improved, and maintained to date
-
- Expand an established, shovel-ready project to rehab ~120 social trails and improve selected trails to maintain some access to the creek
 - Complete an Essential Project of the OC WRAP
 - Enhance riparian vegetation
 - Restore T and E species habitat
 - Improve water quality and public safety



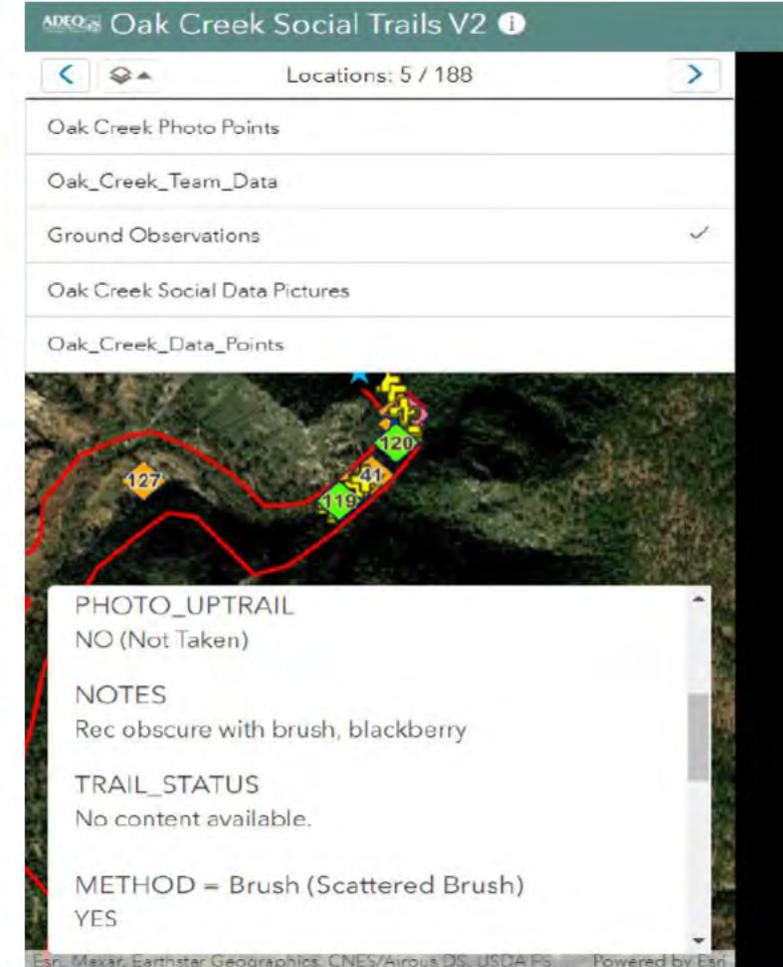
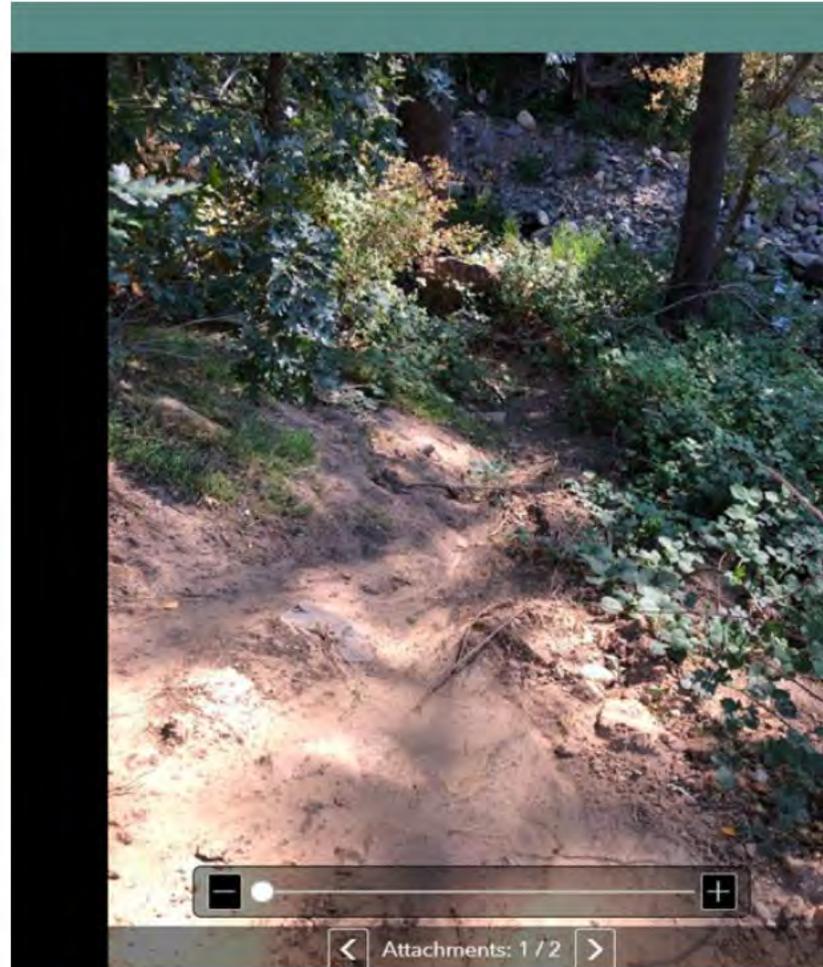
- ADEQ
 - Extend contracts (done)
 - Grant management and reporting
 - Coordinate with and support partners*
- USFS
 - Extend cooperating agreements
 - T and E species, safety training
- National Forest Foundation
 - Conservation Legacy (AZCC)
 - Trail and sawyer crews
 - Oak Creek Watershed Council
 - Repeat photomonitoring
 - Litter clean-ups, *E. coli* load reductions
 - Erosion and sediment modeling (WEPP)
- Natural Channel Design, Inc.
 - ADOT Encroachment Permit, Traffic Control Plan
 - BMP training
 - Day to day leadership and crew support



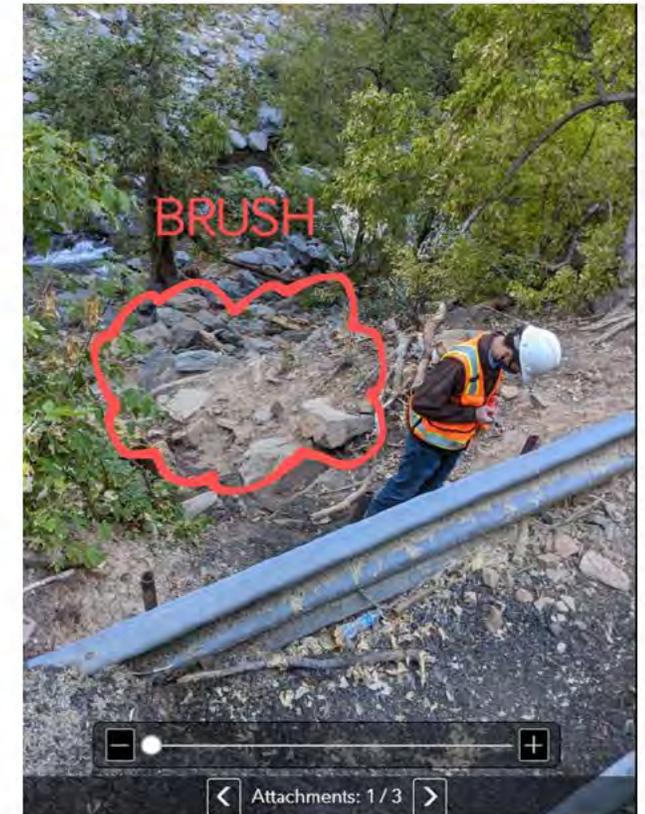
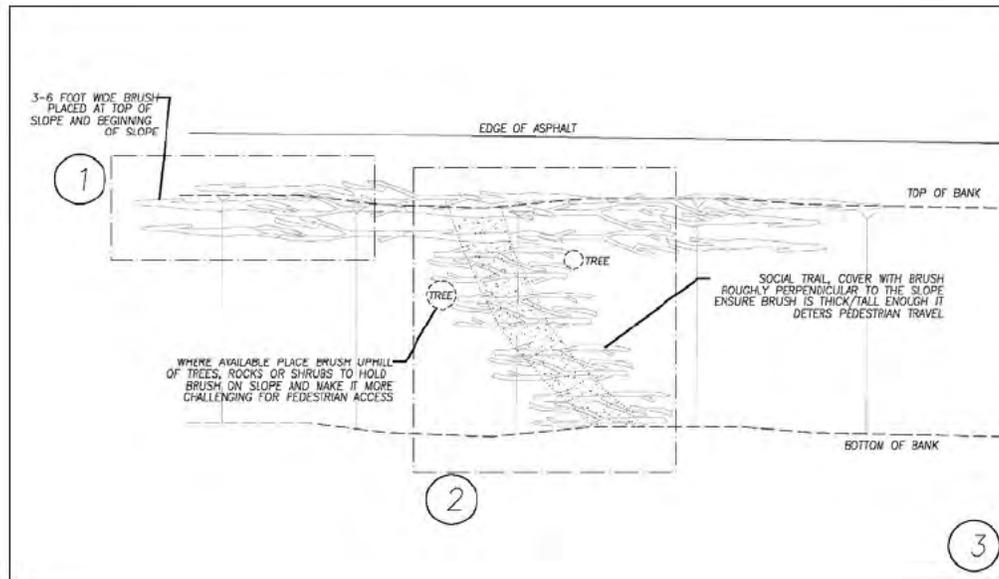
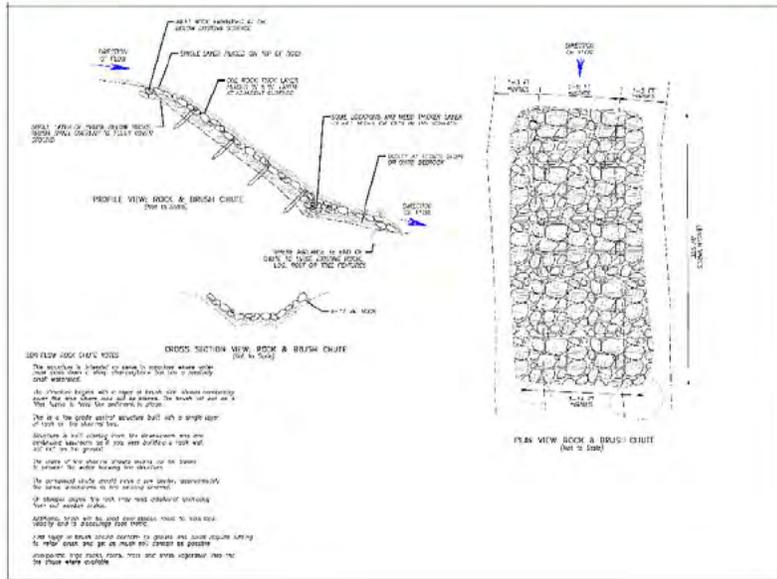
* *all partners actively participate in this role*

Inventory of social trails (Complete)

60 roadside parking areas (~650 cars), 4 day use areas, and 3 campgrounds in OCC, we inventoried 321 social trails!



ID of BMPs, Est of Materials and Crew Time (Complete)



Note the climbing rope used to access the creek on this steep slope.

Trail and Sawyer Crews Rehab and Improve Social Trails



Rehabbed



Improved



Pedestrian Barriers (log worm),
Restoration in Progress, and
Creek Access Signs



- Trail inventory and rephotography
 - Pre- and post-treatment
- Model soil erosion and sediment attenuation
 - Water Erosion Prediction Protocol (WEPP)
 - Est ~39 tons/yr of sediment attenuated
- Litter clean-ups
 - Weights pre- and post-rehab
 - *E. coli* load reductions
- Water quality sampling of BMP effectiveness
 - Trends in *E. coli* concentration
 - DNA for pollutant source and contribution
 - Human, dog, and others

WEPP:Road Results

INPUTS			
Climate	SEDONA RS AZ		
Soil texture	sandy loam with 20% rock fragments <small>(road: 20%; fill: 20%; buffer: 20% rock)</small>		
Road design	Outsloped, rutted		
Surface, traffic	native surface, high traffic		
	Gradient (%)	Length (ft)	Width (ft)
Road	20	100	2
Fill	20	10	
Buffer	20	5	

30 - YEAR MEAN ANNUAL AVERAGES		Total in 30 years
20.34 in	precipitation from	1977 storms
1.05 in	runoff from rainfall from	326 events
0.17 in	runoff from snowmelt or winter rainstorm from	38 events
80.88 lb	road prism erosion	
60.01 lb	sediment leaving buffer	



- 197 of 320 trails rehabbed or improved
 - ~ 1:6 trails improved to maintain creek access
- Few new social trails or “walk arounds”
- Few rehabbed trails “conceded” and converted to improved trails
- ~13% of rehabbed trails needed follow-up maintenance





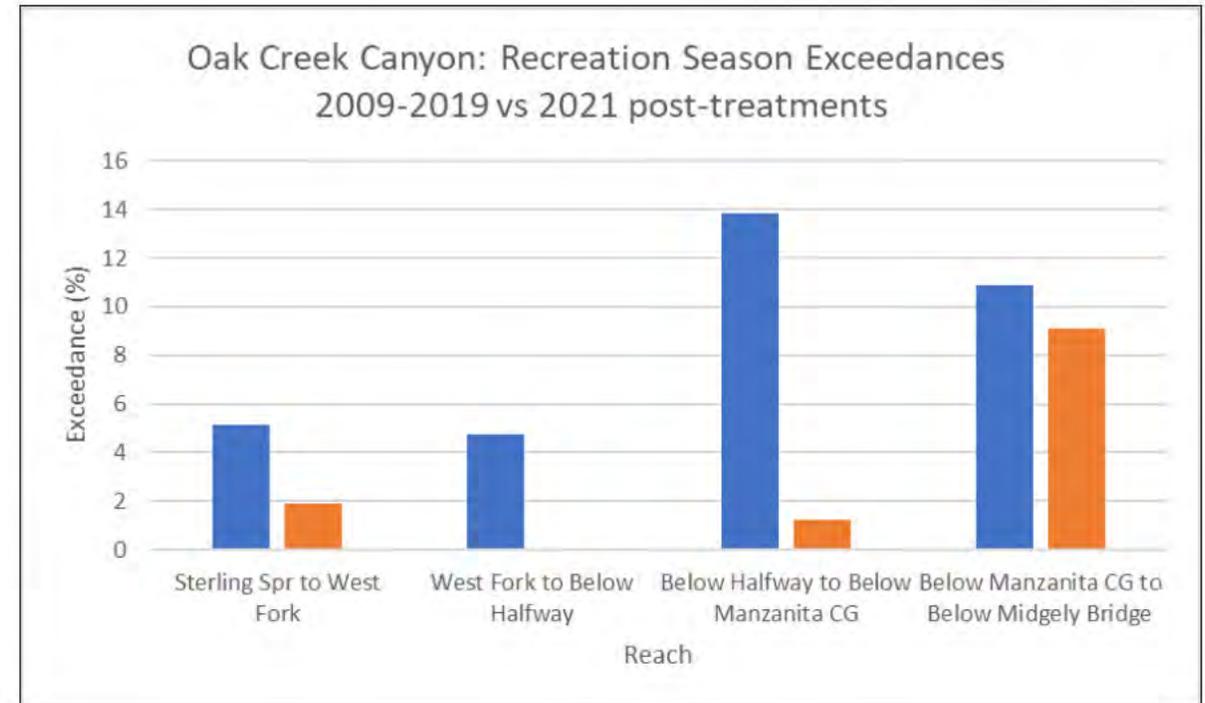
Type	Weight (lbs)
Trash	2361
Feces (human and dog)	98
Recyclables	45
Number (#)	
Diapers	207
Glass	578

1 lb of feces = 1.25×10^{10} CFU per year of E. coli removed

1 discarded diaper in the water at 30 cfs can cause Oak Creek to exceed the FBC standard, creating potential health risk for people downstream

Results to Date: Water Quality Sampling

- Weekday Sampling
 - Four reaches
 - May-Oct 2021
 - ADEQ, OCWC, and Slide Rock State Park
 - 2 exceedances
 - Not more than one at a given site
- Holiday Weekends
 - Paired sampling: above and below
 - 6 high-use areas
 - Day Use Areas (WF, GH, Midgely, Slide Rock)
 - Spring Break, Memorial Day, and Labor Day
 - 1 exceedance
- Recreation Season Exceedance Rate
 - 1999-2019: 13% vs 2021: 3%
 - **~65% reduction in exceedances**



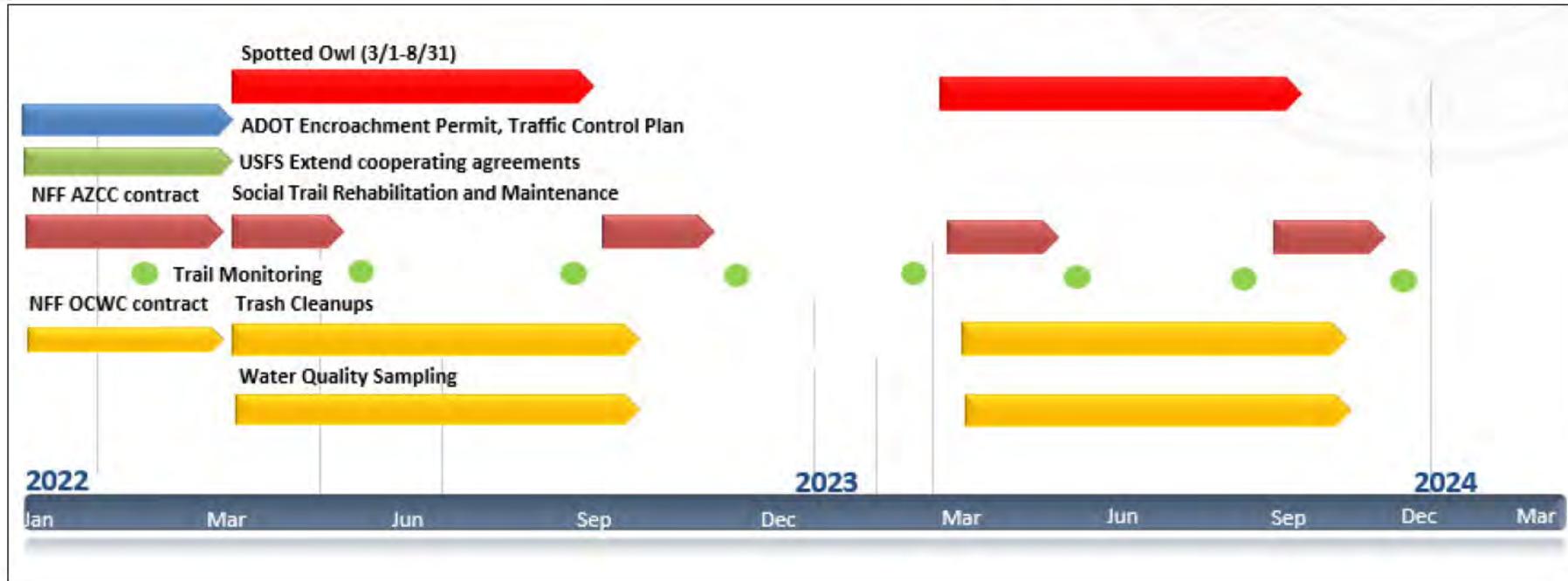
Budget, Matching Contributions, and Timeline

- Budget and Project Duration

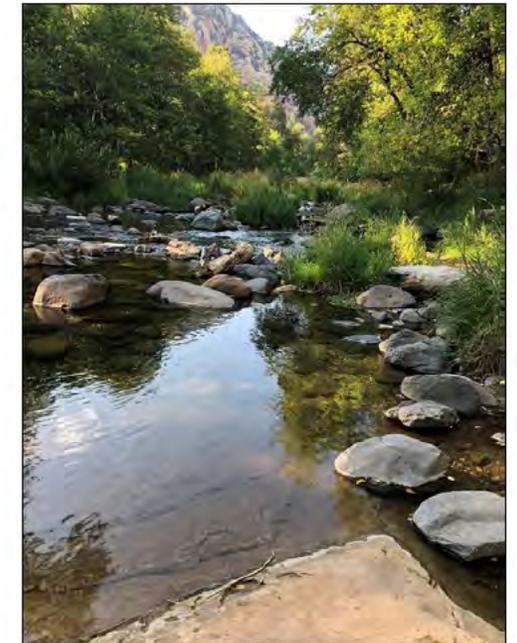
- ~\$239k
- 2-year grant
- March 2022 – March 2024

- Cost Match

- ADEQ \$50k
 - Federal non-point source funding
- NFF \$20k
 - Cash contribution (Crew time and materials)
- USFS \$4k
 - FY22 budget (Materials: fencing and signage)



- Public health and safety
- T and E Species
 - Narrow-headed gartersnake and Northern Mexican gartersnake
- Riparian Habitat
- Water Quality





Dye Ranch Erosion Control and Wetland Restoration



Photo by T. Jones

AUDREY OWENS

AZ GAME & FISH DEPARTMENT



Dye Ranch

35.92 acres owned by AZ Game and Fish Commission (1961)

Part of Chevelon Canyon Ranches Wildlife Area

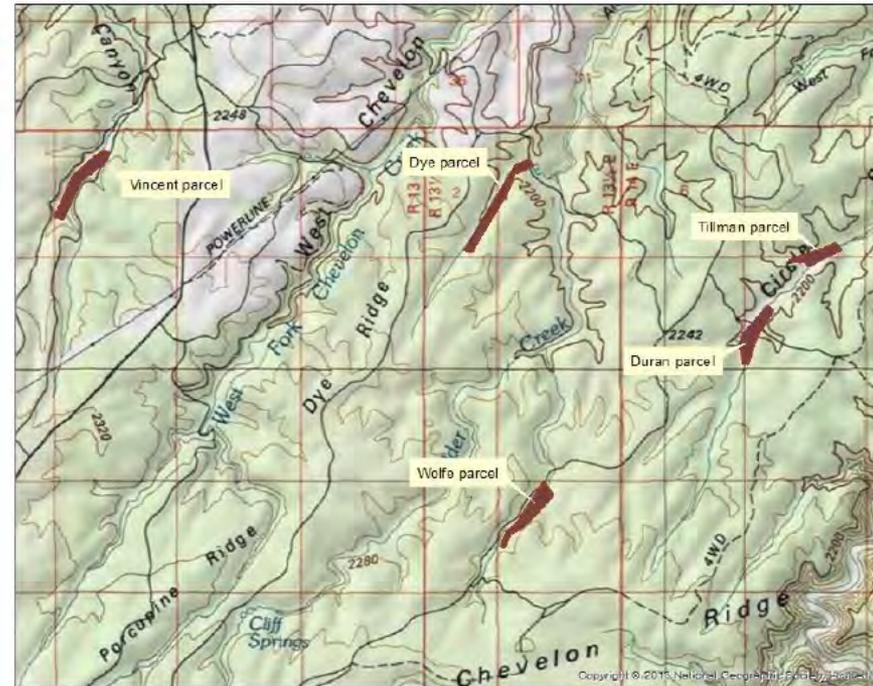
Mogollon Rim, 20 mi NW Heber

7300 ft. elevation

Apache-Sitgreaves NF inholding



Chevelon Canyon Ranches Wildlife Area



Chevelon Canyon Ranches
Coconino County
AGFD Region 1
Township/Ranch: 12N/13E
Sections: 1, 2, 3, 4, and 24
Township/Range: 12N/14E
Sections: 5, 7, and 8



Dye Ranch Management

Habitat

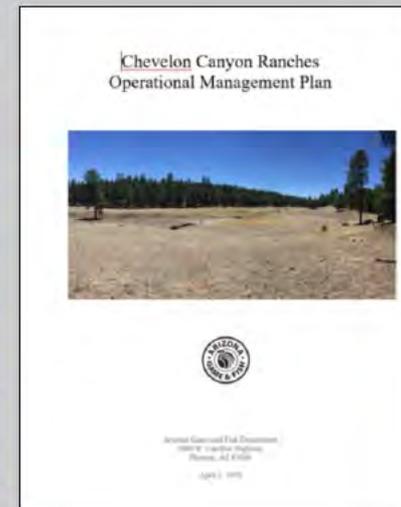
- Seasonal wet meadow & 1 mi unnamed intermittent stream

Management Plan (2020)

- Herbaceous vegetation for wildlife | healthy ponderosa pine stands
 - Perimeter fence (2019)
 - Prescribed burns
 - Mechanical tree thinning
 - Evaluate stream restoration for NLF
- Public recreational opportunities



Dye Ranch pool, June 2020



Statement of Problems

Historical land management:

- Modification of stream channel | soil compaction | loss of riparian vegetation | head-cutting, down-cutting

...resulting in elevated sediment transport, loss of perennial water, loss of riparian vegetation

Current management excludes cattle but

- Active head-cutting and lack of perennial pools
 - *Limit habitat recovery potential*
 - *Reduce watershed health*

Northern Leopard Frogs (NLF)

- Severe decline | need new suitable sites

Dye Ranch

- No invasive species! ...but susceptible to drought
- Potential for NLF/habitat success with increased perennial water
- Highly successful techniques for arid regions & climate change



Goals/Objectives

-Promote perennial water

- Improve watershed health
 - Catch sediment during high flow events (**reduce sediment load**)
 - Spread out/slow down floodwater (**increase water infiltration**)
- Secure habitat for NLF and other riparian/aquatic species
 - Establish NLF at Dye Ranch

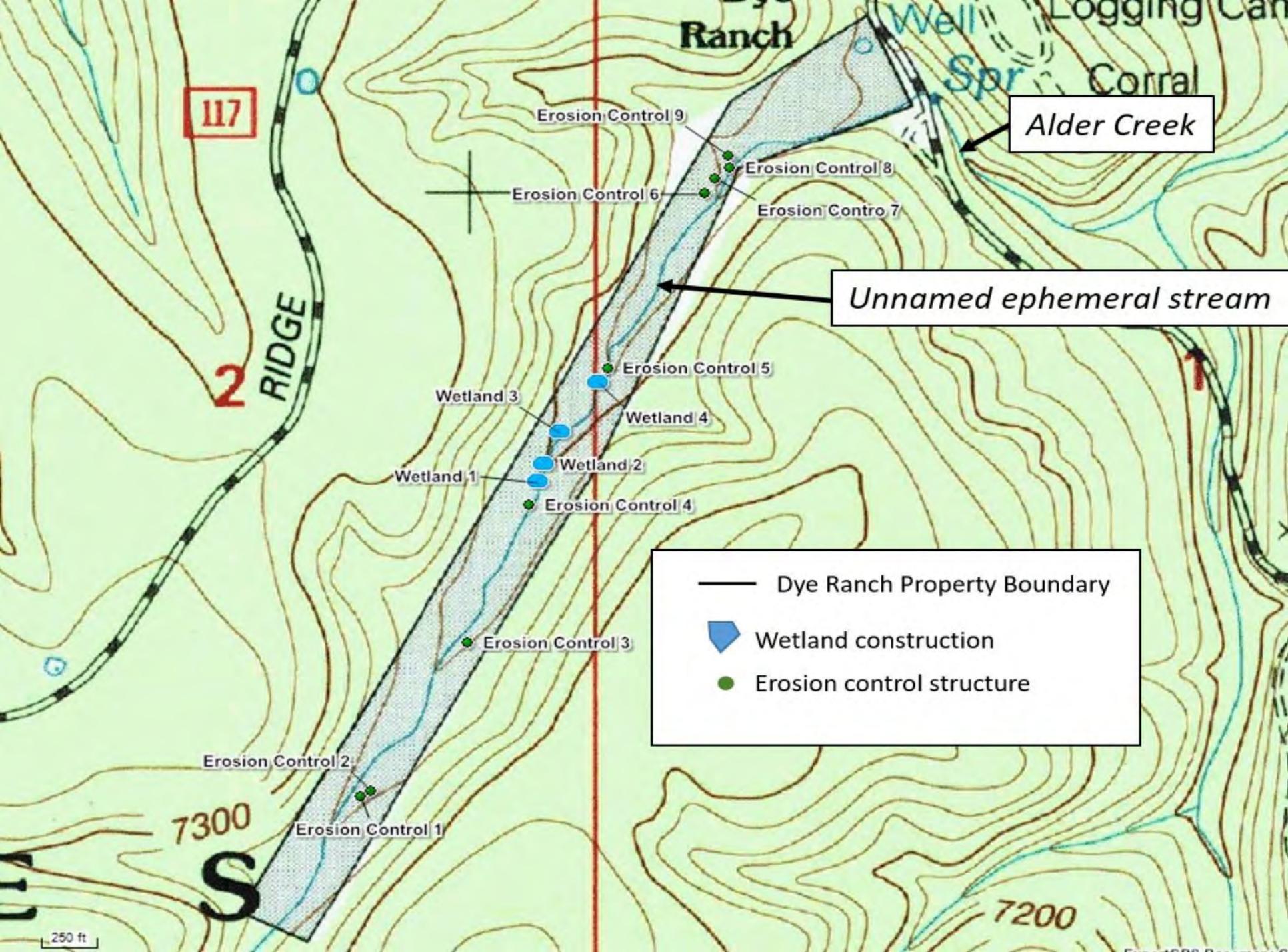


Photo by K. Cooney

Total request: \$76,945



Dye Ranch



117

Ranch

Well Spr

Logging Can
Corral

Alder Creek

Erosion Control 9

Erosion Control 8

Erosion Control 7

Erosion Control 6

Unnamed ephemeral stream

2 RIDGE

Erosion Control 5

Wetland 3

Wetland 4

Wetland 1

Wetland 2

Erosion Control 4

— Dye Ranch Property Boundary
■ Wetland construction
● Erosion control structure

Erosion Control 3

Erosion Control 2

Erosion Control 1

7300

S

7200

250 ft

Erosion Control (with excavator):

-5 locations

-Reshape stream channel, armor sections with rock; buried vertical grade control structures

-Wetland Restoration and Training



Erosion Control (hand-built):

-4 locations

-BCI



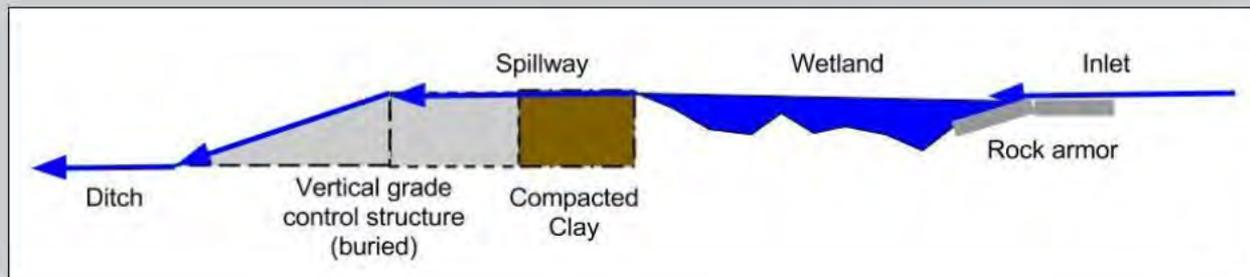
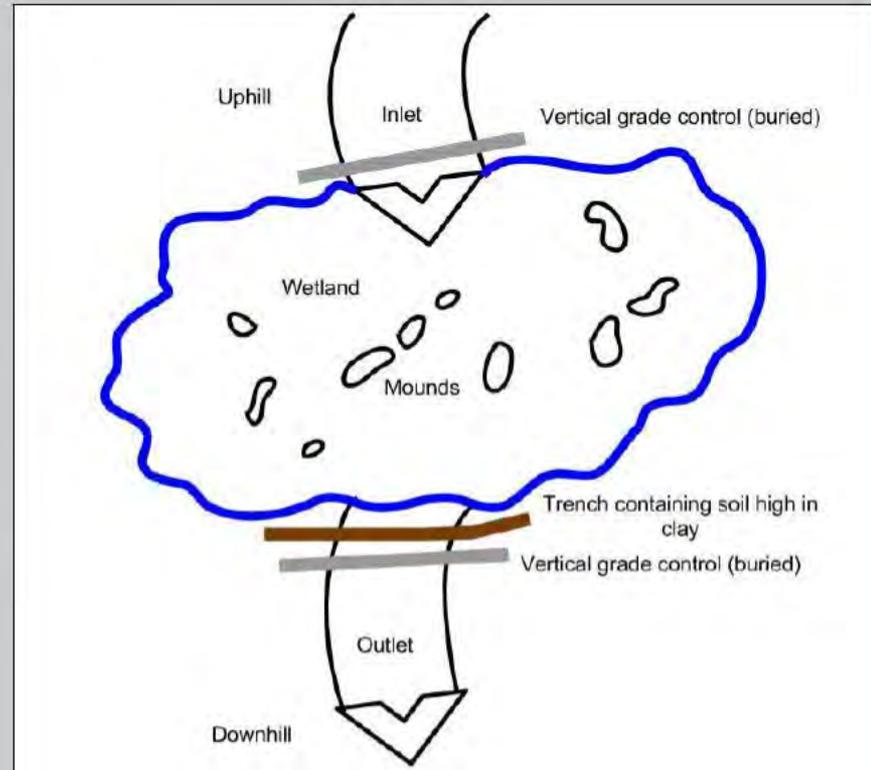
one rock dam

Zuni bowl



Wetland Improvements (4 locations)

- Designed and implemented by Wetland Restoration and Training
- Deepen shallow basins
- Use existing clay
- Armor inlet with rock, outlet with sod
- 1900-3100 sq. ft. each





Location of 4 wetlands



Budget:

Task 3: Rock Hauling (Materials)

	Quantity	Unit	Unit Cost	Total	Notes
Dump truck delivery of 6-12 inch rock	476	tons	\$51.52	\$24,523.52	6 to 12" quarry basalt rock delivered to Dye Ranch (Brimhall Sand *QUOTED* 8/18/21)
			Subtotal	\$24,524.00	



Photo by G. Andrejko

Task 4: Erosion Control (Labor)

	Quantity	Unit	Unit Cost	Total	Notes
Wetland Restoration and Training Excavator	64	hrs	\$250.00	\$16,000.00	includes fuel and maintenance truck
Wetland Restoration and Training Project Supervisor	64	hrs	\$99.00	\$6,336.00	includes consulting fee, mileage, lodging, and survey equipment
Excavator mobilization and demobilization	1	ea		\$1,200.00	
Native plant seed				\$1,400.00	\$100-200 at each erosion control structure
BCI Senior Restoration Specialist, Erosion Control	50	hrs	\$51.50	\$2,575.00	
BCI Restoration Specialist Erosion Control	50	hrs	\$31.50	\$1,575.00	<i>(reflects change from staff review)</i>
BCI Erosion Control Crew Member	50	hrs	\$ 25.00	\$1,250.00	
BCI Erosion Control Crew Member	50	hrs	\$25.00	\$1,250.00	
BCI Crew, Travel, Meals, Lodging	5	days	\$400.00	\$2,000.00	
BCI overhead (5% of BCI costs)				\$442.50	5% of \$8850
			Subtotal	\$34,028.50	

Task 5: Wetland Construction (Labor)

	Quantity	Unit	Unit Cost	Total	Notes
Wetland Restoration and Training Excavator	37	hrs	\$250.00	\$9,250.00	includes fuel and maintenance truck
Wetland Restoration and Training Project Supervisor	37	hrs	\$99.00	\$3,663.00	includes consulting fee, mileage, lodging, and survey equipment
Native plant seed				\$1,200.00	\$300 at each wetland
			Subtotal	\$14,113.00	



Task 7: Monitoring (Labor and Materials)

	Quantity	Unit	Unit Cost	Total	Notes
BCI acoustic analysis	50	hrs	\$51.50	\$2,575.00	Species ID, activity levels
Acoustic bat detectors	2	ea	\$750.00	\$1,500.00	Wildlife Acoustic Song Meter Bat Detectors, SD cards, batteries
BCI overhead (5% of BCI costs)				\$203.75	5% of \$4075
			Subtotal	\$4,278.75	<i>(reflects change from staff review)</i>



Total request \$76,945.00



Cost Share Budget

Dye Ranch Erosion Control and Wetland Improvement Cost Share

	Quantity	Unit	Unit Cost	Total	Notes
Arizona Game and Fish Department					
Region II Nongame Biologist	120	hrs	\$44.43	\$5,331.60	on the ground work 120 hours
Region I Habitat Program Manager	78	hrs	\$49.70	\$3,876.60	78 hours on the ground
Ranid Frog Project Coordinator	120	hrs	\$40.07	\$4,808.40	on the ground work 120 hours
Total cost share				\$14,016.60	<i>*reduced from proposal (\$28,562.00)</i>

Monitoring

3-4 times a year

Water quality

- DO, temperature, conductivity, pH, turbidity
- Surface area of water, depth

Shoreline, emergent, floating vegetation

ID/control erosion, nonnative plants

Wildlife monitoring

- NLF life stages, numbers, breeding
- Other aquatic & terrestrial species
- Bat acoustic monitoring (species diversity and abundance)

**Formal monitoring plan & sample datasheets to be submitted*



Timeline

Compliance

- Spring 2022
 - SHPO and USFWS consultation
 - Water claim, authority to impound surface water
- ...may be longer*

Construction

- Dependent on weather, materials, permitting
- 4 weeks
- May-June | Oct-Nov
- No later than Nov 2023



Tom Biebighauser building a groundwater dam with MD Merrett Construction at a site restored for Chiricahua leopard frogs (2018)

Timeline

NLF translocation

- Frogs or egg masses
- 1st season after wetlands fill
- May – Sept
- Likely require multiple releases

All tasks & report
completed by
Nov 1, 2024





Ravenna & Pampas Grass Control Along the Colorado River from Glen Canyon Dam to Diamond Creek



Melissa McMaster

RiversEdge West, Mariposa Consulting, Grand Canyon National Park and
Glen Canyon National Recreation Area

Nuts and bolts....

- Two trips
 - One upstream from Lees Ferry (16 miles) Motor boat
 - One downstream from Lees Ferry (225 miles) Oar boats
- List and a map of all sites from last 10 years
 - About 50 known sites from Lees to Diamond Creek
- Stop at all sites with plants in the last 5 years
- Scan the river for new populations/plants



Methods



- Find a plant!
- Cut seed heads, bag them and transport them to the trash
- Dig up the plant
- Place it high and dry
- Collect data
 - Site location, number of plants and seed heads, photos area of infestation



Simple strategies

- Locate
- Remove
- Map
- Repeat
- No active restoration needed at this point



Collaborative Effort

- Collaborative effort between the four entities
 - RiversEdge West
 - GRCA
 - GLCA
 - Mariposa Consulting
- Can provide letters and add a task for permits, etc.



United States Department of the Interior

NATIONAL PARK SERVICE
GRAND CANYON NATIONAL PARK
P.O. Box 129
Grand Canyon, AZ 86023



IN REPLY REFER TO:
N2219 (GRCA 8213)

September 29, 2021

John Dillon
Executive Director
Grand Canyon River Outfitters Association
Grand Canyon Fund
P.O. Box 22189
Flagstaff, AZ 86002

Dear Mr. Dillon:

This letter is in support of a proposal from RiversEdge West 501(c)(3) contributing to the protection and conservation of natural resources in Grand Canyon National Park. Their proposal is entitled, *Controlling Ravenna and Pampas Grass in Grand Canyon National Park from Lees Ferry to Diamond Creek*. This project will contribute to objectives of the Grand Canyon Protection Act (1992), "to protect, mitigate damages to, and improve condition of the environmental resources...of Grand Canyon National Park...downstream of Glen Canyon Dam."

Second only to habitat loss, the most serious problems affecting natural ecosystems globally is the introduction and spread of invasive, non-native plants and animals. Currently, Grand Canyon National Park's biologically diverse riparian areas are being degraded by invasive, non-native Ravenna and Pampas grass. For example, Ravenna grass is a highly invasive species which adversely impacts

Ultimate Goals...

- To continue to remove Ravenna and pampas grass from the length of the Colorado River from Glen Canyon Dam to Diamond Creek
- To continue to reduce the number of new populations
- To educate commercial and science river guides
- To educate GRCA and GLCA resource managers



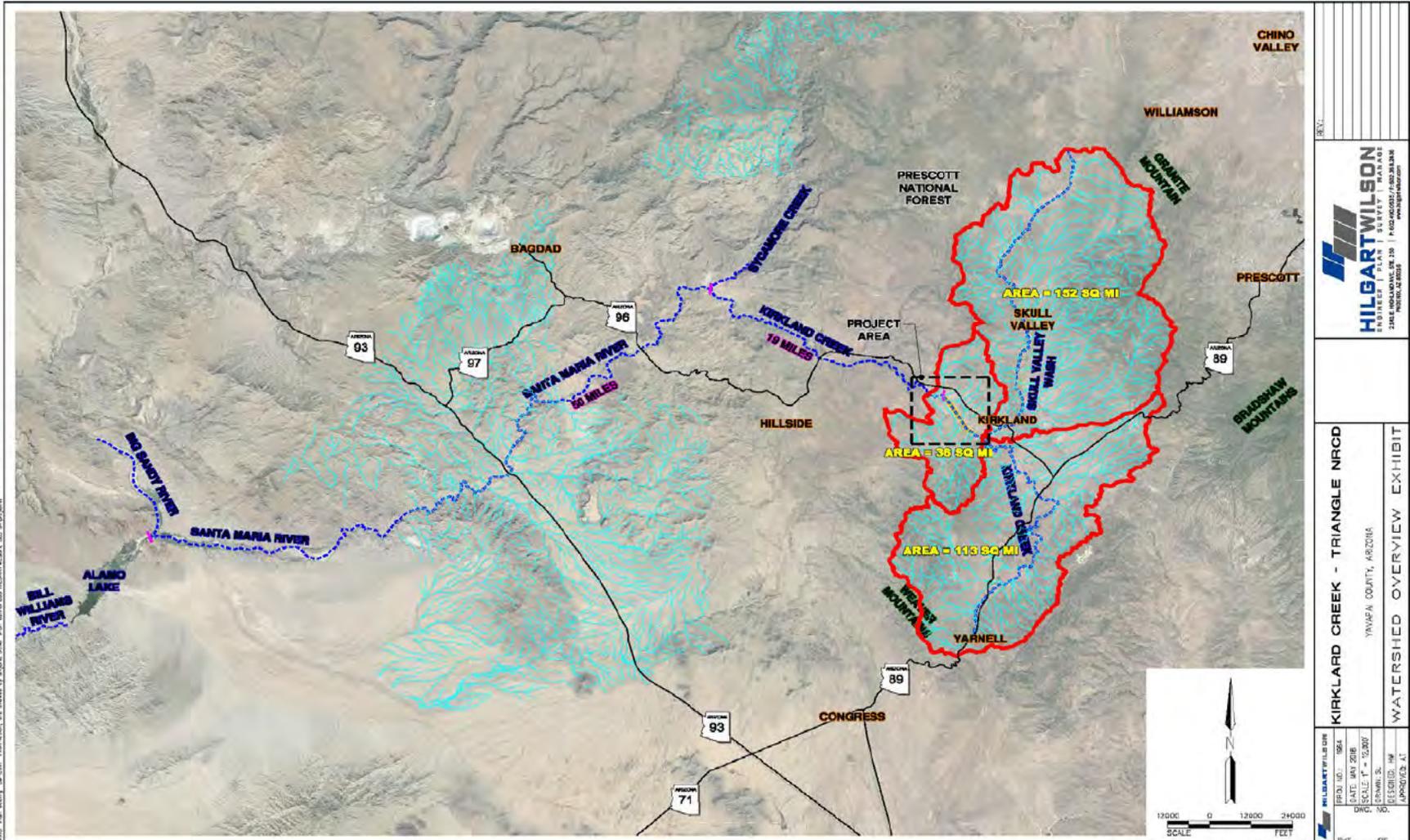
Kirkland Restoration of Proper Stream Channel Characteristics

Triangle Natural Resource Conservation District

Daric Knight, Project Manager

November 16, 2021

Location



This map was prepared by Hilgart Wilson Engineering, Inc. as a project of the Triangle National Resource Conservation District. The map is provided for informational purposes only. It is not intended to be used for any other purpose. The map is not a warranty, representation, or guarantee of any kind. The map is not to be used for any other purpose. The map is not to be used for any other purpose.

Project Description

- * Triangle NRCD has been charged by its cooperators to plan, fund, permit and implement mitigation strategies along Kirkland Creek. This project shall return the riparian channel to a properly functioning condition in order to prevent further erosion of productive agricultural lands and mitigate the increased risk of severe flooding not commonly seen in properly functioning stream channel systems



Project Overview

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MAY 1997



JUNE 2007

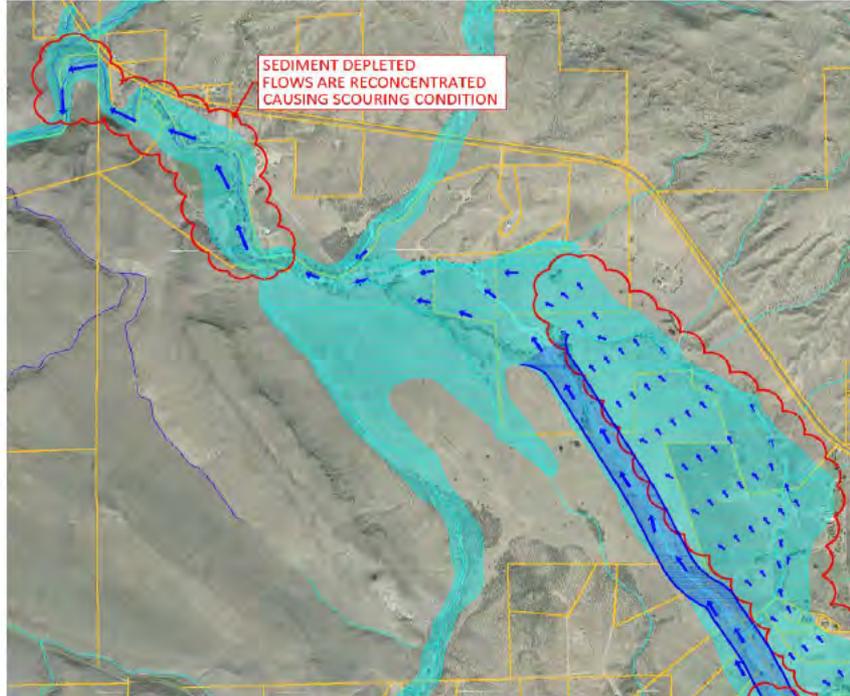


SEPTEMBER 2010



JUNE 2017

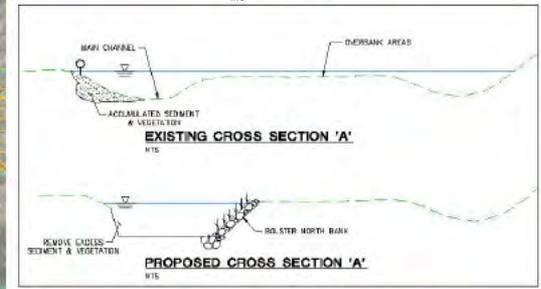
AREA OF SEDIMENT & VEGETATION BUILD UP



SEDIMENT DEPLETED FLOWS ARE RECONCENTRATED CAUSING SCOURING CONDITION



VICINITY MAP



EXISTING CROSS SECTION 'A'

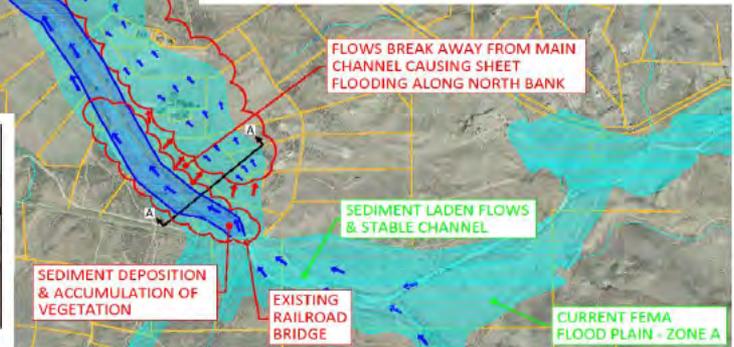
PROPOSED CROSS SECTION 'A'



RAILROAD BRIDGE (LOOKING UPSTREAM)



RAILROAD BRIDGE (LOOKING DOWNSTREAM)



FLOWS BREAK AWAY FROM MAIN CHANNEL CAUSING SHEET FLOODING ALONG NORTH BANK

SEDIMENT LADEN FLOWS & STABLE CHANNEL

SEDIMENT DEPOSITION & ACCUMULATION OF VEGETATION

EXISTING RAILROAD BRIDGE

CURRENT FEMA FLOOD PLAIN - ZONE A

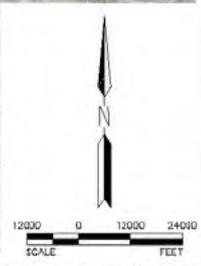
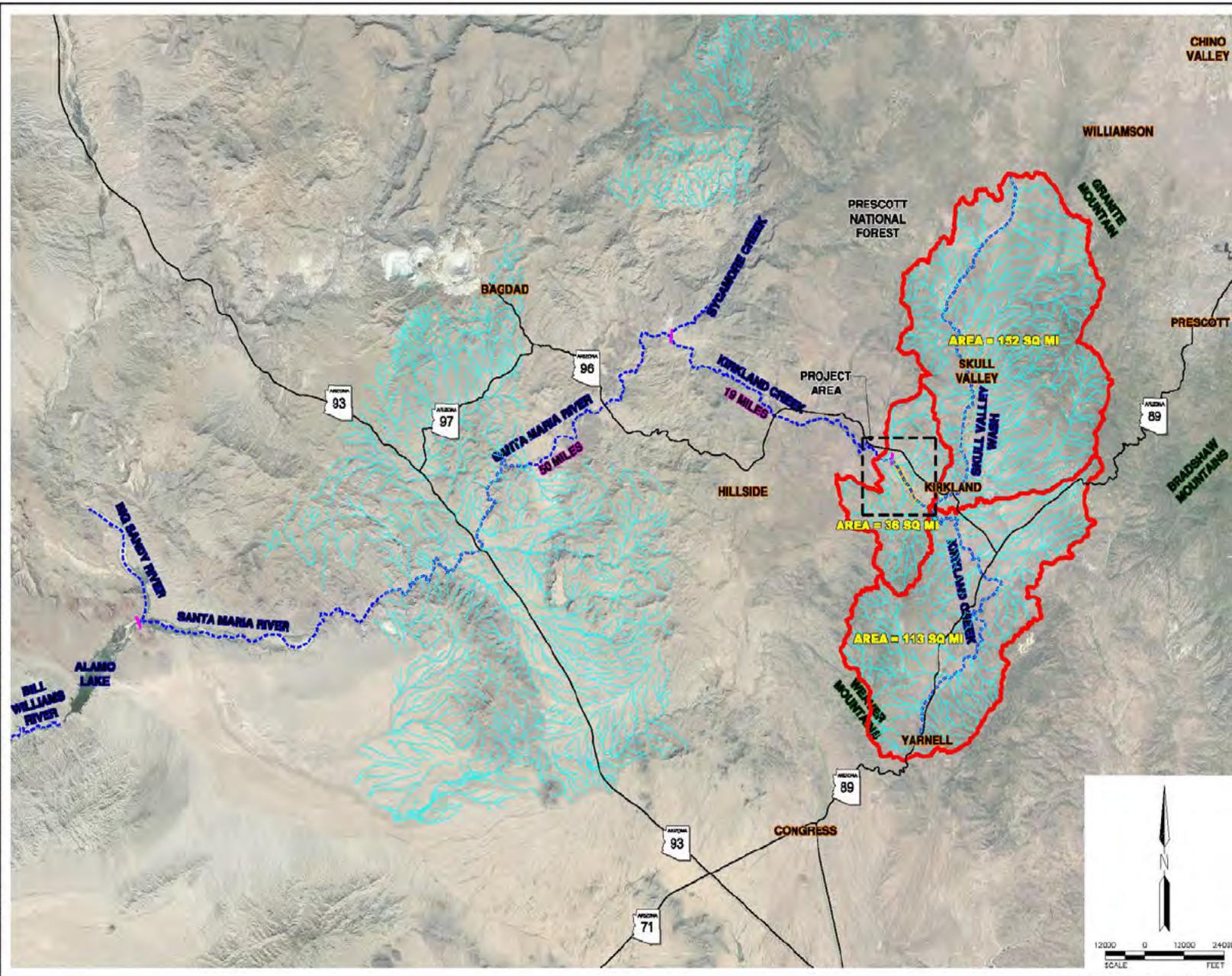


KIRKLAND CREEK - TRIANGLE NRCD
YAVAPAI COUNTY, ARIZONA
OVERVIEW MAP

Water Quality/Quantity

- * Kirkland Creek is not an impaired water. It is recognized as a significant contributor of turbidity and other impairments which flow into the Santa Maria River and down into Alamo Lake (an impaired water)
- * Kirkland Creek is not a properly functioning riparian and lacks flood water and sediment conveyance capacity.

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<p>HILGARTWILSON ENGINEER PLANNER SURVEY MANAGER 2342E INDIANAVILLE, STE. 100 P. 602.400.0333 / F. 602.283.2336 www.hilgartwilson.com</p>		BR-2 CHINO VALLEY	
		WILLIAMSON GRANITE MOUNTAIN PRESCOTT BRADSHAW MOUNTAINS	
PRESCOTT NATIONAL FOREST PROJECT AREA HILLSIDE KIRKLAND YARNELL CONGRESS		AREA = 152.30 MI SKULL VALLEY SKULL VALLEY WASH AREA = 38.80 MI AREA = 113.80 MI HIGASSET MOUNTAIN	
AZ 93 AZ 97 AZ 96 AZ 89 AZ 71 AZ 88		BILL WILLIAMS RIVER ALAMO LAKE BIG SANDY RIVER SANTA MARIA RIVER SANTI MARIA RIVER 50 MILES STOVAINNE CREEK KIRKLAND CREEK 19 MILES SKULL VALLEY WASH 152.30 MI 38.80 MI 113.80 MI	
KIRKLAND CREEK - TRIANGLE NRCO YAVAPAI COUNTY, ARIZONA			
WATERSHED OVERVIEW EXHIBIT			
HILGARTWILSON PROJ. NO.: 1964 DATE: MAY 2018 DWG. NO.: SCALE: 1" = 12,000' DRAWN: S. DESIGNED: HW APPROVED: AT		SHEET NO. 01 TOTAL SHEETS 01	

Reasons for this project

- * The subject reach of Kirkland Creek that comprises the Project area is ephemeral and subject to infrequent but intense flooding. In recent past, 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; Kirkland Creek is aggrading sediment. 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 Kirkland Valley northeast of the channel. 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 Kirkland Valley and erosion occurring on the lower end appear to be indicative of an unbalanced sediment conveyance capacity in the watercourse.

Over bank flooding and erosion



Channel capacity/conveyance



Un-natural modified channel resulting in over bank flooding and aggradation. This leads to channel degradation down stream.



Desired Outcomes

- * Reduce aggradation and excessive in channel vegetation growth in the upper end of the subject reach of Kirkland Creek.
- * Reduce flooding and flood damage in the overbank areas.
- * Reduce erosion and scour damage at the lower end of the subject reach.
- * Re-establish the historical cross-section of Kirkland Creek within the Project area.
- * Restore the balance of sediment conveyance within the watercourse.
- * Limit disturbance to environmentally sensitive areas within the Project vicinity.
- * Retain preferred native vegetation

Methods

The project seeks to impart a corrective impact on Kirkland Creek by reestablishing the channel cross-section at the upstream portion of the subject reach.

- * These efforts include the removal of accumulated sediments and vegetation within the main channel, thus increasing the channel width while maintaining current outside meander bank configuration. This allows for the conveyance of flood waters and sediment loads.
- * The outside bank of the channel will house native rock vanes to help reduce shear stress against the bank and lengthen its meander arc length.
- * Remove and replant desirable native vegetation to adjacent suitable areas.

These changes will ensure that the channel will be allowed to continue to evolve and not be “locked” into its exact current alignment, but be a more correct functioning riparian system while protecting valuable agricultural land and infrastructure.

Areas of Improvement



Long-Term Maintenance

- * These practices will be typical of USDA NRCS practices life expectancy. 30-50 years
- * Minor maintenance will be accomplished by landowners along the waterway.
- * There will be some maintenance accomplished through establishing a partnership with BNSF Railway around the bridge crossing.



Questions

Thank you