WATERSHED GROUP DEVELOPMENT AND WATERSHED RESTORATION PLANNING FOR THE RIO SANTA CRUZ WATERSHED NORTHERN NEW MEXICO

Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase 1 Grant Application NOFO No. R22AS00163

Project Applicant

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March 29, 2022

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WATERSHED GROUP DEVELOPMENT AND WATERSHED RESTORATION PLANNING FOR THE RIO SANTA CRUZ WATERSHED NORTHERN NEW MEXICO

EXECUTIVE SUMMARY

Date: March 29, 2022

Applicant Name: Santa Cruz Irrigation District (SCID)

Applicant Address: 1449 Calle Dominicana St Santa Cruz, NM 87567 Rio Arriba County, New Mexico

Project Location: The Santa Cruz Watershed from the headwaters in the Sangre de Cristo Mountains to the Rio Grande confluence in Española, New Mexico, including adjacent Acequia Llano and Arroyo Seco watershed areas (see Fig 1).

Project Summary: The SCID (applicant) will establish a Watershed Group and develop a holistic watershed restoration/management plan. The SCID will seek to engage a diverse group of stakeholders that include Santa Clara Pueblo, Ohkay Owingeh, over 60 acequias, Truchas Land Grant, City of Espanola, Santa Fe National Forest, Santa Fe County, Rio Arriba County, state agencies, Federal agencies, and other affected stakeholders. Key issues include reservoir sedimentation, seeking to sustain or improve reliability of water supply in the midst of climate change, restoring the hydrologic function of stream channels, and restoring upland and riparian vegetative cover. The vision is for all stakeholders to benefit by establishing fire resiliency, provide clean and abundant water, and connecting historically disadvantaged communities to land and water management, a connection that is part of their shared history and culture.

Project Timeline: The start date, length of time, completion date for the project will depend on availability of funding sources. With funding from the BOR WaterSMART CWMP, the project would start January 1, 2023, and can be completed by January 31, 2025.

Will the Project Involve Federal Land? Yes, a significant portion of the project area involves Bureau of Land Management and the Santa Fe National Forest.

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PROJECT LOCATION

The Rio Santa Cruz Watershed is located in Northern New Mexico within the Upper Rio Grande (HUC 8) as it pertains to the Santa Cruz Watershed (HUC 10) and the adjacent Acequia Llano and Arroyo Seco drainage areas (Fig. 1). Parts of the City of Espanola, Santa Fe County, and Rio Arriba County as well as two Indian Pueblos are within the watershed area.



Figure 1. Location map of project area.

TECHNICAL PROJECT DESCRIPTION

Applicant Category: New Watershed Group

The SCID is applying to seek funding to form a New Watershed Group. The Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Stream Systems' Community Ditch Association, ("the Association") and the Santa Cruz Irrigation District, ("SCID") are encouraging diverse stakeholders to form local solutions to address their water management needs throughout the watershed. Many of the key stakeholders in the Rio Santa Cruz Watershed are currently involved in resolving the water right claims of two Pueblos (Ohkay Owingeh and Santa Clara) in the Abbott Water Rights Adjudication ("Abbott Adjudication"). As part of those confidential discussions, a technical committee was formed to identify potential solutions for settlement. Major identified issues include shortage sharing of water with the looming impacts of climate change on water supply availability. Developing technical solutions for maintaining stream yield, increasing water supply reliability through collaborative efforts, and improving water deliveries for all parties has been identified as key to settlement and avoiding conflict for all stakeholders. One identified key solution is engaging stakeholders to develop, implement, and maintain a holistic watershed management plan by using the Bureau of Reclamation (BOR) Cooperative Watershed Management Program.

Eligibility of Applicant: The Santa Cruz Irrigation District (SCID) was legally organized November 16, 1925, and is an irrigation district recognized by the State of New Mexico. The SCID includes 23 member acequias, in which the associated landowners also own and operate the Santa Cruz Dam and Reservoir to irrigate approximately 8,000 acres. The elected officers (Board Members) of the SCID collaboratively work with the member acequias to ensure deliveries of water for irrigated agriculture. Seven of the member acequias also include irrigated lands owned by Santa Clara Pueblo and Ohkay Owingeh.

The applicant is significantly affected by the quality and quantity of water in the Rio Santa Cruz Watershed, for the watershed is the source of water for the streams and Santa Cruz Reservoir that are relied on by the SCID member acequias and parciantes.

The applicant is located in the State of New Mexico.

Goals: To develop technical solutions for maintaining stream yield, increasing water supply reliability through collaborative efforts, and improving water deliveries for all parties. One key function is engaging the community for developing, implementing, and maintaining a watershed management plan, so stakeholders can best manage water deliveries while minimizing potential conflict.

Approach: The SCID approach involves 1) engaging the full diversity of stakeholders, perform community outreach, and organize a Watershed Advisory Group, 2) perform Watershed Restoration Planning, and 3) develop Watershed Management Project Design.

Task A – Watershed Group Development

The **first step** will be hiring a facilitator to assist with outreach to stakeholders and seeking interest in Watershed Group participation. The Facilitator position will be a "neutral" person who helps the stakeholder group work together, that understands their common objectives, and can help plan how to achieve these objectives, during meetings or discussions.

The **second step** will involve creation of an outreach plan. Goals defined in this proposal will be used to gather input from stakeholders with developing a mission statement and vision statement, and to set goals for the Watershed Advisory Group. The Abbott Adjudication negotiations Technical Committee has already developed a Virtual Tour PowerPoint presentation of the Santa Cruz Watershed and other materials that, with the permission of the Abbott parties, can be used to inform stakeholders. The outreach plan will include stakeholder meetings to establish broad-based diverse membership and host a listening session. Multiple meeting locations will likely be required, given the diverse communities in the watershed area. From previous experiences, online meetings with stakeholders are poorly attended, therefore, assuming pandemic protocols allow, the meetings will be at convenient and desirable locations that help connect people to the land and their heritage. Potential locations might include those that are historically or culturally relevant to local stakeholders including the Oratorio de San Buenaventura Historic Site in Chimayo, New Mexico and a location designated by Santa Clara Pueblo and Ohkay Owingeh.

The **third step** will be to identify issues and needs from the stakeholders and solicit stakeholders to participate in a Rio Santa Cruz Watershed Advisory Group. The Advisory Group will be a non-jurisdictional group open to all that want to participate, including interested community leaders and stakeholder representatives. The intent is for the Advisory Group to represent the wide range of stakeholders in the watershed area. A significant effort to identify issues, needs, and data gaps has already begun as a result of the Abbott Adjudication negotiations which has largely included Santa Clara Pueblo, Ohkay Owingeh, the Santa Cruz acequias, the Truchas Acequias, and the City of Espanola. However, other affected stakeholders have not participated in such efforts and some of the Abbott parties have focused negotiations on matters not related as directly to watershed restoration. Therefore, the outreach plan will focus on identifying issues and needs not directly associated with the Abbott Adjudication negotiations, as appropriate, so as not to violate any confidentiality protocols. One particular issue to identify and address is property owner buy in for stream channel access.

The **fourth step** will involve pre-planning activities by the Rio Santa Cruz Watershed Advisory Group such as developing a schedule with milestones for outlining a watershed restoration plan, collecting baseline information, and identifying restoration needs for the watershed.

Task B - Watershed Restoration Planning

A baseline assessment of data needs and a preliminary outline of a watershed restoration plan has been performed. Stakeholders and the Watershed Advisory Group will be solicited for additional issues, needs, and ideas. Work already underway or completed includes technical studies and models underway through the Abbott Adjudication negotiation process:

- A review of existing watershed restoration plans
- Initial streamflow monitoring along the Rio Santa Cruz and the three major tributaries
- Bathymetric survey of the Santa Cruz Reservoir to assess current reservoir volume, sedimentation, and sedimentation rates
- Initial hydrologic model development of the Santa Cruz stream system

Efforts will be made not to duplicate the work listed above if the Abbott parties agree to make that work available to the Watershed Advisory Group.

<u>Stream Gaging –</u> Stream gaging implementation is a major data gap identified. Currently there is one stream gage for the entire watershed. A stream gage is planned for the North Fork of the Rio Quemado diversion to Rio Truchas. Additional stream gaging is needed for the Rio Quemado at Cordova, the Rio Quemado at the confluence with Rio Santa Cruz, and the Rio Santa Cruz near the confluence with the Rio Grande. The established stream gaging network will be critical for managing streamflows and assessing watershed health (see Fig. 2 below).



Figure 2. Map of Rio Santa Cruz watershed showing soil infiltration rates, acequias, and existing (blue) and proposed (red) stream gaging locations.

<u>Mapping</u> – The SCID and stakeholders have several GIS datasets currently available, such as the soil map shown on Figure 2. To develop a holistic watershed restoration and management plan, the following mapping has been identified as essential:

- a. Vegetative density
- b. Invasive species presence and density
- c. Post fire debris flow probability
- d. Stream bank condition
- e. Acequia transects, headgates, and desagües (returns)

The Santa Fe National Forest and other sources will be solicited for any available datasets and imagery that can be used to perform the required watershed mapping. Some field verification will be required for items b, d, and e.

<u>Hydrologic and Sedimentation Modeling</u> – An existing hydrologic model of the Rio Santa Cruz watershed has been prepared for the Abbott Adjudication negotiations, and is currently in review by the Abbott Adjudication Technical Committee. If the Abbott parties agree to make the existing hydrologic model, or some updated version available, assessment of climate change scenarios on water supply availability will be performed. Otherwise, a hydrologic model based on available existing information will be developed to assess climate change scenarios on water supply availability. Other goals of the hydrologic modeling are to evaluate potential effects of thinning projects on streamflow, and increased storage capacity for the Santa Cruz Reservoir.

Sedimentation modeling, post-fire debris flow probability analysis (Cannon et al, 2009), is proposed to better identify critical areas for watershed thinning and improvement to terrestrial habitat. The purpose will be to identify projects to improve habitat and watershed health while lessening the potential effects on water quality and quantity from catastrophic fires in the watershed.

<u>Acequia Surveys</u> - to better identify transects, headgate locations, and desagüe locations. The State of New Mexico has already developed a GIS dataset for the general coverage of acequia systems, however it is incomplete or inaccurate at many locations. Knowing the exact location of acequia diversions and returns is needed for the hydrologic modeling and for assessing streamflow availability for affected stakeholders and stream habitat assessments. This project can be completed by performing simple field reconnaissance with GPS and use of satellite imagery analysis.

<u>Drafting of Watershed Plan</u> – in addition to compiling information collected from the preplanning, mapping, modeling, and assessment work, the Facilitator will interview the Watershed Advisory Group and stakeholders to better understand watershed issues and needs. The Facilitator will create a project matrix that will outline and prioritize watershed restoration projects and actions to address identified affected stakeholder issues and needs. If conflict exists between priorities or effects of proposed projects on land use, the Watershed Advisory Group will be relied upon to find a mutually supported collaborative path forward.

Task C - Watershed Management Project Design

The Watershed Advisory Group with support from consultants will complete a site-specific project design for the Rio Santa Cruz Watershed. It is anticipated that projects will include improvements to the hydrologic function of major streams, selected thinning throughout the watershed, implementation of sedimentation controls for the Santa Cruz Reservoir, and others that may be developed through further technical explorations and discussions of the Watershed Advisory Group. Projects may be organized by primary streams which include the Rio Quemado, Rio Medio, Rio Frijoles, and Rio Santa Cruz main stem.

Cost estimates for projects will be developed to better understand required resources and time to implement.



Photograph of Santa Cruz Dam, year 2013.

EVALUATION CRITERIA

Evaluation Criterion A - Watershed Group Diversity and Geographic Scope

Sub-criterion A1. Watershed Group Diversity

The SCID would ask all the diverse stakeholders in the watershed to join us in creating a selfsustaining, consensus-based watershed group that can begin the critical task of planning for and implementing watershed restoration projects for all of our mutual benefits. This diverse group of stakeholders includes but is not limited to:

- Acequias from Truchas through La Mesilla and El Llano
- Santa Cruz Irrigation District (SCID)
- Santa Clara Pueblo
- Ohkay Owingeh
- Rio Arriba County
- Santa Fe County
- City of Española
- USDA Santa Fe National Forest
- USDA Natural Resources Conservation Service
- U.S. Department of the Interior Bureau of Land Management (BLM)
- U.S. Department of the Interior Bureau of Indian Affairs (BIA)
- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service
- State of New Mexico (Office of the State Engineer)
- State of New Mexico (Interstate Stream Commission)
- State of New Mexico (Environment Department—Surface Water Quality Bureau)
- State of New Mexico Department of Game and Fish
- East Rio Arriba Soil and Water Conservation District
- Santa Fe-Pojoaque Soil and Water Conservation District
- Nuestra Señora del Rosario, San Fernando y Santiago (Truchas) Land Grant
- Greater Chimayo Mutual Domestic Water Consumers Association
- Cuatro Villas Mutual Domestic Water Consumers Association
- Citizens of the Santa Cruz Watershed Committee
- Others not yet identified

The SCID believes that all of the above-mentioned stakeholders, and others who we have not yet identified, are critical to the long-term success of this project. If the Phase 1 application is successful, this group could tap into an award of funding to complete part or all of the following: assemble the stakeholders, elect a Board of Directors, develop bylaws and a mission statement, complete stakeholder outreach, develop a watershed management plan and design a watershed management project.

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The "affected stakeholders" are the residents of the watershed area which include irrigators of the land grant areas, private land holdings, and the two Pueblos. There are centuries of tradition and community value centralized around irrigated agriculture. Understanding these community values is essential to developing a watershed restoration plan that is effective for the Santa Cruz Watershed.

Affected stakeholders are those that affect or are affected by the quantity or quality of water within the watershed. Affected stakeholders that support the formation of the watershed group and development of a restoration plan include the following:

The Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Stream Systems' Community Ditch Association. An acequia association with a volunteer Board that represents over 60 acequias in the Rio Santa Cruz Watershed. The Association represents approximately 5,000 parciantes, or member-irrigators that largely reside in disadvantaged communities throughout the watershed. The Association fully supports the formation of the watershed group and the development of a holistic watershed management plan (see attached reference letter).

Many of the affected stakeholders within the watershed that support the formation of watershed group have submitted letters of support. Identified specific stakeholders or groups that already support the formation of the watershed group, their interest in the watershed, and their potential involvement in the group is as follows:

- Santa Fe National Forest is in support of the proposed Santa Cruz Watershed Group and has offered to partner with SCID and the watershed group stakeholders with developing the Santa Cruz Watershed Restoration Plan. Most of the Santa Cruz watershed headwaters are in the Santa Fe National Forest. See attached letter of support.
- Santa Clara Pueblo is in support of the proposed Santa Cruz Watershed Group and with developing the Santa Cruz Watershed Restoration Plan. The lower Rio Santa Cruz flows through Santa Clara Pueblo lands. See attached letter of support.
- **East Rio Arriba Soil and Water Conservation District** is in support of the proposed Santa Cruz Watershed Group and with developing the Santa Cruz Watershed Restoration Plan. The District shares a common goal of protecting the watershed. See attached letter of support.
- **Ohkay Owingeh** is in support of the proposed Santa Cruz Watershed Group and with developing the Santa Cruz Watershed Restoration Plan. Ohkay Owingeh tribal lands depend on water from the Rio Santa Cruz and they have emphasized the importance of a healthy and sustainable watershed for providing adequate water supply. See attached letter of support.
- **U.S. Bureau of Land Management** is in support of the proposed Santa Cruz Watershed Group and with developing the Santa Cruz Watershed Restoration Plan. A significant portion of the Santa Cruz Watershed, including the Santa Cruz Reservoir, is on lands controlled by the Bureau of Land Management. See attached letter of support.

Sub-criterion A2. Geographic Scope

The defined geographic scope is designed to fully represent the full geographic extent of the watershed and adjacent sub-watershed areas that receive water supply from the Santa Cruz Watershed proper. Geographic scope and boundaries are illustrated on Figure 3, and includes:

Santa Cruz Watershed (HUC 10)

Adjacent watershed area that includes the Santa Cruz acequia network

Acequia Llano Drainage Area

Arroyo Seco Drainage Area

The Santa Cruz acequias, which include SCID member ditches, all reside within the defined geographic boundaries, and rely on water from the Rio Santa Cruz system. The Santa Cruz acequias include irrigated acreage of Santa Clara Pueblo and Ohkay Owingeh, as well as providing water to the communities of La Mesilla, La Puebla, Chimayo, Cordova, and Cundiyo. The Rio Truchas acequias are outside of the defined geographic boundary but their main source of water is diverted from the North Fork of the Rio Quemado which is part of the Santa Cruz Watershed. All of these communities have been targeted for letters of support and to participate in the watershed group. The planned membership of the watershed group will represent the full geographic scope of the area in which the group intends to work.



Figure 3. Map showing geographic extent of the area the watershed group will work.

JOHN SHOMAKER & ASSOCIATES, INC. WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS The upper watershed area is entirely controlled by the Santa Fe National Forest and the Truchas Land Grant. Mid-portion of the watershed is mostly owned by private holdings and the Bureau of Land Management. The lower-portion of the watershed and adjacent drainages is Pueblo (tribal) lands, BLM, and private holdings. Figure 4 is a map showing the watershed and landownership.



Figure 4. Map of Santa Cruz geographic area and land ownership.

Evaluation Criterion B - Addressing Critical Watershed Needs or Issues

Critical watershed needs here are initial critical watershed needs that have been identified and it is anticipated more will come from stakeholder outreach

Sub-criterion B1. Critical Watershed Needs and Issues

<u>Awareness and Knowledge of Watershed Issues</u> – Education and outreach are essential for generating awareness of issues in the watershed and fostering stewardship of a watershed system. In addition, through public outreach it will be important to bring the community together to address water supply. It is hoped this work can dovetail with water sharing discussions in the Abbott Adjudication settlement negotiations.

The average age of farmers in the watershed area is increasing and the younger generations have been slow to step in and fill the gap. There is a need to educate the younger generations and better connect them with the community, culture, tradition, and land as it pertains to irrigated agriculture and food security.

<u>Watershed Health and Catastrophic Fire Mitigation</u> – Improving health of the Santa Cruz watershed has been identified as a critical issue in particular the need to mitigate the effects of post-catastrophic fire debris flow and runoff on stream channels and the Santa Cruz Reservoir. Most of the upper watershed area is part of the Santa Fe National Forest which includes the Pecos Wilderness area.

The revised Santa Fe National Forest Management Plan supports a) protecting stream channels, b) restoring hydrologic function, c) maintaining and restoring upland and riparian vegetation cover, and d) reducing erosion. Based on the U.S. Forest Service (USFS) Watershed Condition Classification (WCC), the Santa Cruz Watershed is rated as "functioning at risk." The Land Management Plan supports improvements to functioning at risk watersheds particularly if there are partnerships to help guide the needs for improvements.

The Northern New Mexico Riparian, Aquatic and Wetland Restoration Project, which includes the Santa Fe National Forest, has released the final decision notice on a proposal to restore riparian, wetland, and aquatic ecosystems in Northern New Mexico. The signed decision opens the door to begin implementing multiple projects to improve aquatic and terrestrial habitat, watershed health, and water quality. Proposed projects range from channel reconstruction and streambank restoration to planting riparian species and restoring beaver habitat to relocation and decommissioning of roads and trails. The importance of the Environmental Impact Statement (EIS) and subsequent Finding of No Significant Impact (FONSI), is that proposed projects can be implemented without undergoing an EIS, provided the project follows the prescriptive plan.

<u>Restoring and Maintaining Santa Cruz Reservoir Capacity</u> – The Santa Cruz Reservoir, built in 1929, helps deliver water to acequias when Rio Santa Cruz streamflow is not adequate. The original storage capacity of 4,493 acre-feet has been significantly reduced to 3,000 ac-ft or less. The Santa Cruz Reservoir storage is vital to making water deliveries to farmers during the dry summer months, and will become even more important for mitigating the increasingly early spring runoff due to climate change. The SCID has plans to restore the original reservoir capacity, but given the exorbitant costs, assurances are needed to make sure rapid sedimentation does not impair the storage capacity. Performing restoration of the Santa Cruz Reservoir and the Rio Santa Cruz watershed to minimize sedimentation is a critical need for all stakeholders.

<u>Water Quantity (Shortages and the Impacts of Climate Change)</u> – Drought in the watershed leads to shortfalls of water supply. Currently there is a full supply available about 70 percent of the time. In other words, agricultural water demand consistently outweighs supply in the watershed. Streamflow gaging data, mapping, and hydrologic modeling will help develop a plan to minimize water shortages and conflicts over water supply, while meeting the needs of the various water users, including the Pueblo of Santa Clara and Ohkay Owingeh.

Typically, spring runoff peaks during May and June, but more commonly spring runoff is occurring months earlier. Addressing the issue of climate change on water supply availability, and timing of water supply availability is a key issue that needs to be addressed through holistic watershed management and planning.

<u>Stream and Habitat Restoration</u> - Due to multiple issues, such as water quality, sedimentation, erosion, invasive species, land use practices, water storage, and water diversions, among others, streambanks and riparian areas, as well as other watershed ecosystems, need to be addressed and improved following Best Management Practices for restoration.

The Northern New Mexico Riparian, Aquatic and Wetland Restoration Project EIS did not identify any known endangered species issues in the Santa Cruz watershed. However, it is anticipated that stream and habitat restoration will improve conditions to support a diverse and healthy ecosystem.

<u>Control of Invasive Species</u> - Invasive species are prevalent in the watershed and affect available water, agricultural crops, riparian ecosystems, rangeland, and biodiversity. There is a need to map presence and density of invasive species, and to develop a plan for mitigation. One particular issue is how invasive species, such as salt cedar and Russian Olive, choke off irrigation returns and reduce available water downstream.

Sub-criterion B2. Developing Strategies to Address Critical Watershed Needs or Issues

Task A: Watershed Group Development

The SCID and contracted Facilitator will embark on an initial outreach program to target stakeholders that represent the full geographic scope of the area in which the watershed group will work. The importance of Watershed Group Development is to reach out to all interested stakeholders, so that the needs of the full geographic scope of the area can be heard, and the developed Watershed Group instills confidence in addressing needs, values, and traditions of the communities.

The SCID recognizes that many of the stakeholders reside in disadvantaged and underserved communities and already volunteer as Board Members for local acequias, mutual domestic water systems, or other vital community organizations. Even though there is a high level of interest in Watershed Group Development among stakeholders, the stakeholder engagement and roles of the Watershed Advisory Group need to take into consideration an understanding of the community and its stakeholders.

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<u>Stakeholder Engagement</u> – The stakeholder engagement plan will need to be organic and adjust to stakeholder availability, particularly location and timing of events. Informational outreach materials and listening sessions will be key to successful stakeholder engagement. Santa Clara Pueblo has extensive experience with watershed restoration (see August 2010 issue of National Geographic, article titled "Native Lands"). Engaging experts from Santa Clara Pueblo will be a priority. The listening sessions will be an opportunity for stakeholders to ask questions, provide feedback, and exchange information. Attendees of the listening sessions will be invited to participate in the Watershed Advisory Group. The outreach program will include, but not be limited to, 1) informational mailers to SCID members (approximately 5,000) and to identified stakeholders, 2) informal meetings with stakeholder groups, and 3) two outdoor community gatherings to educate stakeholders on the Watershed Group goals, benefits, and process, to garner feedback from the community, and to recruit membership (if needed).

<u>Watershed Advisory Group</u> – The Santa Cruz Watershed Advisory Group will be established from the participants in the listening sessions and various community leaders and stakeholder representatives. The advisory group will be open to all that want to participate, and it will be a non-jurisdictional group of volunteers. The purpose of this advisory group is to ensure that the restoration plan and future watershed management incorporate a wide range of stakeholder interests. With the assistance of the Santa Cruz Acequias and SCID, the group will develop a vision statement for the future of the watershed and have direct input on goals and objectives for the watershed restoration plan and project priorities.

The watershed group will build on previous partnerships developed in the Abbott Adjudication negotiations and strengthen and guide relationships developed in that separate, contemporaneous process. The watershed group will expand upon these efforts through this grant.

<u>Pre-planning Research</u> – SCID and the Facilitator will gather information about issues and needs related to water quantity, quality, watershed health, and stream habitat within the watershed through research of existing plans, reports, and publications, as well as talking to department leads and experts at state and federal agencies, universities, stakeholders, members of the Watershed Advisory Group, etc. This pre-planning research will help fill and identify data gaps as well as serve to create an outline for the watershed restoration plan.

Task B: Watershed Restoration Planning

The primary functions of the Watershed Restoration Plan are to support water-supply reliability and to improve habitat and watershed health while lessening the potential effects on water quality and quantity from catastrophic fires in the watershed and other climate change impacts. One of the biggest challenges for the Santa Cruz acequias has been conveyance of water from the upper watershed to irrigators in the lower watershed, which will further be complicated by meeting the additional needs of the two Pueblos located at the tail end of the system. The Watershed Restoration Plan activities should include the following process:

- incorporate stakeholder input on plan objective, existing background information, and identified data gaps
- watershed mapping and modeling
- technical assessments of water quantity and quality
- collaborating with Watershed Advisory Group and stakeholders to gather input on results of technical assessments
- developing and prioritizing list of restoration goals and projects

To facilitate the process of developing a watershed restoration plan, an example plan outline will be presented to stakeholders. The outline will include the following: 1) Description and Purpose of Plan, 2) Background Watershed Information, 3) Identified Issues, 4) Goals and Strategies, 5) Identified Projects, and 6) Implementation Schedule.

An example plan objective is "Using a watershed approach to restore and maintain the stream system in a holistic manner so that the water delivery system to irrigators and the ecosystem are functionally optimized, and the stakeholders in the watershed are actively involved in selecting the management strategies that will be implemented to prevent and solve problems related to the stream system." Stakeholders will first have an opportunity to review, modify, and adopt the plan objectives.

The Rio Santa Cruz includes three primary tributaries 1) Rio Quemado, 2) Rio en Medio, and 3) Rio Frijoles. The Rio Quemado is further divided into the North Fork and the South Fork. Due to a lack of stream gaging data, there are likely some misconceptions among stakeholders regarding the source and quantity of streamflow. Collecting additional streamflow data is a critical watershed need that will be implemented up front. One current proposal includes installing temporary stilling wells with transducers and developing rating curves for each station. The time-series data would be used to educate stakeholders and would be incorporated into the analysis of critical issues and needs. A permanent stream gaging system will like be recommended for the Watershed Restoration Plan. A stream gaging network (see Fig. 2) will be critical for managing streamflows and assessing watershed health.

Mapping will be required to develop a holistic watershed restoration and management plan, particularly to address the issues and needs related to watershed health. Mapping of vegetative density, invasive species presence and density, post fire debris flow probability, stream bank condition, and acequia transects, headgates, and desagües (returns) will require coordination with agencies and groups. Input from stakeholder experts on watershed restoration, such as

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the Santa Fe National Forest and Santa Clara Pueblo, will be solicited. Mapping of acequia features (acequia surveys) will require closely working with the Santa Cruz acequias, the East Rio Arriba Soil and Water Conservation District, SCID, and the New Mexico Acequia Association. The intent is to use available information for each acequia with some spot checks in the field to verify locations. Understanding acequia water supply needs and basic infrastructure will be critical for addressing stakeholder issues and resolving conflicts over water use and shortage sharing.

Proposed Watershed Advisory Group hydrologic and sedimentation modeling methods and tools will be presented to the Abbott Adjudication Technical Committee, so there are no redundancies in efforts, and so there are no conflicts developing among settlement parties. Hydrologic modeling will be performed to assess climate change scenarios, Santa Cruz Reservoir modifications, and watershed improvements on water supply availability. The hydrologic modeling results will be used to quantify benefits of proposed activities and to prioritize issues.

Sedimentation modeling and post-fire debris flow probability analysis (Cannon et al, 2009), is proposed to better identify critical areas for watershed thinning and improvement to terrestrial habitat. The purpose will be to identify projects to improve habitat and watershed health while lessening the potential effects on water quality and quantity from catastrophic fires in the watershed. This activity will require the Watershed Group to closely work with Santa Fe National Forest and the Truchas Land Grant. Available imagery from the Santa Fe National Forest and other sources will be used for the analysis.

Drafting of the Holistic Santa Cruz Watershed Restoration Plan will outline a floorplan for maintaining the quantity and quality of source of water, and help address stakeholder issues, so it limits conflict with the inevitable shortage sharing of available supply. Coupling the recommended plan projects related to restoring the hydrologic function of stream corridors and terrestrial habitat of the upper watershed area with the Santa Fe National Forest would be key to plan implementation. A draft plan will be presented to stakeholders through outreach efforts, such as presentations at community gatherings in the lower and upper watershed areas, and to the Abbott Adjudication Technical Committee. Goals of the stakeholder input on the draft plan will be to identify any remaining conflicts, options for conflict resolution, and stakeholder priority of issues.

Task C: Watershed Management Project Design

The primary purpose of the Phase 1 activities will be to implement Task A and B, with an initial phase of Task C. The Watershed Advisory Group will likely propose possible restoration projects that address the main identified issues affecting our watershed - these may be only in the concept phase at the completion of this stage. Task C Watershed Management Project Design activities that will be completed as part of this grant project will likely be limited to important projects that do not require significant engineering, such as stream gage installation, and acequia diversion and return improvements. Stream gage installation is critical for addressing data gaps, validating needs, and overall development of the plan. Identified simple improvements for acequia diversion and returns that have high priority will be designed with cost estimate for implementation.

It is not within our current scope to create fully designed large restoration projects such as restoring the hydrologic function of tributaries. That will mostly come after Phase 1 has been completed. However, a prioritized list of projects will be developed as part of the plan, and initial cost estimates to design and implement projects will be used to develop timelines, milestones, and an overall action plan. Project designs completed by other entities will be included as a starting point for completing design of projects identified in the plan. An example includes identified specific project areas of Santa Fe National Forest that require restoration of stream channels or upland and riparian vegetation cover will be designed using the prescriptive plan detailed in the revised Santa Fe National Forest Plan

The Watershed Group will work with Reclamation's environmental and cultural resource staff to determine what type of site-specific environmental compliance will be necessary for the project(s) on Federal Land upon implementation.

Evaluation Criterion C - Implementation and Results

Presented below is the SCID best effort to detail the BOR WaterSMART CWMP program requirements, to implement planned activities within the required two-year time frame, and to identify the extent to which the proposed activities will complement existing Federal, state, or regional planning efforts. However, it should be noted that stakeholder input may change components of Task B Watershed Restoration Planning.

Sub-criterion C1. Project Implementation

Table 1 outlines the milestones for each Task and provides start dates, completion dates, and total task costs. Hiring of the facilitator will occur after notice of grant award.

Major Task	Major Activities	Milestones	Start Date*	Completion Date*	Task cost
Task A	Stakeholder	Hiring Facilitator	Jul. 1, 2022	Jul. 31, 2022	
Watershed	Engagement	Design brochure and	Aug. 1, 2022	Dec. 31, 2022	\$17,220
Group		prepare letter for mailing.			

 Table 1. Major Tasks, milestones, Implementation Dates, and Costs

SCID

Development	Outreach	Mail out brochures and			
and		questionnaire with SCID			
Completed by	Education	newsletter. Call, email, and			
SCID Project		perform initial visits to		-	
Manager and		stakeholder groups (e.g.,			
Hired		Pueblo partners, Water			
Facilitator and		Providers, SFNF)			
Water		Host two outdoor	Sep. 1, 2022	Oct. 15, 2022	
Resource		information exchange	_		
Consultant		gatherings to engage			\$13,816
		communities in the upper			
		and lower watershed areas.			
		Watershed group	Nov. 1, 2022	May 31, 2023	\$10.712
		participation and framework			\$10,712
	Watershed	Conduct 1-2 meetings to	Oct. 15, 2022	Dec. 31, 2022	
	Advisory	prioritize watershed projects			
	Group and	based on needs and issues			
	Stakeholder	Conduct 1-2 meetings to	Jan. 15, 2023	Feb. 28, 2024	
	meetings	develop a schedule with			\$7.810
		milestones for completing			φ7,010
		the plan			
	Pre-planning	Solicit input from experts	Jul. 1, 2022	Dec. 31, 2022	
	research	regarding data gaps and			\$6 400
		information to create a			φ0,100
		watershed restoration plan			
		Coordinate with Abbott	Jul 1, 2022	Jun 30, 2023	\$8 080
	Compile	parties			
	existing	Collect and review all	Dec 1, 2022	Jun 30, 2023	
	information	available watershed data			\$8,720
	and data	from SCID, SFNF, and			<i>\$0,720</i>
	~ 11	other stakeholders			
	Collect new	Instrumentation and	Nov. 1, 2023	Nov. 1, 2024	\$24,800
Task B	data	streamflow monitoring			
Watershed		Vegetative type and density	Jul. 1, 2023	Jun. 30, 2024	
Restoration	Mapping	(NDVI imagery)			\$19.280
Planning	B	Acequia features	Jul. 1, 2023	Jun. 30, 2024	
		Stream bank condition	Jul. 1, 2023	Jun. 30, 2024	
		Post-fire debris flow	Jan. 1, 2024	Aug. 31, 2024	
	Modeling	probability			\$24.520
		Hydrologic			4 ,
		Sedimentation			
	Drafting	Develop list of projects with	Aug. 1, 2023	Oct. 31, 2023	
	watershed	decision matrix that address			\$14,360
	plan	issues and needs		X 00 555	
Task C	Summary of	Incorporate project designs	Nov. 1, 2023	Jun. 30, 2024	\$29.400
	· · · ·	davalanad by others			,.00

Management	project	Stream gaging design	Jan. 1, 2024	Mar. 31, 2024	
Project	designs	Acequia diversion	Jan. 1, 2024	Jun. 30, 2024	
Design		improvements design			
	Action plan	Develop inventory of work	Jul. 1, 2024	Dec. 31, 2024	
	_	required to complete project			\$14,360
		designs			

* start and completion dates are governed by scheduled milestones detailed in the NOFO

Sub-criterion C2. Building on Relevant Federal, State, or Regional Planning Efforts

The flowing is a description of how the proposed activities that are part of this grant project will complement, build upon, or meet the goals of relevant Federal, state, or regional planning efforts.

Rio Arriba County Comprehensive Plan

The 2009 Rio Arriba County Comprehensive Plan section on land and water lists ten goals and 69 implementation strategies for economic development. Rio Arriba County supports this application (see included letter of support). Example goals in line with this grant proposal include:

- 1. Strengthen the connection between the land and water, and protect the water rights within the region.
- 2. Protect and restore irrigated agricultural lands for livestock and agricultural production purposes, increase the water shortage capacity of the County, and encourage managed development and develop water foot-print of future developments.
- 3. Protect Critical Management Areas designated and mapped in this plan in order to protect and restore biodiversity and natural resources such as headwaters, streams, rivers, riparian areas, springs, ciénegas, floodplains, critical wildlife habitats, traditional range land and irrigated lands.
- 4. Educate citizens of all ages about the values, history, principles, opportunities and economic benefits of the relationship between land and water so that future generations can continue to work the land.
- 5. Protect the region's water supply and quality by maintaining the natural function of the land, encouraging and pursuing funding for water shed management, protecting Critical Management Areas from development, mapping and managing aquifers, and restoring function to damaged or unproductive lands.
- 6. Encourage compact and sustainable growth that reflects traditional settlement patterns, promotes biodiversity, reduces our carbon footprint, reduces our water footprint, and enhances our unique diversity and quality of life.

Jemez y Sangre de Cristo Regional Water Plan

The Jemez y Sangre de Cristo Regional Water plan identifies strategies for better management and use of available water supply. The Santa Cruz Watershed Restoration Plan will incorporate identified needs and issues in the regional water plan and build upon recommended strategies for water management.

Santa Fe National Forest Land Management Plan

The vision is to:

- 1. Restore fire resiliency to our forest
- 2. Provide clean and abundant water
- 3. Connect people to the land and their heritage

The revised plan supports a) protecting stream channels, b) restoring hydrologic function, c) maintaining and restoring upland and riparian vegetation cover, and d) reducing erosion.

Based on the U.S. Forest Service (USFS) Watershed Condition Classification (WCC), the Santa Cruz Watershed is rated as "functioning at risk." There are three WCC classifications: (1) functioning properly, (2) functioning at risk, and (3) impaired function. The Land Management Plan supports improvements to functioning at risk watershed particularly if there are partnerships to help guide the needs for improvements.

The Northern New Mexico Riparian, Aquatic and Wetland Restoration Project – A news release was provided on July 30, 2021 that the Carson, Cibola, and Santa Fe National Forests and Kiowa National Grasslands have released the final decision notice on a proposal to restore riparian, wetland, and aquatic ecosystems in Northern New Mexico. The signed decision opens the door to begin implementing multiple projects to improve aquatic and terrestrial habitat, watershed health, and water quality across the three national forests. Proposed projects range from channel reconstruction and streambank restoration to planting riparian species and restoring beaver habitat to relocation and decommissioning of roads and trails. The importance of the Environmental Impact Statement (EIS) and subsequent Finding of No Significant Impact (FONSI), is that proposed projects can be implemented without undergoing an EIS, provided the project follows the prescriptive plan.

The Rio Quemado, Rio Medio, and Rio Frijoles are not in the initial list for riparian improvements; nevertheless, a prescribed process is in place to implement such restoration projects on Santa Fe National Forest in the Santa Cruz Watershed. Restoration projects identified in the Santa Cruz Watershed Plan will implement the process and methods described in the Santa Fe Nation Forest updated plan.

No endangered species issues were identified for the Rio Quemado, Rio Medio, and Rio Frijoles, which allows for a less stringent process to implement watershed restoration projects. In summary, the Northern New Mexico Riparian, Aquatic and Wetland Restoration Project provides a process to implement projects identified by an established Santa Cruz Watershed Group.

Upper Rio Grande Watershed District – Watershed Group

The primary focus of the Upper Rio Grande Watershed District (URGWD) is flood prevention on the main stem of the Rio Grande from Española to about Velarde. The URGWD does <u>not</u> include the Santa Cruz Watershed, but it does include the Rio Truchas Watershed which receives water from the Santa Cruz Watershed via a diversion from the North Fork of the Rio Quemado to Rio Truchas. The URGWD mission statement includes the following:

- 1. to create watershed health, enhance local ecosystems and improve water quality,
- 2. to participate in programs to protect the communities, homes, businesses, farms, ranches, acequias, and water infrastructure systems from flooding and sediment damages, and
- 3. to view the water resources of the valley as central to the historic, cultural, economic, and ecological fabric of the communities.

The URGWD has formed a Watershed Group and applied for funding from the BOR Cooperative Watershed Management Program. The Santa Cruz Watershed Restoration Plan will complement efforts by the URGWD.

Rio Quemado Watershed Group

Rio Quemado Watershed Project addresses stream siltation, water temperature, and streambottom deposits. These issues are largely due to rural road runoff and lack of streambank stabilization. A Watershed Restoration Action Strategy Plan was developed to address issues with the Rio Quemado. Projects were planned for the time period 2006 through 2009. One streambank stabilization and restoration project was completed on the Rio Quemado at Acequia Las Cuevas and Acequia Manuel Vigil. No other known activity has occurred since 2009, and it is not known if the Rio Quemado Watershed Group still exists. The Santa Cruz Watershed Restoration plan will include the same stakeholders and build upon efforts of the Rio Quemado Watershed Group.

Española Valley Flood Risk Management and Ecosystem Restoration Plan

The U.S. Army Corps of Engineers (USACE) proposes to construct 280 acres of habitat measures to restore the bosque in the floodplain communities of the Pueblos of Ohkay Owingeh and Santa Clara by (1) improving hydrologic function by constructing Grade Restoration Facilities (GRFs), high-flow channels, terrace lowering, willow swales, ponds, and wetlands, and (2) restoring native vegetation and habitat by removing exotic species, and restoring riparian gallery forest (bosque). The project involves the confluence of the Santa Cruz with the Rio Grande (floodplain), and not the Santa Cruz Watershed.

The proposed management measures for Ohkay Owingeh include: 6 GRFs (1 located along the Rio Chama, 1 located along the Rio Grande upstream of the Rio Grande/Rio Chama confluence, and 4 located below the Rio Grande/Rio Chama confluence), terrace lowering, non-native vegetation removal, and high flow channels. The proposed management measures for Santa Clara Pueblo include: vegetation removal, high-flow channels, swales, and bank line lowering. Issues and needs for the Santa Cruz watershed identified in the Española Valley Flood Risk Management and Ecosystem Restoration Plan will be included in Task B planning efforts.

U.S. Environmental Protection Agency's (EPA) Nonpoint Source Management Program

A list of the New Mexico Environment Department Surface Water Quality Bureau (SWQB) Santa Cruz Watershed "assessment units" and their water quality impairments area as follows:

- Santa Cruz River (Santa Clara Pueblo boundary to Santa Cruz Dam) Impaired by temperature and aluminum, and a historic impairment for *E. coli* with a corresponding Total Maximum Daily Load (TMDL).
- Santa Cruz Lake Impaired by nutrients, temperature, and aluminum, with no TMDL.

- Santa Cruz River (Santa Cruz Reservoir to Rio en Medio) Impaired by temperature and aluminum, with no TMDLs currently.
- Rio Quemado (Santa Cruz River to Rio Arriba County boundary) Impaired by *E. coli* and aluminum, with a TMDL for *E. coli*.
- Rio Quemado (Rio Arriba County boundary to headwaters) Impaired by *E. coli* and aluminum, with a TMDL for *E. coli*.
- Cañada de los Tanos (Rio Quemado to headwaters) This tributary of the Rio Quemado has been assessed for its high-quality cold water aquatic life use, and meets this standard.
- Rio Medio (Rio Frijoles to headwaters) Impaired by temperature, turbidity, and aluminum, with no TMDLs currently.
- Rio Frijoles (Rio Medio to headwaters in Pecos Wilderness) Impaired by turbidity, with no TMDL currently.

The headwater streams identified above have generally been assessed at their lower ends, and their upper reaches and upper tributaries may have much higher water quality, but apparently have in general not been assessed. The New Mexico Water Quality Standards identify several Outstanding National Resource Waters within the Pecos Wilderness portion of the Santa Cruz watershed. A convenient way to identify these ONRWs is to turn on the "Outstanding National Resource Waters" group (i.e., check the box) in the SWQB mapper.

Ideally, the plan for the Santa Cruz watershed will develop strategies to address the water quality problems identified above, and strategies to protect water quality, along with strategies to ensure water users have access to their traditional and property rights in water, and other management objectives and strategies appropriate to plan on a watershed basis. A key document in developing strategies for water quality improvement and protection is the U.S. Environmental Protection Agency's Nonpoint Source Program and Grants Guidelines for States and Territories (April, 2013). To help with this component of the plan, the SWQB has proposed to provide staff technical support in that area through staff time, estimated at 200 hours over the course of two years. The SWQB supports this application (see included letter of support).

Evaluation Criterion D - Presidential and Department of the Interior Priorities

Major components of the proposed Santa Cruz Watershed Restoration Plan are to implement Tribal consultation and strengthen relationships with stakeholders in the watershed community, and to address the climate crisis.

Sub-criterion No. E1. Climate Change

The Santa Cruz Watershed Restoration Plan is meant in part to increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, and biodiversity. In particular the Santa Cruz Watershed Restoration Plan will address several of the policy details specified in EO 14008, Sec. 214 and Sec 216 regarding conserving our public lands and waters, increase resilience to wildfires and storms, and solicit input from State, local, Tribal, agriculture, and other key stakeholders in identifying strategies in conserving waters and addressing the climate crisis.

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Sub-criterion E2. Disadvantaged or Underserved Communities

As outlined further below, the proposed project will serve impoverished communities in a county that has been designated as "Most Disadvantaged", and which experiences a disproportionate impact from climate change. The benefits to these communities will help address water quality and quantity in a time of increasing drought and economic growth opportunities.

The project area primarily serves Rio Arriba County, New Mexico and the communities of Cordova, Cundiyo, Chimayo, La Puebla, Cuarteles, Santa Cruz, La Mesilla and El Llano. These communities (and Rio Arriba County) are classified as rural, and according to the Multidimensional Index of Deep Disadvantage performed by the University of Michigan¹, Rio Arriba County carries a "Most Disadvantaged Designation". That designation is further demonstrated by the following statistics from the Index and the 2020 Census:

- Index of Disadvantage: -3.63 (Most Disadvantaged)
- Median Household Income: \$42,264 (compared to \$67,521 nationwide)
- Percent Living in Poverty: 26.4% (compared to 14.7% nationwide)
- Percent Living in Deep Poverty: 16.5% (compared to 6.5% nationwide)
- Infants with Low Birth Weight: 11.7% (compared to 8.0% nationwide)
- Life Expectancy: 73.9 (compared to 79.2 nationwide)
- Labor Force Participation Rate: 48.6% (compared to 61.9% nationwide)
- Unemployment Rate: 8.0% (compared to 6.0% nationwide)
- Substandard Housing Percentage: 23.36% (compared to 5.2% nationwide)
- Language other than English spoken at home, percent of persons age 5 years+: 59.7%

The U.S. Drought Monitor map released on Thursday, March 17th, 2022 depicts the project area as having a D3 designation for extreme drought, which has been ongoing for approximately twenty years. Numerous drought research studies, including one performed by Richard Seager at the Lamont-Doherty Earth Observatory of Columbia University, have projected that the aridification of the Southwestern United States is worsening, and is contributed to by climate change. Taken together, it is clear that the project area is located in a watershed that is primarily composed of rural, disadvantaged communities that are experiencing increasing and disproportionate impacts from climate change.

Sub-criterion E.3. Tribal Benefits

Santa Clara Pueblo and Ohkay Owingeh are in the defined geographic scope and receive water supply from the Rio Santa Cruz stream system. Protecting the quantity and quality of water in the watershed from drought and climate change impacts should benefit all the users in the

¹ The Index can be viewed at the following hyperlink: <u>https://tableau.dsc.umich.edu/t/UM-</u> <u>Public/views/IndexofDeepDisadvantage/CountiesCitiesMap?:isGuestRedirectFromVizportal=y&:embed=y</u>

system, including these two tribes located at the bottom of the basin. One of the key components of the Santa Cruz Watershed Restoration Plan is to obtain Tribal and stakeholder needs and issues and have all stakeholders work together. By helping to improve water management holistically, it is hoped that plan components from the Santa Cruz Watershed Restoration Plan can assist in water rights negotiations with the two Pueblos.

OVERLAP OR DUPLICATION OF EFFORT STATEMENT

The SCID is not aware of any overlap between the proposed Santa Cruz Watershed Restoration plan project and any other active proposals or projects in terms of activities, costs, or commitment of key personnel (The SCID did receive a legislative appropriation from the State of New Mexico in the 2022 legislative session for watershed management planning that was vetoed by Governor Michelle Lujan-Grisham. While a Special legislative session has been called to address the veto of legislative appropriations, at the current time that appropriation remains vetoed. The SCID will supplement this application in the event that any legislative appropriations are reinstated or received in the future.)

The SCID is also not aware of any duplicative efforts to the proposed Santa Cruz Watershed Restoration plan project. There are ongoing activities related to the Abbott Adjudication negotiations where legal and technical services are funded by state and federal programs; however, the adjudication process and stakeholders have not duplicated or funded the efforts described in the Santa Cruz Watershed Restoration plan project.

PROJECT BUDGET

The project budget is designed to cover project costs for the time period July 1, 2022 to the end of project January 1, 2025, provided that the project is funded for the first and second year.

1. Budget Proposal

The SCID does not have any identified Non-Federal and Federal Funding Sources for the proposed project.

SOURCE	AMOUNT	
Costs to be reimbursed with requested Federal Funding	\$199,478	
Cost to be paid by the applicant	\$0	
Value of third –party contributions	TBD	
TOTAL PROJECT COST		

Table 2. Santa Cruz Watershed Phase 1 Planning Total Project Cost

	COMPUT	TATION	Quantity	TOTAL
BUDGET ITEM DESCRIPTION	\$/Unit	Quantity	Туре	COST
Salaries and Wages				
Project Manager/Facilitator	\$60.00/hr	296	Hours	\$17,760.00
Program Lead/Facilitator	\$60.00/hr	432	Hours	\$25,920.00
Fringe Benefits				
Full-Time Employees				\$
Part-Time Employees				\$
Equipment				1
Field Equipment	\$500.00	1	Unit	\$500.00
Stilling wells with transducers	\$1,500.00	3		\$4,500.00
Supplies and Materials				
Brochure handouts, mailers, posters and postage	\$2,500.00	1	Unit	\$2,500.00
Venue supplies, audio/visual, tables, food & beverage				\$2,600.00
Contractual/Construction				**************************************
Design Consultant	\$125/hr	40	Hours	\$4,400.00
Legal Consultant	\$125/hr	254	Hours	\$31,750.00
Technical Consultant	\$120/hr	879	Hours	\$100,080.00
Third-Party In-Kind Contributions				<u>.</u>
TBD				\$
Travel				L
Posting of materials in watershed communities	\$0.60/mile	200	Mile	\$120.00
Project Manager/Facilitator travel	\$0.60/mile	880	Mile	\$528.00
Consultant travel	\$0.60/mile	800	Mile	\$480.00
Equipment install and quarterly data collection	\$0.60/mile	1000	Mile	\$600.00
Field Surveys	\$0.60/mile	600	Mile	\$360.00
Other				
Venue rental fees	\$1,000/day	2	days	\$2,000.00
TOTAL DIRECT COSTS				
Indirect Costs				I
Type of rate:	percentage:	\$base		\$5,823.00
SCID Administration	3%			-

Table 3. Santa Cruz Watershed Phase 1 Planning Budget Proposal

2. Budget Narrative

The SCID realizes the NOFO allows for an award up to \$200,000 over a 2-year period, with up to \$100,000 awarded for the first year, and up to \$100,000 awarded for the second year, contingent on the BOR review performed by October 31, 2023. The budget proposal and schedule are prepared to achieve needed milestones to achieve Phase 1 activities for Tasks A, B, and C while honoring the BOR schedule and available funds outlined in the NOFO. All of Task A and a portion of Task B are proposed to be completed in the first year, and the remainder of Task B and all of Task C are proposed to be completed in the second year, if granted. Proposed pre-award costs (July 1 through December 31, 2022) will be compliant with all applicable administrative and cost principles criteria established in 2 CFR Part 200 and all other requirements of this NOFO. The SCID will consult with the BOR regarding these criteria before incurring pre-award costs.

The SCID has two paid employees (Office Manager and Dam Tender); all other board members and officers are volunteers without compensation. The salaries and wages component of this grant will include the SCID Project Manager, the Programs Lead (SCID Board Member), a hired Facilitator, and contracted experts. The Project Manager will work 250 hours on this project over the two-year time frame and the proposed base salary is \$60.00/hour. The Programs Lead will work 350 hours and the base salary is \$60.00/hour. The SCID hired Facilitator rates are estimated at \$60.00/hour. Given the many community responsibilities of the SCID Project Manager and Board Members, it is likely that the hired Facilitator will substitute, with oversight by Project Manager, for tasks and hours assigned to the SCID Project Manager and Programs Lead.

The Project Manager/Facilitator will work a total of 140 hours in the Task A component, where 60 hours will be spent performing outreach activities and 80 hours will be spent attending the stakeholder meetings. In Task A, the Programs Lead/Facilitator will spend 148 hours assisting with outreach activities and attending stakeholder meetings. For Tasks B and C, the Project Manager/Programs Lead/Facilitator will spend 232 hours compiling and expanding on existing information, coordinating stakeholders and the Watershed Advisory Group, and managing contractors.

The Fringe benefits for the Project Manager/Programs Lead as employees of SCID may include health insurance/dental, retirement, federal and state taxes that are a set federally approved rate and include unemployment insurance, Medicare, and Social Security. A placeholder for these fringe benefits is included in the proposed salary of \$60.00/hr. The SCID is currently unsure how the Fringe benefits will be implemented to meeting the requirements of the NOFO, however, in the event the grant is awarded, the SCID will work closely with BOR to ensure compliance with program requirements and state and federal laws.

Travel for the purposes of this project will include the distance from SCID office in Santa Cruz, New Mexico to stakeholders in the Santa Cruz Watershed. All site visits, data collection, and meetings with stakeholders will occur in various locations throughout the watershed, such as Santa Clara Pueblo near the confluence of the Rio Santa Cruz with the Rio Grande to the community of Truchas near the headwaters. It is 32 miles round trip

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from Espanola to Truchas, New Mexico. The mileage rate for 2022 is \$0.60/mile. The SCID Project Manager/Program Lead/Facilitator will take approximately 40 trips within the watershed over the two-year time frame. This exact mileage is to be determined, but for purposes of this application, we have used the roundtrip distance from Espanola to Truchas (32 miles). For 40 trips with the mileage rate of \$0.60/mile, the travel cost for a hired contractor will be \$768.00. Mileage for contracted consultants to perform various tasks defined in Task A, B, and C is also included in the budget proposal. It is anticipated that the contracted consultant will be traveling from Albuquerque, New Mexico. Round trip from Albuquerque to Truchas is about 200 miles.

Materials for the purpose of this grant will include the costs to print brochures, stakeholder meeting handouts, single paged letters, postage, and envelopes. Under Task A, a budget of \$2,500 has been allocated for posters and mailers to the thousands of Stakeholders in the watershed. An estimate of \$1.00 per mailer to 2,500 stakeholders was used to develop the cost for public outreach with mailers.

The Facilitator will be contracted by SCID to assist the Project Manager and Programs Lead to perform and complete stakeholder engagement, stakeholder outreach, Watershed Advisory Group and stakeholder meetings, and to assist with overall management of the project and grant. A competitive procurement method will be utilized to select the Facilitator, such as placing an advertisement in local papers and notifying stakeholders and agencies within the Santa Cruz watershed area or geographic scope of this project. This advertisement will briefly state the description of the job, a request for application, and the deadline date for application. This advertisement will be paid by the SCID from other funding sources. The SCID Project Manager will follow the District's, state, and federal procurement methods. The selection process will be based on qualifications to complete tasks, knowledge of community, requested pay, time commitment, and other factors.

The SCID proposes to use existing contracted consultants familiar with the project, which include Adan Trujillo, Enrique Romero, and John Shomaker & Associates, Inc (JSAI). Other qualified consultants, to be determined, will likely be used for completing other portions of work identified in Tasks A, B, and C, where notated as "Consultant". The SCID Project Manager will follow the District's, state, and federal procurement methods for contracting consultants.

JSAI is a Water Resource and Environmental Consulting firm that has been assisting the SCID and Santa Cruz Acequias with technical services related to the Abbott Settlement and has been significantly involved with developing the concept for the proposed Rio Santa Cruz Watershed Restoration Plan. Where identified as "Technical Consultant" the SCID is proposing to use JSAI to complete these tasks, or other qualified technical consultants appropriate for the job.

Adan Trujillo and Enrique Romero currently provide legal services to SCID related to the Abbott Adjudication and governance function and compliance. SCID contemplates retaining Trujillo and Romero to provide legal services related to guidance and compliance with grant requirements; procurement and governance in the Watershed Advisory Group, developing outreach presentations and materials; questions raised by the implementation of the project; and any other legal questions that may arise during the project term.

Third Party In-Kind Contributions will include the time that all stakeholders spend participating in meetings, discussion, phone calls, site visits, and performing watershed assessments. These stakeholders include Santa Clara Pueblo watershed restoration technical experts, U.S. Forest Service experts (Santa Fe National Forest), New Mexico Environment Department Surface Water Quality Bureau experts, and other stakeholders that have expressed interest in participation (see Letters of Support). This information is voluntary to this application and does not affect the budget requested. It exemplifies the commitment from agencies that will partake and contribute to the new watershed group.

Indirect costs include the SCID Office Manager services for administrative role in this project. SCID will charge an indirect rate of 3% for these services which will cover operation and maintenance costs, and accounting fees that cover payroll.

ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)?

No. This project is to just create a watershed plan. Any proposed data collection will be non-invasive so there are no impacts to the surrounding environment

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

No. The watershed plan will include the work by the Santa Fe National Forest regarding effects of proposed activities on any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have.

Possibly. The watershed plan will include the surveys performed by the Santa Fe National Forest and the New Mexico Environment Department Surface Water Quality Bureau regarding wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States". CWA jurisdiction will be considered as part of the development of the Santa Cruz Watershed Restoration Plan.

When was the water delivery system constructed?

The existing irrigation system in the Santa Cruz Watershed is hundreds of years old. Some of the infrastructure was constructed as early as the 1600s.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

No, not for the proposed Phase 1 activities. However, the Santa Cruz Watershed Restoration plan will likely include proposed projects that will result in modifications to the existing irrigation system. The existing irrigation system in the Santa Cruz Watershed is hundreds of years old, and modifications have been ongoing since originally constructed.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

Yes. The Santa Cruz Watershed Restoration plan will consider potential effects of recommended projects on National Register of Historic Places. The State Historic Preservation Office will be consulted as part of the plan development.

Are there any known archeological sites in the proposed project area?

Yes. The proposed project area includes portions of two Pueblos. Santa Clara Pueblo and Ohkay Owingeh will be consulted as part of the plan development.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

No. The proposed Santa Cruz Watershed Restoration plan is to benefit low income or minority populations.

Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands?

No. The proposed project is to obtain input from Santa Clara Pueblo and Ohkay Owingeh. The plan would likely provide access of water to Indian sacred sites and tribal lands.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

No. One of the primary issues already identified in the Santa Cruz Watershed is non-native invasive species. The proposed Santa Cruz Watershed restoration plan will address methods for reducing the effects of noxious weeds or nonnative invasive species on the watershed.

REQUIRED PERMITS OR APPROVALS

No required permits or approvals are anticipated for Phase 1 activities for development of the Watershed Group and the Santa Cruz Watershed Restoration Plan. If during the project, a permit is required, the SCID Project Manager will compile will all regulations to obtain the proper permit.

LETTERS OF SUPPORT AND PARTICIPATION

The following stakeholders have provided the attached Letters of Support:

- 1. Santa Clara Pueblo
- 2. Ohkay Owingeh
- 3. City of Espanola
- 4. Rio Arriba County
- 5. Santa Fe Pojoaque Soil and Water Conservation District
- 6. Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Acequia Association
- 7. New Mexico Environment Department Surface Water Quality Bureau
- 8. New Mexico Interstate Stream Commission
- 9. U. S. Bureau of Land Management
- 10. Santa Fe National Forest
- 11. East Rio Arriba County Soil and Water Conservation District

Letters of Support are attached as Appendix A.

OFFICIAL RESOLUTION

RESOLUTION 2022-01

A Resolution of the Santa Cruz Irrigation District Authorizing Ron Gallegos to Commit to the Financial and Legal Obligations Associated with the Receipt of a Financial Assistance Award under the WaterSMART Cooperative Management Program Phase 1 Grant

WHEREAS, the Board of Directors for the Santa Cruz Irrigation District, "SCID", met in a

special meeting on Monday, March 28th, 2022 at 9:00AM at the SCID offices in Española, New Mexico; and

WHEREAS, SCID is in the process of applying for a WaterSMART Cooperative Management Program Phase 1 Grant with the United States Bureau of Reclamation; and

WHEREAS, SCID has named one of its Board members, Ron Gallegos, as the Project Manager for the purposes of the grant application; and

WHEREAS, the Board of SCID further wishes to formally resolve that Ron Gallegos is authorized to commit to the financial and legal obligations associated with the receipt of a financial assistance award under the WaterSMART Cooperative Management Program Phase 1 Grant.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Santa Cruz Irrigation District as follows:

- SCID Board member Ron Gallegos is hereby authorized and approved as the official with legal authority to enter into an agreement under the WaterSMART Cooperative Management Program Phase 1 Grant and to work with the United States Bureau of Reclamation to meet established deadlines for entering into a grant or cooperative agreement.
- SCID has reviewed and supports the application to be submitted.

APPROVED, ADOPTED AND RESOLVED ON THIS 28th DAY OF MARCH, 2022 BY THE SANTA CRUZ IRRIGATION DISTRICT

Chairman Kenny Salazar **Director Ron Galleg**

Director Dominic Marfinez

REFERENCE CITED

Cannon, S. H., Gartner, J. E., Rupert, M. G., Michael, J. A., Rea, A. H., & Parrett, C. 2010. Predicting the probability and volume of post wildfire debris flows in the intermountain western United States. Geological Society of America Bulletin, 122(1-2), 127-144.

SCID

APPENDIX A.

Letters of Support

- 1. Santa Clara Pueblo
- 2. Ohkay Owingeh
- 3. City of Espanola
- 4. Rio Arriba County
- 5. Santa Fe Pojoaque Soil and Water Conservation District
- 6. Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Acequia Association
- 7. New Mexico Environment Department Surface Water Quality Bureau
- 8. New Mexico Interstate Stream Commission
- 9. U.S. Bureau of Land Management
- 10. Santa Fe National Forest
- 11. East Rio Arriba County Soil and Water Conservation District

SANTA CLARA

POST OFFICE BOX 580 (505) 753-7330 (505) 753-5375 Fax



INDIAN PUEBLO

ESPANOLA, NEW MEXICO 87532 OFFICE OF GOVERNOR

March 18,2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: Santa Clara Pueblo's Support for Santa Cruz Irrigation District Phase 1 Application for Bureau of Reclamation WaterSMART Cooperative Watershed Management Program

Dear Members of the Bureau of Reclamation Application Review Committee:

Santa Clara Pueblo supports the Phase 1 Application by the Santa Cruz Irrigation District (SCID) to the Bureau of Reclamation WaterSMART Cooperative Watershed Management Program grant. The proposed work plan in the application to establish watershed restoration planning for the Rio Santa Cruz Basin in New Mexico would establish a vital foundation for future watershed improvements. The lower Rio Santa Cruz below the La Mesilla irrigation diversion to the confluence with the Rio Grande flows through Santa Clara Pueblo lands so there is a common interest in improving the Rio Santa Cruz watershed.

The Pueblo encourages the review committee to give the SCID application full consideration.

Sincerely, 14 Course

J. Michael Chavarria Governor, Santa Clara Pueblo

cc: Don Bustos, President, Rio Quemado, Rio Frijoles, Rio En Medio, Rio Santa Cruz Stream Systems Community Ditch Association Kenny Salazar, Chairman, Santa Cruz Irrigation District Santa Clara Pueblo Tribal Council Santa Clara Pueblo Water Committee

Ben Chavarria, Director, Rights Protection Office and THPO Dino Chavarria, Director, Office of Environmental Affairs Daniel Denipah, Director, Forestry Department Jessica Aberly, Esq.

Richard Hughes, Esq.



OHKAY OWINGEH Governor Joseph P. Aguino., 1st Lt. Gov. Michael Cata, 2nd Lt. Gov. Marcello Povijua, Tribal Sheriff Lindbert Martinez P.O. Box 1099 Ohkay Owingeh, New Mexico 87566 Phone :(505) 852-4400

March 21, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team P.O. Box 25007, MS-84-27133 Denver, CO 80225

> Re: Santa Cruz Irrigation District Phase I Application for BOR WaterSMART Cooperative Watershed Management Program Grant

Dear Application Review Committee:

On behalf of Ohkay Owingeh, I am writing in my capacity as Governor to express the Pueblo's support for the Santa Cruz Irrigation District's application for a grant under the WaterSMART Cooperative Watershed Management Program. The lands of Ohkay Owingeh are located near the bottom of the Rio Santa Cruz Watershed, and we depend in part on water from that source for our agricultural and other needs. We appreciate the importance of a healthy and sustainable watershed for providing adequate water to the Pueblo and others who depend on that source for their livelihoods as well. The Pueblo is committed to working with its neighbors in the Rio Santa Cruz Watershed, and in particular with the Santa Cruz Irrigation District, to develop and implement sound restoration plans and watershed management. For these reasons, we support the Santa Cruz Irrigation District's application.

We are grateful for your consideration of the application and this letter of support.

Sincerely yours, Íoseph P. Aguino

Governor

cc: Santa Cruz Irrigation District



Javier E. Sánchez Mayor

Dennis Tim Salazar Mayor Pro Tem

Councilors

District 1 Dennis Tim Salazar John L. Ricci

District 2 Peggy Sue Martinez John Ramon Vigil

District 3 Manuel J. Martinez Denise D. Benavidez

District 4 Justin J. Salazar-Torrez Dorothy D. Valdez

Interim Municipal Judge Martin M. Martinez

Executive Staff

Interim City Manager Diahann Jacquez

City Clerk Angelica M. Serrano

405 N. Paseo de Oñate Española, NM 87532 505-747-6100 (Main) 505-747-6084 (Fax) www.cityofespanola.org

CITY OF ESPAÑOLA

"The Heart of Northern New Mexico...Where Cultures Unite"

March 22, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's (SCID's) application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the Mayor of the City of Española.

The City of Española is one of numerous entities in the Española Valley reliant upon the limited water resources of the region. The efforts of SCID to effectively manage the watershed that serves as the source of recharge to surface and groundwater in the vicinity of Española will benefit not only SCID, but all citizens of the Valley. On behalf of the citizens of Española, I encourage BOR to grant SCID's funding request for the benefit of the region.

In considering whether to award this application, please note that the City of Española supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

Javier E. Sánchez Mayor



Javier E. Sánchez Mayor

Dennis Tim Salazar Mayor Pro Tem

Councilors

District 1 Dennis Tim Salazar John L. Ricci

District 2 Peggy Sue Martinez John Ramon Vigil

District 3 Manuel J. Martinez Denise D. Benavidez

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CITY OF ESPAÑOLA

"The Heart of Northern New Mexico...Where Cultures Unite"

March 22, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's (SCID's) application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the Mayor Pro Tem and Public Works Committee Chair of the City of Española.

The City of Española is one of numerous entities in the Española Valley reliant upon the limited water resources of the region. The efforts of SCID to effectively manage the watershed that serves as the source of recharge to surface and groundwater in the vicinity of Española will benefit not only SCID, but all citizens of the Valley. On behalf of the citizens of Española, I encourage BOR to grant SCID's funding request for the benefit of the region.

In considering whether to award this application, please note that the City of Española supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

Dennis Tim Salazar Mayor Pro Tem



Javier E. Sánchez Mayor

Dennis Tim Salazar Mayor Pro Tem

Councilors

District 1 Dennis Tim Salazar John L. Ricci

District 2 Peggy Sue Martinez John Ramon Vigil

District 3 Manuel J. Martinez Denise D. Benavidez

District 4 Justin J. Salazar-Torrez Dorothy D. Valdez

Interim Municipal Judge Martin M. Martinez

Executive Staff

Interim City Manager Diahann Jacquez

City Clerk Angelica M. Serrano

405 N. Paseo de Oñate Española, NM 87532 505-747-6100 (Main) 505-747-6084 (Fax) www.cityofespanola.org

CITY OF ESPAÑOLA

"The Heart of Northern New Mexico...Where Cultures Unite"

March 22, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's (SCID's) application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the Interim City Manager of the City of Española.

The City of Española is one of numerous entities in the Española Valley reliant upon the limited water resources of the region. The efforts of SCID to effectively manage the watershed that serves as the source of recharge to surface and groundwater in the vicinity of Española will benefit not only SCID, but all citizens of the Valley. On behalf of the citizens of Española, I encourage BOR to grant SCID's funding request for the benefit of the region.

In considering whether to award this application, please note that the City of Española supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

Diahann Jacquez

Interim City Manager

COMMISSIONERS

James J. Martinez Chairman, District I

Christine A. Bustos District II

Moises A. Morales District III

COUNTY MANAGER Lucía F. Sánchez

DEPUTY MANAGER Matthew T. Casados



Rio Arriba County Office of the County Manager

March 22, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's (District) application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the County Manager of Rio Arriba County (County).

Our County understands the vital role watershed management plays in our region and supports such initiatives as proposed by the District. The County is home to the San Juan and Sangre de Cristo mountain ranges, the headwaters of the Rio Grande River and Rio Chama and countless tributaries above 7,000 ft. in elevation that are pivotal to the Rio Grande watershed that supports all local stream systems, mutual domestic water associations, ditches and traditional acequias. We recognize the importance of water management within our local communities, ranches, and farms as well as to our public lands and cities. Our County strongly supports project proposals like this one that aims to support continued water management, watershed restoration, riparian areas, floodplain systems, planning, and project design. We ask for favorable consideration of this project proposal by the District. We are confident that the District will continue to support the important work needed to foster healthy watershed systems in our region.

In considering whether to award this application, please note that Rio Arriba County fully supports the Phase 1 Application, and would like to thank you for your consideration of this much needed watershed project.

Sincerely,

Lucía F. Sánchez, County Manager Rio Arriba County

P.O. Box 127 * Tierra Amarilla, New Mexico 87575 * Phone (575) 588-7254 * Fax (575) 588-7810 Espanola Annex * 1122 Industrial Park Road * Espanola, New Mexico 87532 * Phone (505) 753-2992 * Fax (505) 753-9397



SUPERVISORS Alfredo Roybal José Varela López Champe Green

SANTA FE - POJOAQUE SOIL AND WATER CONSERVATION DISTRICT

4001 Office Court Dr., # 1001 Santa Fe, New Mexico 87507-4929 Telephone (505) 471-0410 Extension 5 SFPSWCD@GMAIL.COM

March 24, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the President of the Board of Supervisors of the Santa Fe-Pojoaque Soil and Water Conservation District (SF-PSWCD).

SF-PSWCD's jurisdictional boundaries include the watershed that will benefit from this successful application. Our District shares a strong common interest in protecting this watershed, and we believe that your approval of this application and provision of funding to organize a watershed management group and identify potential watershed management activities to implement at a later stage is a much-needed first step toward future collaboration and partnership on watershed management activities. This crucial step forward will be critical to SF-PSWCD's own near-future goal of establishing a Watershed District with the ability to conduct mil levies for future watershed projects, and will help facilitate our own work in successfully rehabilitating several earthen flood-control dams that control storm drainage throughout the watershed.

In considering whether to award this application, please note that the Santa Fe-Pojoaque Soil and Water Conservation District supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

alfredo J. Roybal

Alfredo Roybal, President Board of Supervisors Santa Fe- Pojoaque Soil and Water Conservation District <u>ajroybal55@gmail.com</u> (505) 470-5630

Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz

Acequia Association

March 24, 2022 Bureau of Reclamation

Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's (SCID) application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the President of the Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Acequia Association (the Association).

The board of the Association is extremely enthusiastic to support Cooperative Watershed Management Program Application of the SCID. We are honored to serve the basin to bring together stakeholders to stabilize the future of water for many diverse needs. We represent 68 acequias and approximately 5,000 irrigators, who have worked for generations to steward our watershed, grow food for our families, and who also use the water of the basin for domestic, municipal and business purposes. We have directly felt the impacts the intensified drought/flood/ siltation cycles that climate change has brought and feel an urgency to address them effectively. To best serve our community and the wider watershed this collaboration is vital and we will continue to seek funding to further this collaborations and its efforts, direct our contractors to assist and offer the volunteer time of our board to ensure this partnership is successful.

In considering whether to award this application, please note that the Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Acequia Association supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

Don Bustos, Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Acequia Association Board President 505-309-1168 or santacruzacequias@gmail.com



MICHELLE LUJAN GRISHAM GOVERNOR JAMES C. KENNEY CABINET SECRETARY

March 24, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the Bureau Chief of the New Mexico Environment Department's Surface Water Quality Bureau (SWQB).

The Santa Cruz watershed is a priority area for watershed-based planning under the State of New Mexico's Nonpoint Source Management Program, and we are happy that the Santa Cruz Irrigation District is taking the initiative to begin a locally-based planning effort that can encompass the goals of the Nonpoint Source Management Program. Good, clean water is critically important to watershed residents, water users, and stakeholders from the headwaters in the Pecos Wilderness to the Rio Grande on Santa Clara Pueblo. The water quality and assessment programs that I oversee have identified several impairments (in the 2022-2024 Clean Water Act Section 303(d)/305(b) Integrated Report Appendix A¹) and developed Total Maximum Daily Loads² (TMDLs) for streams within the Santa Cruz watershed.

The following list is a brief status of streams in the watershed:

- Santa Cruz River (Santa Clara Pueblo boundary to Santa Cruz Dam) The marginal coldwater aquatic life use is impaired by temperature and aluminum. There is a historic impairment for *E. coli* with a corresponding TMDL. Other uses are fully supported.
- Santa Cruz Lake The high quality coldwater aquatic life use is impaired by nutrients, temperature, and aluminum, with no TMDLs currently. Other uses are fully supported.
- Santa Cruz River (Santa Cruz Reservoir to Rio en Medio) The high quality coldwater aquatic life use is impaired by temperature and aluminum, with no TMDLs currently. Other uses are fully supported.
- Rio Quemado (Santa Cruz River to Rio Arriba County boundary) The high quality coldwater aquatic life use is impaired by aluminum. The recreational contact use is impaired by *E. coli*, with a TMDL for *E. coli*. Other uses are fully supported.
- Rio Quemado (Rio Arriba County boundary to headwaters) The high quality coldwater aquatic life use is impaired by aluminum. The recreational contact use is impaired by *E. coli*, with a TMDL for *E. coli*. Other uses are fully supported.

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE 1190 Saint Francis Drive, PO Box 5469, Santa Fe, New Mexico 87502-5469 | (505) 827-2855 | www.env.nm.gov

¹ <u>https://www.env.nm.gov/surface-water-quality/303d-305b/</u> and <u>https://www.env.nm.gov/surface-water-quality/wp-content/uploads/sites/18/2022/03/2022-2024-IR-Appendix-A-303d-305b-Integrated-List.pdf</u>
² <u>https://www.env.nm.gov/surface-water-quality/tmdl/</u>

- **Cañada de los Tanos (Rio Quemado to headwaters)** This tributary of the Rio Quemado has been assessed for its high quality coldwater aquatic life use, and fully supports this designated use.
- **Rio Medio (Rio Frijoles to headwaters)** The high quality coldwater aquatic life use is impaired by temperature, turbidity, and aluminum, with no TMDLs currently. Other uses are fully supported.
- **Rio Frijoles (Rio Medio to Pecos Wilderness)** The high quality coldwater aquatic life use is impaired by turbidity, with no TMDL currently. Other uses are fully supported.

SWQB generally assesses streams at the most downstream water quality station in the assessment reach; therefore, the upper reaches and upper tributaries of the headwater streams noted above may have much higher water quality that fully support their designated uses. Any identified high-quality waters are NMED-SWQB priorities for continued water quality protection. In addition, the New Mexico Water Quality Standards identify several Outstanding National Resource Waters (ONRWs) within the Pecos Wilderness portion of the Santa Cruz watershed.

Ideally, a watershed plan for the Santa Cruz watershed will develop strategies to address the water quality problems identified above, and strategies to protect water quality, along with strategies to ensure water users have access to their traditional and property rights in water, and other management objectives and strategies appropriate for watershed-wide planning. A key document used by SWQB to develop strategies for water quality improvement and protection is the U.S. Environmental Protection Agency's *Nonpoint Source Program and Grants Guidelines for States and Territories* (April, 2013). SWQB encourages the Santa Cruz Irrigation District to include water quality-related planning in their proposed project. Furthermore, SWQB is committed to providing technical support in that area through staff time, estimated at 200 hours over the course of two years.

SWQB is grateful that the Santa Cruz Irrigation District and the association of acequias in the Santa Cruz watershed are taking the leadership role in forming a watershed group and developing a watershed plan for the Santa Cruz watershed. In considering whether to award this application, please note that NMED-SWQB supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

Shelly Lemon Digitally signed by Shelly Lemon Date: 2022.03.24 10:20:06 -06'00'

Shelly Lemon Chief, Surface Water Quality Bureau

NEW MEXICO INTERSTATE STREAM COMMISSION

COMMISSION MEMBERS

MARK SANCHEZ, Chair STACY TIMMONS, Vice-Chair MIKE A. HAMMAN, P.E., Secretary ARON BALOK, Commissioner GREGORY CARRASCO, Commissioner PAULA GARCIA, Commissioner PETER RUSSELL, Commissioner PHOEBE SUINA, Commissioner



BATAAN MEMORIAL BUILDING ROOM 101 P.O. BOX 25102 SANTA FE, NEW MEXICO 87504-5102 (505) 827-6160 FAX: (505) 827-6188

March 28, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the Deputy Director of the New Mexico Interstate Stream Commission (NMISC).

Funding this application will support creation of watershed group, with representatives from a diverse group of stakeholders including the NMISC, to begin planning for and implementing proactive and mutually beneficial projects based in sound science. In conferring with NMISC staff, we see a benefit to supporting this work and agree that it should have a strong technical foundation including identifying data-gaps and various technical assessments including hydrologic modeling to support decision-making.

In considering whether to award this application, please note that we support this Phase 1 Application. Thank you for your consideration of this project.

Sincerely,

Hon

Hannah Riseley-White NMISC Deputy Director Hannah.Riseley-White@state.nm.us 505-695-5592



United States Department of the Interior

BUREAU OF LAND MANAGEMENT Farmington District Taos Field Office 1024 Paseo del Pueblo Sur Taos, New Mexico, 87571 www.blm.gov/new-mexico



IN REPLY REFER TO: (NMF02000)

March 22, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

Via Email: pmrromero@msn.com

The US Bureau of Land Management Taos Field Office is in support of the Rio Quemado, Rio Frijoles, Rio en Medio, Rio Santa Cruz Stream Systems' Community Ditch Association, ("the Association") and the Santa Cruz Irrigation District, ("SCID") in its application to the Cooperative Watershed Management Program ("CWMP") implemented by the United States Bureau of Reclamation (BOR). The BOR recognizes that the American West faces serious water challenges, including widespread drought, increased populations, aging infrastructure ,and environmental requirements that strain water resources. The BOR has therefore implemented the WaterSMART Program.

We support the application for funding of \$200,000 over a two-year period from the Cooperative Watershed Management Program, "CWMP", which encourages diverse stakeholders to form local solutions to address their water management needs throughout their watershed that will hopefully increase water supply and effectively manage watersheds for the benefit of all the stakeholders that reside in and receive water directly from that watershed. This diverse group of stakeholders includes but is not limited to:

• Acequias from Truchas through La Mesilla and El Llano

- Santa Cruz Irrigation District (SCID)
- · Santa Clara Pueblo

- Ohkay Owingeh Pueblo
- Rio Arriba County
- Santa Fe County
- · City of Española

USDA Santa Fe National Forest
USDA Natural Resources Conservation Service
U.S. Department of the Interior Bureau of Land Management (BLM)
U.S. Department of the Interior Bureau of Indian Affairs (BIA)
U.S. Army Corps of Engineers (USACE)
U.S. Fish and Wildlife Service
State of New Mexico (Office of the State Engineer)
State of New Mexico (Interstate Stream Commission)
State of New Mexico (Environment Department—Surface Water Quality Bureau) State of New Mexico Department of Game and Fish
East Rio Arriba Soil and Water Conservation District
Santa Fe-Pojoaque Soil and Water Conservation District
Nuestra Señora del Rosario, San Fernando y Santiago (Truchas) Land Grant
Greater Chimayo Mutual Domestic Water Consumers Association
Cuatro Villas Mutual Domestic Water Consumers Association
Citizens of the Santa Cruz Watershed

Committee

With the number and benefits of stakeholders, we hope this grant is awarded.

Sincerely,

PAMELA MATHIS Digitally signed by PAMELA MATHIS Date: 2022.03.22 15:46:05 -06'00'

Pamela Mathis Field Manager



United States Forest **Department** of Service Agriculture

Santa Fe National Forest

Supervisor's Office **11 Forest Lane** Santa Fe, NM 87508 505-438-5300 Fax: 505-438-5390

File Code: 1500 Date: March 21, 2022

Mr. Don Bustos President Santa Cruz Stream Community Ditch Association 805 Early Street, Bldg B, Suite 203 Santa Fe, NM 87505

BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation **District Phase 1 Application**

Dear Mr. Bustos:

Thank you for contacting me to request a letter of support for the Santa Cruz Irrigation District's application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. On behalf of the Santa Fe National Forest (SFNF) I appreciate this opportunity and look forward to working with you in this regard.

The SFNF has worked with the SCID over many decades and values the expertise and centuries old water management practices possessed by individual acequia associations. As you know, the headwaters of many acequias reside within national forest boundaries. If you are awarded this funding the SFNF sees this as a unique opportunity to advance our relationship and continue as a partner in your Watershed Management Program. Our involvement in your watershed program will ensure integration of SCID's recommendations on planned SFNF hazardous fuels reduction and forest restoration projects that will benefit downstream acequia users.

In this regard, the SFNF enthusiastically supports your application and urges favorable consideration of your Phase 1 Application.

Sincerely,

DEBBIE Date: 2022.03.21 CRESS

14:50:04 -06'00 DEBBIE CRESS

Digitally signed by

DEBBIE CRESS

Forest Supervisor

cc: Sandra Imler Jacquez, Española District Ranger





EAST RIO ARRIBA SOIL AND WATER CONSERVATION DISTRICT



19283 Highway 84/285, Suite 112 Hernandez, New Mexico 87537 Telephone (505) 753-0477 SUPERVISORS Ross Garcia, Jr. Joseph M. Salazar J. Lucas Cordova Edward Martinez Ron Martinez

March 18, 2022

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team PO Box 25007, MS 84-27133 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program, Santa Cruz Irrigation District Phase 1 Application

Dear Application Review Committee:

This is a letter of support for the Santa Cruz Irrigation District's application to the Bureau of Reclamation (BOR) WaterSMART Cooperative Watershed Management Program. I am writing to you as the District Manager of the East Rio Arriba Soil and Water Conservation District.

The Santa Cruz Irrigation District and the East Rio Arriba Soil and Water Conservation District share a common goal of protecting the watershed.

In considering whether to award this application, please note that the East Rio Arriba Soil and Water Conservation District supports this Phase 1 Application. Thank you for your consideration of this project.

Sincerely Marcds Valdez, District 505-753-3508 marcos.valdez@nm.nacdnet.net

APPENDIX B. Mandatory Forms

JOHN SHOMAKER & ASSOCIATES, INC. WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS

Page 82 o 82