Updating and Expanding the Conceptual Restoration Plan

For New Mexico's Middle Rio Grande

Through Socorro County, NM

Proposal to the
WaterSMART Cooperative Watershed Management Program Phase I Grants
For Fiscal Year 2018

Funding Opportunity Announcement No. BOR-DO-18-F005

Submitted by:
Save Our Bosque Task Force
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TREASURE OUR BOSQUE
Save Our Bosque Task Force
Socorro, New Mexico

Table of Contents

1. Executive Summary

Date: January 2018
Applicant: Save Our Bosque Task Force
Applicant Location: Socorro, Socorro County, NM

As an existing watershed group, the Save Our Bosque Task Force is proposing a Watershed Restoration Planning project to update to its 2004 Conceptual Restoration Plan (CRP) as well as expanding this plan throughout Socorro County. This update would include evaluating the current hydrology/geomorphology and riparian habitat conditions in our area as well as modeling trends due to land use changes, drought, and climate change. This plan would identify general, potential project areas based on their long-term sustainability, partner efforts, and ability to address area interests and issues. To ensure that it meets the needs of our community, we will reach out to private landowners and increase our collaborative efforts with other groups within our focus area. Funding will be used to conduct outreach to stakeholders, to gather and combine available information, analyze current conditions, produce a geodatabase of all relevant information and current projects within our study area, and prepare a final report of current conditions.

This project will occur over two years, with an estimated completion date of December, 2019.

Analysis will include Federal lands, including those managed by Bureau of Reclamation, Bureau of Land Management, and U.S. Fish and Wildlife Service.

2. Background Data

Description of watershed: The Rio Grande – Albuquerque Watershed covers over 3200 mi^2 (8300 km^2), extending from the confluence of the Rio Grande and the Jemez River down to San Marcial where the Rio Grande enters into the Elephant Butter Reservoir watershed. Climate is defined as semiarid. In the Socorro area, the average annual precipitation is 8 - 10 inches with an annual average temperature of 57 degrees (Fahrenheit), average minimum temperature of 41 degrees, and average maximum temperature of 74 degrees. This watershed includes Bernalillo, Torrance, Sandoval, Socorro, and Valencia Counties. Upstream watersheds include: Rio Grande-Santa Fe, Jemez, Rio Puerco, and Rio Salado. Socorro County is one of the largest counties in New Mexico but has only 17,000 residents with 30% of its residents living below the federal poverty level. The county's racial diversity is measured as 55% Hispanic with a high Native American population. Farming and ranching are still important economic interests in the county. Level III Ecoregions represented within this watershed include: Rio Grande Floodplain, Albuquerque Basin, Chihuahuan Basin and Playas, Chihuahuan Desert Grasslands, and Low Mountains and Bahadas. Federal lands (Bureau of Land Management (BLM), Bureau of Reclamation (Reclamation), Forest Service, National Wildlife Refuges (NWR)), Tribal lands, state lands (New Mexico State Land Office, New Mexico Department of Game and Fish

(NMDGF)), Middle Rio Grande Conservancy District (MRGCD), and private lands are all present within this area.

Source of water supply: Water is supplied from upstream flows of the Rio Grande with inputs from the Rio Puerco, Rio Salado, and arroyos. The area relies on surface flows and groundwater for its water supply.

Water rights involved and length of existence: The area has been farmed for centuries with Tribal, acequia, and community water rights dating back to the 1700s[1]. Tribal rights are still held in the watershed, individual senior water rights are present but have changed hands over the years, and water right consolidation has occurred in the watershed, with limited small scale acequias remaining. On November 25, 1930, the MRGCD filed an Application for Permit to Change the Points of Diversion (No. 0620) of 71 old ditches diverting water from the Rio Grande that were located within the boundaries of the District. The Application proposed the abandonment of the 71 old diversion points and the construction of four new permanent diversion dams and two headings. In its Application, the District claimed the right to irrigate a total of 123,267 acres of land, including 80,785 acres for which old irrigation rights are claimed and 42,482 acres of new lands irrigated from water salvaged from the construction of the drainage systems. The Application, that claimed a duty of water of three acre-ft per acre, was approved on January 26, 1931.

The MRGCD claimed that all ditches in existence within the boundaries of the District had perfected water rights and that the MRGCD is the successor in right to divert and distribute water to the lands served by these ditches and that no further water right filings were required.

The MRGCD Official Plan included the results of surveys of lands in the Socorro Division, which covers from San Acacia south to Bosque del Apache NWR. The survey found a total of 5,057 acres of irrigated lands as well as 10,605 acres of non-irrigated lands that included about 10,377 acres of grasses, bosque, and "swamp" lands. A total of nine individual ditch headings in the Socorro Division were abandoned, and their points of diversion changed to the Socorro Main Canal diversion at San Acacia.

Application No. 1690 was filed by MRGCD on May 27, 1930 for a permit to construct El Vado Dam and related works for the storage and release of water on the Rio Chama as supplemental supply to the direct diversion for the 123,267 acres claimed under Application No. 0620. Application No. 1690 was considered to be an application for regulation of the flow of water for which old water rights were claimed and was not a change in method of use or appropriation. In the 1951 repayment contract between the MRGCD and the United States, the MRGCD conveyed to the United States title to the water rights under permit No. 1690 in 1963; however, the ownership of El Vado Dam and other MRGCD facilities and water rights are the subject of ongoing litigation.

[1] Scurlock, D. 1988. The Rio Grande bosque: ever changing. New Mexico Historical Review 63:131-140.

Surface water rights for Bosque del Apache NWR are based on Permit No. 2 granted by the Territorial Engineer on January 4, 1906 to C.H. Elmendorf of the Socorro Company for the appropriation of 97 cfs from the Rio Grande for the purpose of irrigating 6,780 acres of land along the west bank of the Rio Grande within the Bosque del Apache Grant. This permit was transferred to the United States on January 15, 1939. On July 30, 1956, the State Engineer granted License No. 2 to the U.S. Fish and Wildlife Service (FWS), with a priority date of January 4, 1906 to appropriate 12,417 acre-feet of water per annum from the Rio Grande system for the purpose of protection, production of feed, resting and propagation of wildlife on a total of 4,139 acres within 25 separate tracts on the west side of the Rio Grande in the Bosque del Apache Grant. A permit issued by the NM State Engineer in 1999 allowed the FWS to expand the Refuge's place of use from 4,139 acres to 8,239 acres while staying within the existing licenses of consumptive right, and provided for an additional point of diversion from the LFCC about 4.5 miles upstream of the southern boundary of the Refuge. Additionally, the FWS has received permits to drill wells and divert groundwater to supplement their existing surface water available.

Current water uses: The only diversions from the Rio Grande in the San Acacia to San Marcial reach are located at San Acacia. The Socorro Main Canal North diverts water from the Rio Grande at San Acacia Dam or is fed via Drain Unit 7 Extension from Belen Division return flows. The Socorro Main Canal North delivers irrigation water to lands serviced by MRGCD Socorro Division and the Bosque del Apache NWR, all located on the west side of the Rio Grande. The Low Flow Conveyance Channel (LFCC), originally functioning as a channel to deliver water to Elephant Butte Reservoir, now functions as a large valley drainage system, salvaging farm field return flows and capturing shallow groundwater from the surrounding area including the river. Water is diverted from the LFCC for agricultural use in the Socorro Division, for agricultural and fish and wildlife use at the Bosque del Apache NWR, and for return to the river floodway to support low flow Rio Grande silvery minnow (*Hybognathus amarus)* habitat. An outfall structure from the LFCC to the Floodway was constructed just north of the Escondida Bridge in 1996 to accommodate sediment transport research flows.

Drainage of agricultural lands in the reach between San Acacia and San Marcial is accomplished by a series of interior drains that discharge to the riverside drains and/or the LFCC. North of the narrows at the Escondida Bridge, the San Acacia Drain serves this function for the north end of the Socorro division, followed in downstream order by the Chamisal Drain, the Polvadera Drain, and the McAllister Drain. South of the constriction at the Escondida Bridge, the Luis Lopez Drain extends past the City of Socorro and discharges to the riverside drain at San Antonio. The Elmendorf Drain begins south of San Antonio and along with an interior drain, drains Bosque del Apache NWR lands to the south boundary of the Bosque del Apache NWR, where it discharges into the LFCC. The Elmendorf Drain extension drains undeveloped lands south of the Bosque del Apache NWR and discharges to the LFCC at the railroad crossing near Tiffany Junction.

Water issues in the affected watershed: Reliance on surface water within our region makes drought a major concern[2]. Under drought conditions, common in recent years, surface water supplies available to farmers, the refuges, and the river has been limited. These limited supplies have impacted production of crops and have affected the water quantity and quality available to the endangered Rio Grande silvery minnow. In times of drought, reliance on groundwater wells becomes more prevalent and results in temporary drawdown of the area aquifer. There are limited wells within the valley to serve the current irrigated lands and use of these wells could have longer term effects on the aquifer. This area also faces flood danger to private lands and infrastructure, especially in areas without levee protection.

Flooding from the Rio Grande, its major tributaries, and area arroyos has occurred occasionally in the past. With a large sediment supply reaching this reach of river from all those sources, the river over time has aggraded in sub reaches within the Task Force focus area. Except for a short 6-mile section in the Socorro area with an engineered levee, there is only a spoil berm keeping flood waters from the historic floodplain where farms, infrastructure and small communities are found. This is an important concern to the area water managers, local government, and private citizens.

Additionally, there are some water quality issues in our watershed. The New Mexico Environment Department's Surface Water Quality Bureau[3] lists the Rio Grande from Cañas Arroyo to Rio Puerco as impaired due to aluminum, copper, and E. coli. Probable sources were listed as municipal point source discharges, waterfowl, on-site treatment systems (septic), waste from pets, municipal (high density areas), impervious surface/parking lot runoff, and other unknown sources. The Rio Grande from San Marcial to Cañas Arroyo is listed as impaired due to aluminum and temperature; the sources for this stretch were unknown.

Wildfire has increasingly become an issue in this watershed with each fire resulting in fire adapted vegetation (tamarisk) gaining ground and the native, flood dependent vegetation losing ground, thus creating larger receptive fuel beds and larger and more intense wild fires (as was witnessed with the 9,200 acre Tiffany fire). Fires can also negatively impact water quality through increased runoff and increased sedimentation.

This project area is affected by water delivery requirements under interstate compact and international treaties. The Rio Grande Compact apportions the waters of the Rio Grande north of Fort Quitman, Texas between the states of Colorado, New Mexico, and Texas. The initial division of the total drainage basin of the Rio Grande was adopted by the Treaty of 1906 between the United States and Mexico and has been used consistently since that time. A further compact between the three states in the region was signed in 1938. Since 1947, the delivery schedule for New Mexico has been based on the Elephant Butte Effective Index Supply, instead

[2] Socorro Sierra Regional Water Plan, 2016

[3] https://www.env.nm.gov/swqb/303d-305b/2016-2018/documents/EPA-APPROVED2016APPA--IntegratedList.pdf

of the San Marcial Index Supply, which was originally used. New Mexico has historically relied on three distinct methods to insure that the water delivery remains in compliance with the provisions of the Rio Grande Compact. These methods are the administration of groundwater uses, water salvage measures, and tributary inflow below the Otowi gage (Rio Grande at Hwy 502). New Mexico has also relied on the implementation of water salvage measures undertaken with Reclamation to reduce the "non-beneficial consumptive use" of water in the middle valley, thereby enhancing the water supply in the middle valley.

Several endangered species are present within our watershed. This project area contains designated critical habitat for the Federally endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and Federally endangered Rio Grande silvery minnow, and proposed critical habitat for the Federally threatened yellow billed cuckoo (*Coccyzus americanus*). While there are two populations of the Federally endangered Pecos sunflower (*Helianthus paradoxus*), the La Joya population was excluded from being designated as critical habitat, and the Rhodes property population was not yet in existence at the time of critical habitat designation. Additionally, critical habitat for the Federally endangered New Mexico meadow jumping mouse (*Zapus hudsonius luteus*) can be found on Bosque del Apache National Wildlife Refuge. Other endangered species found within this watershed include the Chiricahua leopard frog (*Rana chircahuensis*), the Least tern (*Sterna antillarum*), and the Mexican spotted owl (*Strix occidentalis lucida*) – critical habitat outside of project area).

Project Location: Our project area is located within two HUC8 watersheds, including the southern half of Rio Grande-Albuquerque (13020203) and northern portion of Elephant Butte Reservoir (13020211) (Figure 1); however, planning for the Elephant Butte watershed portion will be completed through our Tiffany Fire Rehabilitation project, for which, state funding has been requested. Reclamation is providing an in-kind match and technical support to the Tiffany Fire Rehabilitation Project and if funding for that project is received, project planning will be coordinated between this proposal and that to complement efforts. Our specific project will focus on the Rio Grande floodplain through Socorro County, which encompasses several HUC12 watersheds (Figure 2).

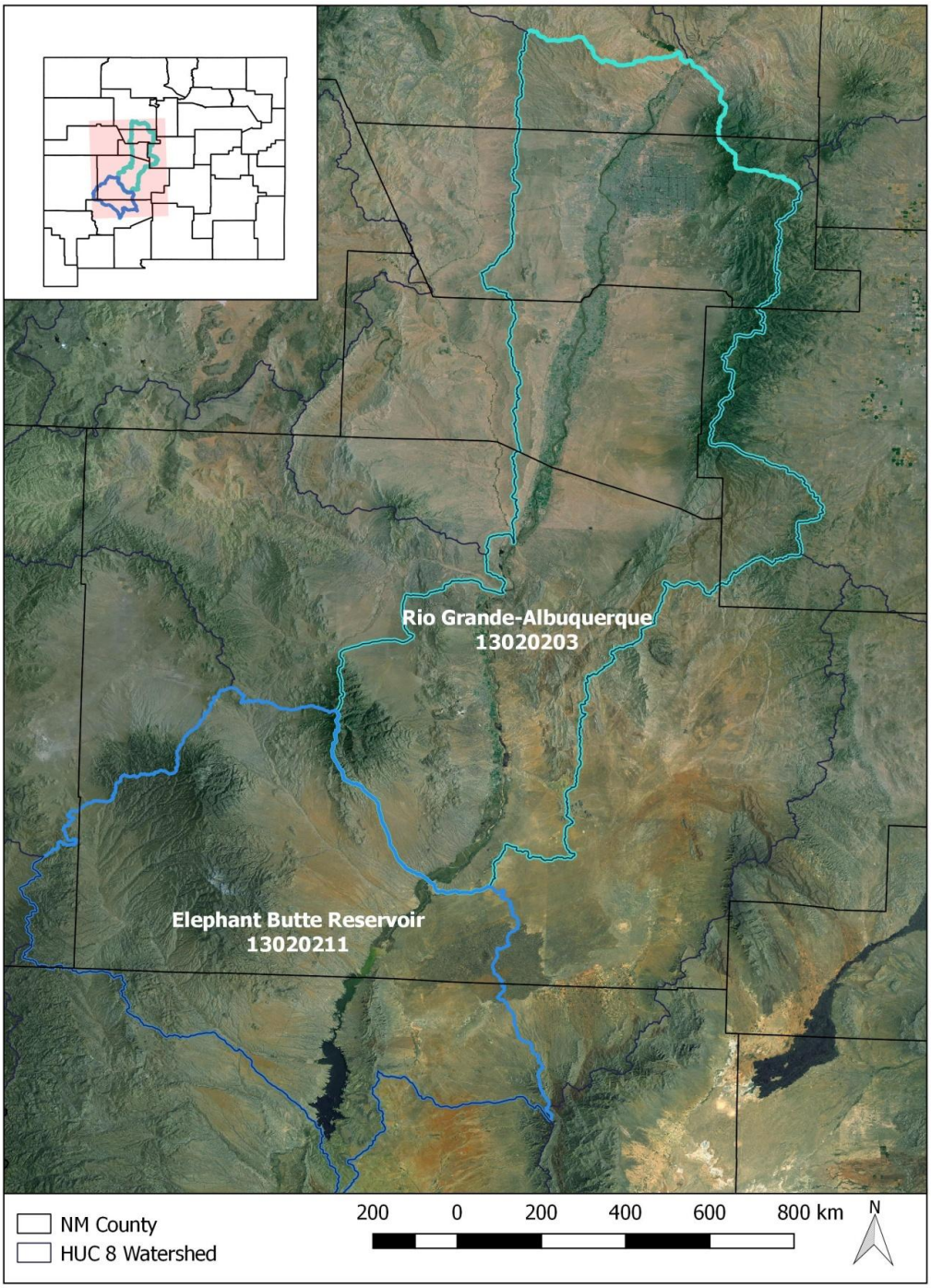

Figure 1. Watershed map. The Save Our Bosque Task Force's focus area lies within the two HUC8 watersheds that affect the Rio Grande through Socorro County.

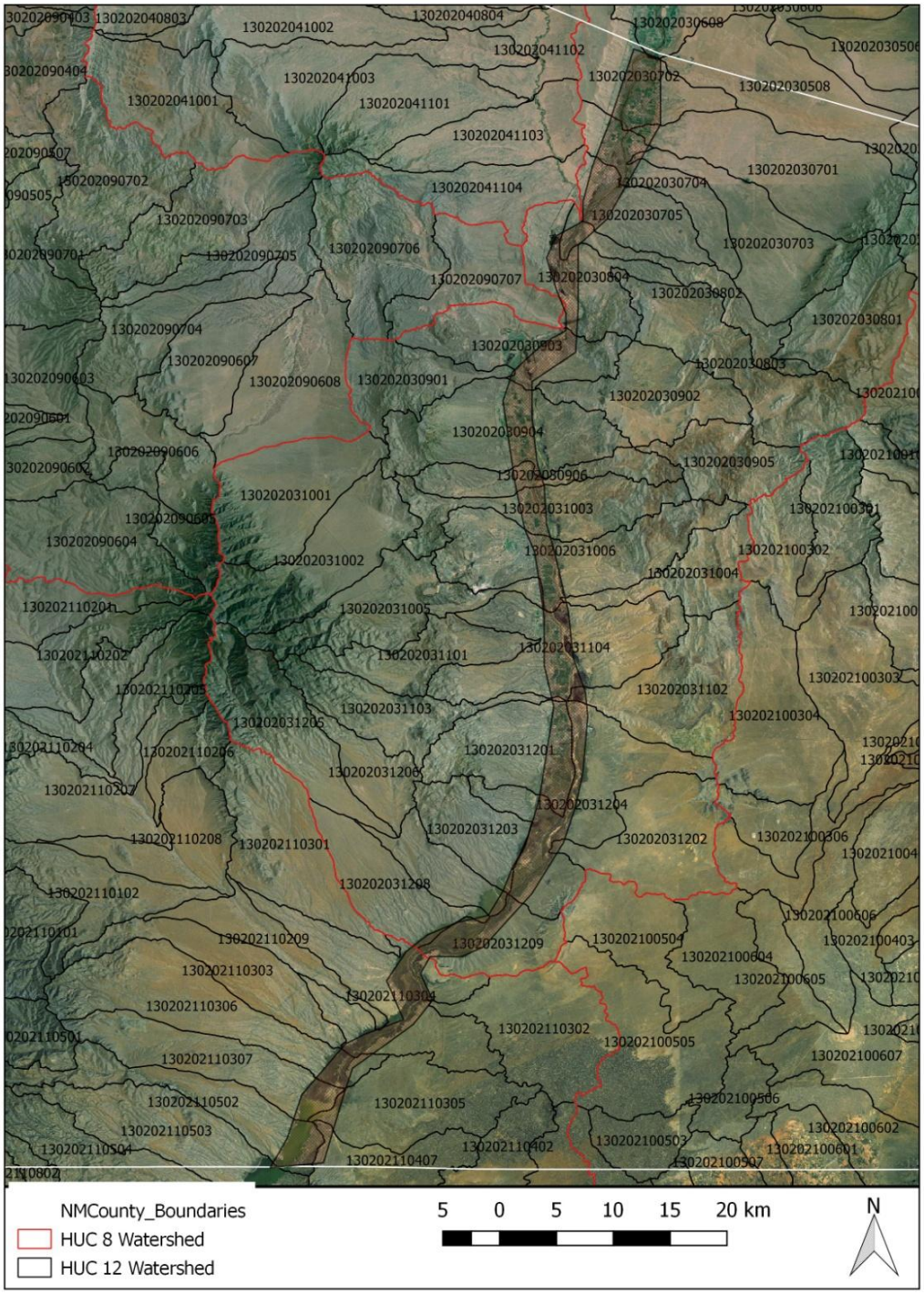

Figure 2. The project/focus area of the Save Our Bosque Task Force within the Rio Grande-Albuquerque watershed. The focus area intersects with many HUC 12 watersheds, highlighting the geographic diversity of our region.

3. Project Description

Description of Applicant: The Save Our Bosque Task Force (Task Force) is an Existing Watershed Group that was formed in 1994. The Task Force is comprised of federal, state, and local agencies and private citizens dedicated to preserving the Bosque ecosystem for future generations. The Save Our Bosque Task Force is a 501c(3) nonprofit organization and watershed group that works to convene local, state, and federal entities (Table 1) and private landowners to support river processes, ecosystem restoration, and recreation in Socorro County, New Mexico. Its mission is to preserve, protect, and enhance the Rio Grande and its adjoining riparian area (bosque, wetlands, grasslands) while respecting the customs and cultures of the residents of Socorro County, to provide for public recreation, allow for historical resource use, and plan for public safety, all within the confines of current infrastructure and political limitations. It was initially formed by citizens who were concerned about the degradation of the ecosystem along the Rio Grande bosque due to trash dumping, off-road vehicle use, illegal fuel wood cutting, and wildfire. In the past 23 years, the Task Force has developed and implemented a diverse portfolio of river restoration projects, which have greatly improved the condition of the river and opportunities for recreation. The Task Force has a history of working with private landowners to secure funding and provide technical advice to restore their properties within the floodplain. Many of these areas are now protected in perpetuity with conservation easements. Currently, the Task Force is a convener of key agencies managing wildfire impacts, removing tamarisk, and studying the impacts of the tamarisk leaf beetle. As the Task Force looks to the future, its vision is to serve as a steward of the Rio Grande by building its capacity to maintain sites undergoing restoration, to work with private landowners, and to improve recreation opportunities along the public stretches of the river.

In 2004, the Task Force, along with a diverse group of stakeholders, commissioned the Conceptual Restoration Plan[4] (CRP) with funding and support from the Bureau of Reclamation (Reclamation), Fish and Wildlife Service (FWS), and U.S. Army Corps of Engineers and non-governmental foundations. The CRP was the first comprehensive restoration plan for the Rio Grande reach from San Acacia to San Marcial. This riparian and floodplain restoration plan focused on river ecosystem and river process enhancement rather than attempting to restore the river to a known or prescribed historical condition. The goals of plan included evaluating opportunities to: 1)restore channel function, form, and processes, 2)maintain cottonwood bosque and re-establish cottonwood generational succession, 3)address floodplain structural encroachment, 4)recognize historic uses in restoration planning, 5)integrate adaptive management into the restoration design, 6)restore a mosaic of native riparian vegetation, 7)enhance channel conveyance capacity to pass high flows safely, 8)notify and seek feedback of landowners regarding conservation easements, and 9) address potential for water salvage. The CRP also defined the Task Force's vision of a riparian ecosystem that functions as naturally as

[4] Tetra Tech, Inc. 2004. Conceptual restoration plan, active floodplain of the Rio Grande, San Acacia to San Marcial, NM. 4 vol.

possible and addresses a number of specific issues on the river. River issues addressed in the CRP included flood frequency, sediment loading, channel capacity, areas of high flood potential, restoration components, riparian and aquatic habitat, evapotranspiration, institutional constraints, and potential for water salvage. The CRP included project area components whose design and implementation was contingent on overcoming obstacles and constraints that may limit the type or areal extent of the restoration activity. Our work also includes projects to reduce the risk of wildfire and rehabilitate areas following fires.

A matrix was created within the CRP that outlined and prioritized watershed management projects. This plan has been the Task Force's guiding document since 2004; however, time has come to update this plan and include modeling for different climate change scenarios and future water availability. There are new issues that affect our watershed, such as the arrival of the tamarisk leaf beetle with resulting increased fire frequency/intensity and new threatened species with larger home ranges such as the Yellow-billed cuckoo to consider. There is also the need to reassess the sustainability of existing and planned projects to assure best management practices in designing and implementing projects[5].

The Task Force's current projects include the Tiffany Fire Rehabilitation Project, for which we are currently seeking state funding for Phase I: planning, analysis, and compliance. Task Force partners for this project include Sierra Soil and Water Conservation District, Reclamation, Bureau of Land Management, FWS, Socorro County, New Mexico State Forestry, and private landowners. Planning for this 9,200-acre project will include: using existing vegetation mapping, topography, soils, and surface and groundwater information to determine priority areas for plant community patches and best management practices. Priority sites will be selected based on watershed management goals including water transport efficiency, plant community sustainability, and fire protection potential. Final products will include maps, project implementation descriptions, and considerations for specific activities to be considered under federal and state regulations. The Task Force is also a project partner on a fuels reduction project led by New Mexico State Forestry with funding by state Severance funds and on two Socorro County Wildfire Mitigation Projects, led by Socorro County and funded by FEMA. These large-scale projects will result in fuels reduction through the removal of woody invasive species on 2,300 acres of floodplain habitat and restoration of native plant species in Socorro County. The Task Force acts as technical advisors, project inspectors, and is leading pre- and post-implementation monitoring on all of these projects. Additionally, the Task Force has a cooperative agreement with Partners for Fish and Wildlife (USFWS), in which our role is to outreach to potential project participants, act as fiscal agent, and assist with conservation/management plans. The Task Force has worked with the Rio Grande Agricultural Land Trust to restore and protect private lands along the floodplain in Socorro County. In

[5] Seavy, N.E., T. Gardali, G.H. Golet, F.T. Griggs, C.A. Howell, R. Kelsey, S.L. Small, J.H. Viers, and J.F. Weigand. 2009. Why Climate Change makes riparian restoration more important than ever: Recommendations for practice and research. Ecological Restoration 27(3):330-338.

general, the Task Force serves as a conduit to connect and enhance the work by different agencies and entities within our watershed and establish common ground amongst stakeholders. These stakeholders all recognize the value of a functioning riparian area that can support the cultural history of our community, safely convey floodwaters through the valley, and provide important recreational and ecological values to this area. Planning allows the Task Force and all stakeholders to address issues of water supply and quality, natural disturbances, ecosystem health, and threats such as wildfire.

Eligibility of Applicant: The Task Force is an existing watershed group and grassroots 501c3 nonprofit organization. It meets the described eligibility requirements of the program in the following ways:

1. The Task Force's projects significantly affect the quality of water in the watershed and all habitat restoration projects consider the quantity of water required to sustain the native plant communities. The Task Force and its members, and area stakeholders are significantly affected by the quality and quantity of water in the watershed.

2. The Task Force is capable of promoting the sustainable use of water resources. The Task Force has been active in the watershed for 23 years and in that time, has accomplished many projects and achieved great community support. Our environmental education programs support educating local youth and citizens on the importance of numerous water issues.

3. The Task Force is located in Socorro, NM in the western United States.

Table 1. Entities that have signed the Save Our Bosque Task Force's Memorandum of Understanding and partner with Save Our Bosque Task Force

Local	Middle Rio Grande Conservancy District City of Socorro Socorro Chamber of Commerce Socorro County
State	New Mexico Department of Game and Fish New Mexico State Forestry Socorro Soil and Water Conservation District
Federal	Bureau of Land Management Bureau of Reclamation National Resources Conservation District US Fish and Wildlife Service – Bosque del Apache NWR US Fish and Wildlife Service – Sevilleta NWR

Goals: The primary goal of the Task Force is to protect, enhance, and restore the Rio Grande and its surrounding habitat. The goal of this project is to update our guiding document, the CRP. The first CRP was developed fourteen years ago, and since its completion, the Task Force has

accomplished many of the priority projects and initiatives outlined in that plan. This update would include evaluating the current hydrology/geomorphology and riparian habitat conditions[6,7] in our area as well as modeling trends due to land use changes, drought, and climate change[8,9,10]. This plan would identify general, potential project areas based on their long-term sustainability, partner efforts, and interest. To ensure that it meets the needs of our community, we will reach out to private landowners, and increase our collaborative efforts with other groups within our focus area.

Approach: As an existing watershed group, the Task Force has previously completed many of the activities under Task A – Watershed Group Development. We have developed mission and vision statements and goals. We have conducted outreach activities, such as creating brochures, a website, and holding public meetings. We have worked with our partners to gather information about water quality and quantity needs, and we have previously completed planning activities. However, since our first CRP, we have increased our focus area and welcomed new stakeholders to the table. With this funding, we will address several of the activities described under Task Area B – Watershed Restoration Planning.

Outreach to Stakeholders: Project proponents will utilize existing knowledge of the river issues existing on our reach of the Rio Grande and the existing CRP to prepare draft goals to present to stakeholders. The Task Force will reach out to the small rural communities, La Joya Acequia, NMDGF, area NWRs, MRGCD, Socorro County, City of Socorro, University of New Mexico, New Mexico Tech, private landowners, and government agencies including USFWS, Reclamation, US Army Corps of Engineers and NM Interstate Stream Commission. We would approach this by first hosting focused outreach events to smaller groups and then presenting results from this outreach to the greater group with follow up questions for them before finalizing goals, objectives, and assumptions under plan development. We did this with the original CRP and would follow a similar protocol here. By presenting the original plan, our accomplishments under that plan, and our reasons for wishing to update it, we introduce the discussion of the need for information in the reach, our combined observations and wishes for the river and floodplain lands, potential plan benefits to all stakeholders, and how we will coordinate with them through the planning process.

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[6] Brand, L.A., J.C. Stromberg, D.C. Goodrich, M.D. Dixon, K. Lansey, D. Kang, D.S. Brookshire and D.J. Cerasale. 2011. Projecting avian response to linked changes in groundwater and riparian floodplain vegetation along a dryland river: a scenario analysis. Ecohydrology 4:130-142.

[7] Bureau of Reclamation. 2004-2017. Yearly report on Endangered Southwestern willow flycatcher monitoring on the Middle Rio Grande, NM.

[8] Seavy, N.E., T. Gardali, G.H. Golet, F.T. Griggs, C.A. Howell, R. Kelsey, S.L. Small, J.H. Viers, and J.F. Weigand. 2009. Why Climate Change makes riparian restoration more important than ever: Recommendations for practice and research. Ecological Restoration 27(3):330-338.

[9] Stewart, I.T., D.R. Cayan, and M.D. Dettinger. 2005. Changes toward earlier streamflow timing across Western North America. Journal of Climate 18: 1136–1155.

[10] Mueller, R.C., C.M. Scudder, M.E. Porter, R.T. Trotter III, C.A. Gehring, and T.G. Whitham. 2005. Differential tree mortality in response to severe drought: Evidence for long-term vegetation shifts. Journal of Ecology 93: 085–1093.

Proposed Timeline

Phase 1A – 2018-2019

Task 1: Outreach to stakeholders – Oct 2018- Dec 2019

- Summarize draft goals for planning purposes
- Meet with other entities conducting current planning efforts in the project area(Figure 2), small stakeholder groups or individual landowners to discuss our planning process and listen to their vision of their land into the future, discuss priority issues for our reach of the river, our watershed
- Compile summaries of major landowners' goals for properties, any concerns or restrictions on restoration or other work
- Develop issues, goals, and objectives for planning purposes

Task 2: Information gathering into one geodatabase –Oct 2018 – Mar 2019

- Build skeleton geodatabase tiered off of Middle Rio Grande examples to allow for easy incorporation as necessary
- Request review of geodatabase by appropriate agencies and entities to assure completeness and practicality
- Compile all mapping products, supporting documentation into one geodatabase
- Compile synopsis of all research and monitoring available in reach by subject, years of data, and results, identify remaining data gaps

Task 3: Analysis of current conditions: Jan 2019 – Oct 2019

- Vegetation – plant diversity, suitable habitat for ES, fire risk, successional stage, any vegetation models available reviewed
- Hydrology – current overbank potential in different water years, aggrading or degrading reaches, channel width/depth ratio, in-channel habitat diversity rated by discharge, any current modeling efforts by subreach/reach reviewed
- Geomorphology – current sediment load in reach, sediment movement in the last 10 years through the reach, sediment plug potential in subreaches, Army Corps of Engineers sediment modeling results reviewed, tributary inputs
- Groundwater – current status of groundwater depth by river mile, zones of groundwater depth based on original riparian model and any updates provided, Interstate Stream Commission modeling results reviewed
- Land use and restoration in the active floodplain – categorize all landownership and current uses, delineate past, current, and funded habitat restoration/fuels reduction/other projects in reach, protected lands delineated
- Ecosystem services – evaluate aspects of reach ecosystem for carbon sequestration, water storage, water filtration
- Topography – determine most recent LiDAR and most comprehensive coverage for reach. If insufficient, determine what is needed to update topographic information.

- Incorporate existing planning efforts and supporting information (Reclamation's Lower Reach Plan, NMDGF, Tiffany Fire Rehabilitation, Refuge plans, etc.) into analysis as feasible

Task 4: Geodatabase and report – Nov 2019 – Dec 2019

- Compile results of Task 3 into geodatabase
- Report on the analysis of current conditions results of this phase will allow us to address some of the issues our projects address based on current condition.

Next steps:

In order to assure that this plan is a useful tool to diverse stakeholders, we find that it will be necessary to phase the project over two grant cycles (2018 and 2020). Phasing the project allows for the time and expenses necessary to complete the plan with thorough outreach to our communities and interested parties and a comprehensive analysis of available data on the current state of our system in the first phase. However, we will require additional analysis in a second phase that will determine the resilience of our system in a changing climate and the sustainability of project design alternatives and the best locations for our work[11]. During Phase 1a, opportunities will arise to begin the process of learning what predictive tools will be needed for Phase 1b. A number of professionals in the fields of climate science, geohydrology, hydraulic engineering and ecology are available to us as stakeholders to assist with developing these tools. Through a series of discussions and meetings (under Phase 1a, Task 1), we will be ready to implement Phase 1b when our initial analysis is complete. The second phase will focus on developing and processing trend analysis tools to look for sustainable solutions to issues we face. A short summary of Phase 1b is included here.

Phase 1B –2020

Task 1: Review Phase 1A products and results

Task 2: Develop Trend analysis for unique or combined aspects of the ecosystem

- Include water availability, habitat diversity, sustainability of successional stages, resilience under different climactic scenarios, positive change in groundwater stability, fire danger, land use changes, habitat diversity, and wildlife diversity, ecosystem services, possible alternatives for water infrastructure, and flood risk

Task 3: Develop tiered restoration plan based on goals developed in Phase 1, sustainability indices, and adaptive management triggers based on resiliency of the river system.

Task 4: Provide outreach to original and additional stakeholder groups to report findings, share restoration goals and priorities, and discuss regional issues addressed through planning effort

[11] Davies, P.M. 2010. Climate change implications for river restoration in global biodiversity hotspots. Restoration Ecology 18(3): 261-268.

4. Evaluation Criteria

Evaluation Criteria A: Watershed Group Diversity and Geographic Scope

Watershed Group Diversity: From its inception, the Task Force has reached out to a diverse collection of watershed stakeholders in Socorro County and beyond. Productive channels of communication have been opened with an array of stakeholders in the process of completing our many events, projects, and outreach efforts. The Task Force will use these channels to ensure inclusion of a diverse group of stakeholders as well as collaboration when feasible. Our past collaborations were usually begun with a preliminary informational meeting with follow up meetings scheduled with stakeholders who were interested in continuing on with a given project. We envision a similar formula for this effort.

Stakeholders in our area who affect, or are affected by, water quality are State and Federal agencies, such as New Mexico State Forestry and Bosque Del Apache NWR, and non-profits, such as the Rio Grande Agricultural Land Trust and Rio Grande Return. Another group who is at the core of the Task Force's efforts is the private landowners who farm or live in or adjacent to the Rio Grande floodplain and are affected on a daily basis by water quality/abundance.

The current membership of the Task Force mirrors fairly well the stakeholders within the watershed. There are agency staff (Federal, State, and County), non-profit group members, and a variety of private individuals with a pressing interest in water issues.

Geographic Scope: Our current membership represents many of the stakeholders with land ownership or interest along the river (Figure 3); however, we plan to outreach to the acequias and additional communities to reach more private landowners. We will do this through public meetings that will allow us to hear and learn about their concerns.

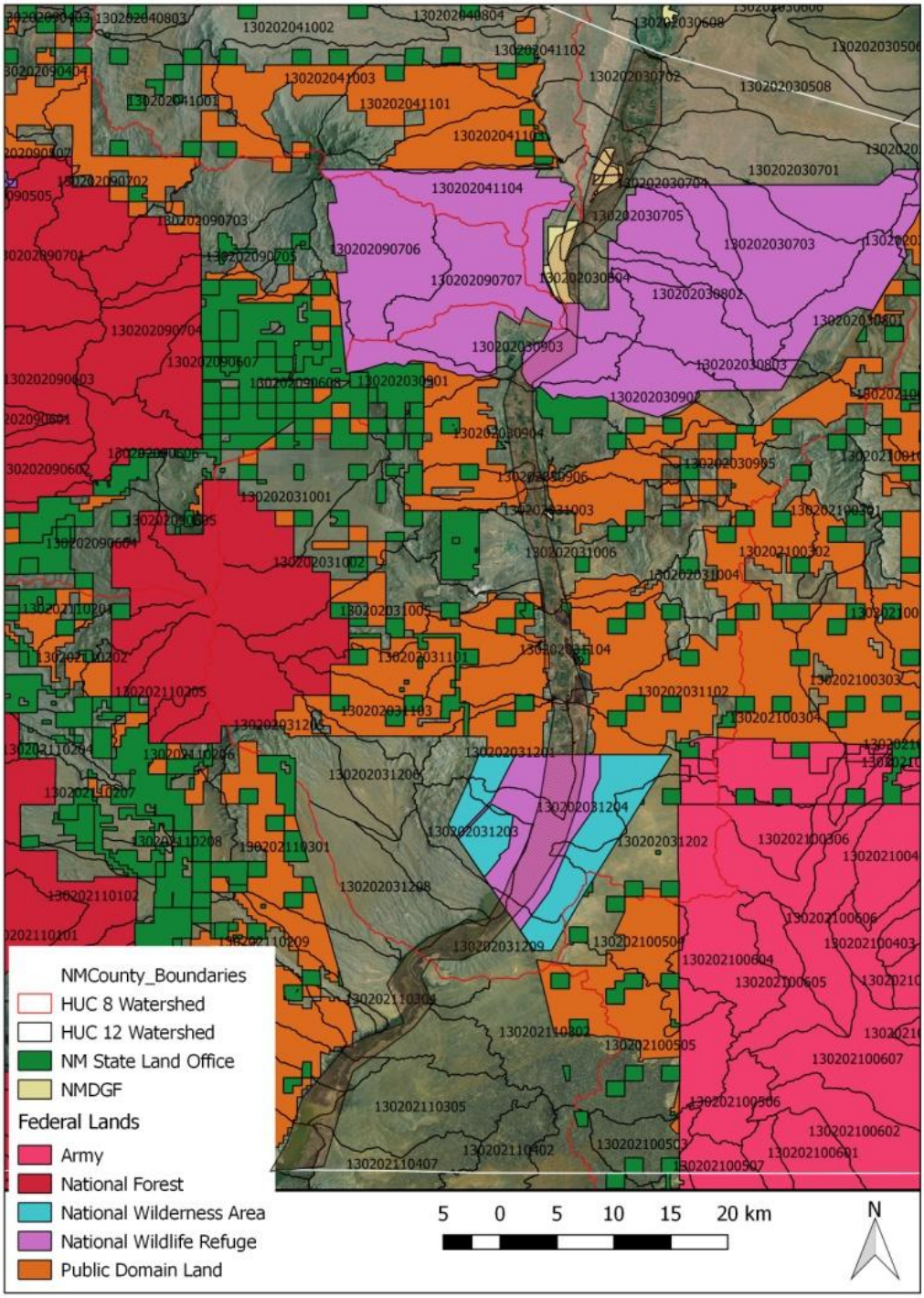

Figure 3. Federal and state land ownership along the Rio Grande in Socorro County. MRGCD has either easements or ownership of west side of the river; however, owned areas are contested with the Bureau of Reclamation. Bureau of Reclamation has lands south of the Tiffany Basin in the southern portion of the focus area.

Evaluation Criteria B: Addressing Critical Watershed Needs

Critical Watershed Needs or Issues

Critical needs within the Rio Grande-Albuquerque watershed include declining ecological resiliency due to managed flows, lack of flushing flows and invasive species, endangered species issues, water quality issues, floodplain encroachment that impacts water management and Rio Grande Compact deliveries, water shortages, sediment management, and flood risks to the east side of the river and infrastructure[12,13]. An update to the CRP will address these issues by finding solutions through scientific analysis and with sustainable project locations identified.

Developing Strategies to Address Critical Watershed Needs or Issues

Stakeholder Outreach and Partnership Building: In 2004, the Task Force, along with a diverse group of stakeholders, commissioned the CRP. This plan focused on river ecosystem and river process enhancement rather than attempting to restore the river to a known or prescribed historical condition. The goals were to find ways of restoring natural river functions, identifying restoration needs, and enhancing riparian biological diversity. The CRP also defined the Task Force's vision of a riparian ecosystem that functions as naturally as possible and addresses a number of specific issues on the river. River issues addressed in the CRP included flood frequency, sediment loading, channel capacity, areas of high flood potential, restoration components, riparian and aquatic habitat, evapotranspiration, institutional constraints, potential for water salvage. An update of this plan would evaluate opportunities to address these issues in light of predicted future conditions, including a decrease in water availability due to a changing climate[14], presence of the tamarisk leaf beetle, and increasing fuel loads. Because of these changing conditions, we have experienced an increase in catastrophic, large-scale wildfires[15] and are likely to see a negative change in biological diversity[16].

Watershed Restoration Planning: The Socorro County reach of the Rio Grande is considered important for its unique riparian forests, grasslands and wetlands, for its natural beauty, and for its services it provides to sensitive species, other wildlife and our community – groundwater

[12] Fullerton, W. and D. Batts. 2003. Hope for a living river: A framework for a restoration vision for the Rio Grande. 131pp.
[13] Crawford, C.S., A.C. Culley, R. Leutheuser, M.S. Sifuentes, L.H. White, and J.P. Wilber. 1993. Middle Rio Grande ecosystem: bosque biological management plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
[14] Enquist, C. and D. Gori. 2008. A climate change vulnerability assessment for biodiversity in New Mexico, Part I: Implications of recent climate change on conservation priorities in New Mexico. The Nature Conservancy of New Mexico, Santa Fe, NM. 79 pp
[15] Ellis, L.M. 2000. Flooding and fire as disturbance mechanisms in riparian areas. In J.P. Taylor Ed. Proceedings from the conference on fire in riparian areas sponsored by the Middle Rio Grande Bosque Initiative.
[16] Millar, C.I., N.L. Stephenson, and S.L. Stephens. 2007. Climate change and forests of the future: Managing in the face of uncertainty. Ecological Applications 17: 2145–2151.

recharge, flood protection, recreation, and a greenbelt in the desert[17]. Many agencies and entities are interested in this reach of river and would benefit from a planning document which looks at critical watershed issues and addresses the needs of these stakeholders[18]. Those include water management agencies tasked with water delivery in balance with environmental benefits (Endangered Species Act requirements, flood management, fire control, and Water Compact deliveries). They also include community members who either live along the river and value the riparian areas as stewards of their lands and are concerned for the fire and flood danger made worse with lack of proper management. They include those who live in nearby communities where their views of the river, their use of its shaded forest for recreation, and their historic connection to the floodplain including farming, ranching, and traditional customs is strongly connected to river health. All these stakeholders benefit from planning efforts that highlight sustainable projects that support the resilience of the natural system[19].

During our outreach to government agencies and universities, we will review the pertinent information available to us for our planning purposes and discuss with them the most appropriate analysis to gain knowledge of the physical and biological aspects of the river through our reach. The Middle Rio Grande, including our area of work, has a wealth of physical and biological information that will be available to us. Reclamation measures river physical condition including river profiles and cross sections, depth-width ratios, aggradation or degradation, and other general geomorphological conditions[20]. Historic snowpack records and discharge measurements at numerous river gages will augment water diversion history and recent surface and groundwater modeling available. The US Corps of Engineers has recently undertaken a sediment supply analysis for the reach which would be available to us. Reclamation vegetation mapping, habitat suitability determination for the endangered Southwestern willow flycatcher, suggested flow requirements for the Rio Grande silvery minnow and recent water management strategies for that species, and general habitat availability for other sensitive species are available. The NM Interstate Stream Commission is currently updating its groundwater model for this river reach and it should be available to our planning process[21]. Past and current habitat restoration project locations, land ownership, infrastructure management and use, and land use maps, and landowner contact information is available through Socorro County and other local, regional, and federal land management agencies and landowners. Scientific data available from these sources and others will be utilized to develop a comprehensive geodatabase for the reach of river under

[17] Crawford, C.S., A.C. Culley, R. Leutheuser, M.S. Sifuentes, L.H. White, and J.P. Wilber. 1993. Middle Rio Grande ecosystem: bosque biological management plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
[18] USFWS. 2017. Final Biological and Conference Opinion for Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Management and Maintenance Activities on the Middle Rio Grande, New Mexico. 192 pp.
[19] Hansen, L., J. Hoffman, C. Drews, and E. Mielbrecht. 2010. Designing climate-smart conservation: Guidance and case studies. Conservation Biology 24:63–69.
[20] Massong, T., T. Bauer, and M. Nemeth. 2002. Geomorphic assessment of the Rio Grande San Acacia Reach. U. S. Bureau of Reclamation. Albuquerque.
[21] Shafike, N., S. Bawazir, and J. Cleverly. 2007. Native versus invasive, plant water use in the Middle Rio Grande basin. Southwest Hydrology November-December 28-29.

this planning effort. With this geodatabase in place, analysis of the different physical and biological characteristics of the river system will be possible.

Scientific information was the basis for the original CRP and will be the foundation of the update proposed here. Data gathered will be used to analyze the current state of this river reach during Phase 1a of this project (2018-2019). Project proponents believe there is sufficient information available to develop a thorough plan once existing data is compiled. Utilizing the data on river elevations, widths, and depths, we will determine the historic and current average slope of the river per sub reach (determined through past evaluation of geologic features within the river basin) and the changes in channel planform over a to-be-determined past record. The aggradation/degradation lines established in the mid-1900s are also available as a decadal record of changes in planform and channel thalweg elevation. Sediment modeling and geomorphic studies will help to characterize the current sediment balance in the reach with general information available for major tributaries, the Rio Salado and the Rio Puerco. Limited surface water measurements are available for these tributaries, but the main stem of the Rio Grande has five gauging stations within the river reach to be analyzed. General characteristics of past and current surface water hydrology have been developed through large-scale environmental compliance preparation[22,23]. Past and present vegetation is available through Reclamation's repeated series of vegetation mapping in this river reach. Trends based on water management changes and vegetation response was undertaken in 2015[24].

When the CRP was originally developed, no information on drought or climactic variations was available to the Middle Rio Grande of New Mexico. More recently, numerous scientific papers have been published on the likely scenarios under different climate models for our watershed.[25] Most of these models show a decline in snowpack runoff and more flashy and extreme summer monsoon events. The second phase of the project (1b; proposed as a second request under this program 2019-2020) will include developing trend analyses to predict climactic variation, drought indices, future water supply (both surface flows and groundwater stability), sediment supply and management, river planform, plant community diversity and succession, and land use to determine the likely future conditions on the river. Utilizing these tools, we will be able to determine locations within the river reach where projects to address area issues of water quality and quantity, wildfire, flooding, endangered species concerns, land use, and overall biological diversity will be successful and sustainable.

[22] Upper Rio Grande Water Operations Review, 2007
[23] Final Biological and Conference Opinion for the Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Maintenance and Management on the Middle Rio Grande, 2016
[24] Petrakis, R., P. Tashjian, W. van Leeuwen, R. Dello Russo. 2017. Historical analysis of vegetation changes in response to shifting management objectives on the Middle Rio Grande
[25] "Potential Consequences of Climate Variability and Changes for the Water Resources of the United States" Jacobs, K., D. Briane Adams, and P. Gleick.

We would present the results of the original analysis from the CRP to our stakeholders to determine if these issues and their prioritization are still current and relevant. Each issue will be addressed in the updated plan, and management priorities for each issue will be developed. The proponents of the plan will determine general project locations to best address area issues using information on the current state of the system and predicted future conditions. The final step in the plan will highlight techniques towards restoration based upon predicted plant communities, successional patterns, and other factors.

The Task Force has always been able to approach conflict with an understanding that together we find lasting solutions, whereas, separately, the fight continues. Conflicts are most likely due to water scarcity and land use practices. Regional issues include water availability and use, fire and flood danger, endangered species, and ecosystem services. All of these issues will be addressed in this planning effort. Identifying different stakeholders' views, interests and goals for their lands will allow us to develop shared visions and offer opportunities to find ways to overcome conflict. The analysis will provide science-based solutions to these conflicts and issues. The final plan will provide a framework for the many entities working along this reach of the river.

Evaluation Criteria C: Implementation and Results

Understanding of and Ability to Meet Program Requirements

This proposed scope of work has been broken into four major tasks: 1) outreach to stakeholders, 2) information gathering into one geodatabase, 3) analysis of current conditions, and 4) final geodatabase and report. Detailed plans for each major task and an estimated schedule can be found in the proposed timeline (pg 10). Milestones and cost of each task can be found in Table 2.

Table 2. Milestones and cost of each major task. Dates after each milestone refer to the end date.

Major Tasks	Milestones	Total cost for task
Task 1: Outreach to stakeholders (Oct 2018 – Dec 2018)	1. Development of draft goals – Oct 2018 2. Summaries of landowner goals – Dec 2018	$5714.56
Task 2: Information gathering into one geodatabase (Oct 2018-Mar 2019)	1. Compilation of mapping products – Nov 2019 2. Synopsis of available research and monitoring – Feb 2019 3. Review by stakeholders and incorporation of their comments – Mar 2019	$6,405.00

Task 3: Analysis of current conditions (Mar 2019 – Oct 2019)	1. Selection of Contractor for Analysis – Mar 2019 2. Project Updates – May, Aug, Sept 2019 3. Report of findings – Oct 2019	$86,242.43
Task 4: Final geodatabase and report – Nov 2019- Dec 2019	1. Geodatabase finalized and available for use – Dec 2019 2. Report of current conditions – Dec 2019	$1638.00

Building on Relevant Federal, State, or Regional Planning Efforts: The 2016 Socorro-Sierra Regional Water Plan lists wide-scale removal of exotic vegetation, such as tamarisk and Russian olive, and the management of watersheds to increase yield and improve watershed quality as priority strategies. This plan identifies watershed, stream system, and wildlife habitat restoration/improvements as a key collaborative project within the planning region, including developing/using data to help prioritize/develop techniques to evaluate current and potential future riparian ecosystem strength and sustainability as needed and the development of an ecological model to contribute to the decision support tool for the region.

This project will support conservation targets of the Middle Rio Grande Conservation Action Plan (MRGCD 2015) including 1) riparian and wetland vegetation communities, 2) native bird habitat, 3) native fish community, 4) wildlife corridors, and 5) ditch and drain habitat.

This proposed plan will help to identify project areas that meet or complement the goals of the following plans:

- Final Biological and Conference Opinion for the Bureau of Reclamation, Bureau of Indian Affairs, and Non-Federal Water Maintenance and Management on the Middle Rio Grande, 2016
- Lower Reach Plan, Bureau of Reclamation, in review
- Middle Rio Grande: Bosque Biological Management Plan, 1993
- Recovery Plan for Southwestern Willow Flycatcher, 2002
- Recovery Plan for the Rio Grande Silvery Minnow (*Hybognathus amarus*), 2010
- Restoration Analysis and Recommendations for the San Acacia Reach of the Middle Rio Grande, NM. Prepared for the Middle Rio Grande Endangered Species Collaborative Program by Parametrix, 2008.

Evaluation Criteria D: Nexus to Department of the Interior Initiatives

The Task Force benefits the Rio Grande where the Bureau of Reclamation has a great many activities, projects, and facilities. The Task Force has members and works with two National Wildlife Refuges – Bosque del Apache NWR and Sevilleta NWR. The Bureau of Land Management is a member of the Task Force. Four of the BLM's National Conservation Areas fall within the affected watershed, including one national historic trail, and two wilderness study areas. They are El Camino Real de Tierra Adentro National Historic Trail, Antelope Wilderness Study Area (east side of BDA), Sierra de las Canas Wilderness Study Area, and Veranito Wilderness Study Area.

Appendix A: Project Budget

Budget Proposal

Budget Item Description	Computation		Total Cost
	$/unit	Quantity	
Salaries and Wages			
Program Director	$25/hr	386	$9650
Travel			
Travel to Albuquerque (3)	$0.545/mile	480	$261.60
Travel to Bernardo, NM	$0.545/mile	60	$32.70
Travel to La Joya, NM	$0.545/mile	70	$38.15
Contractual			
Consulting Ecologist	$53.5/hr	95	$5052.50
Contractor for Analysis	-	-	$80203.15
Total Direct Costs			$95238.10
Indirect Costs			
Type of Rate	5%	$95238.10	$4761.90
Total Estimated Project Costs			$100000

Budget Narrative

Salaries and wages – Miranda Kersten, Save Our Bosque Task Force Program Director, will be involved in all tasks of this project. The program director will be responsible for outreach preparation and coordination, attending and leading outreach events, and writing a summary report of the findings of these meetings with stakeholders (76 hours) in Task 1. For Task 2, the program director will conduct the data gathering, coordination with stakeholders, and geodatabase development (244 hours). The program director will coordinate with the contractor doing the analysis of current conditions (Task 3, 25 hours) and for Task 4, will write a final report based on current analysis and produce a final geodatabase that will be made available to stakeholders (41 hours). The Save Our Bosque Task Force will cover the costs of any additional work necessary by the program director to complete this project.

Travel – Travel for outreach and meetings with stakeholders. We estimate there will be three trips to Albuquerque, NM for the program director and consulting ecologists, one trip to Bernardo, NM, and one trip to La Joya, NM. Mileage for these meetings will total 610 miles and mileage reimbursement has been set at the federal rate of $0.545/mile. The Save Our Bosque Task Force will cover any additional travel costs incurred during this project.

Contractual –Consulting Ecology will be working on Task 1: Outreach and assist with preparation for outreach events/public meetings (16 hours), attend outreach events (24 hours), and write/edit summary report of outreach (20 hours, Task 3: QC of analysis contractor work (25

hours), and Task 4: Review and quality control of report (10 hrs). Hourly cost based on consulting ecologist's regular rates.

Contractor for analysis – The cost for this portion is based on Reclamation's in-kind amount for much of the same analysis for the Tiffany Fire Rehabilitation Planning and Analysis; however, this analysis will include more area. We still need to reach out to consultants and request proposals for this work and exact cost of work. The selection of a contractor would occur in the early stages of this project. We will contract out Task 3, the analysis of current conditions.

Indirect costs – Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for the recipient's organization.

We are proposing an indirect rate of 5% on the direct costs for this project. The proposed amount of indirect costs is $4761.90 for this project.

Total costs – The total cost of this project will be $100,000. The Task Force is committed to a non-Federal share of $15,000 to help cover additional costs and materials for this project, and also to seek additional funding as needed.

SAVE OUR BOSQUE TASK FORCE
PO Box 1527, Socorro, New Mexico 87801-1527

Save Our Bosque Task Force

Resolution 2018-01 Regarding Grant Funding Assistance from the Bureau of Reclamation

Be it resolved by the Board of the Save Our Bosque Task Force (Task Force) that:

- The Task Force's Chair is the individual with legal authority to enter into contractual agreements;
- The Task Force Board of Directors voted at its January 2, 2018 meeting to support the application for submission to the Bureau of Reclamation in response to funding opportunity no. BOR-DO-18-F005;
- The Task Force is capable of providing the amount of funding and/or in-kind contributions specified in the funding plan;
- The Task Force will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

Passed and adopted by the Task Force Board of Directors on this 2nd day of January, 2018.

Doug Boykin, Chairman — Date: 1/2/2018

Matt Mitchell _____

Fred Hollis _____

Gina Dello Russo _____

Yasmeen Najmi Approved by phone

Since 1993 working to preserve the Rio Grande bosque for this generation and future ones.

January 20, 2018

To Whom It May Concern:

Socorro County recognizes the Save Our Bosque Task Force (Task Force)'s history of comprehensive science-based planning and collaborative efforts towards ecosystem improvements. Socorro County acknowledges the extensive coordination and diverse partnerships, including landowners, state and federal agencies, and local land managers that the Task Force has developed within the Rio Grande watershed in Socorro County.

Planning watershed projects with sustainability in mind and bringing in new stakeholders is important to the future of this ecosystem; therefore, we would like to express our full support for the Task Force's WaterSMART Cooperative Watershed Management Program's grant application to update and expand its Conceptual Restoration Plan.

Sincerely,

Delilah A. Walsh
County Manager

PO Box I, Socorro, NM 87801
Phone: 575.835.0589
dwalsh@co.socorro.nm.us | www.SocorroCounty.net

RIO GRANDE RETURN

1/25/2018

To Whom It May Concern,

Rio Grande Return a 501(c)3 non-profit corporation devoted to the restoration and protection of the Rio Grande including its watershed, wildlife, wetland habitats and agricultural lands. Rio Grande Return recognizes the Save Our Bosque Task Force (Task Force)'s history of comprehensive science-based planning and collaborative efforts towards ecosystem improvements. Rio Grande Return acknowledges the extensive coordination and diverse partnerships, including landowners, state and federal agencies, and local land managers that the Task Force has developed within the Rio Grande watershed in Socorro County.

Planning watershed projects with sustainability in mind and bringing in new stakeholders is important to the future of this ecosystem; therefore, we would like to express our support for the Task Force's WaterSMART Cooperative Watershed Management Program's grant application to update and expand its Conceptual Restoration Plan.

Sincerely,

Alan Hamilton Ph.D.

Executive Director Rio Grande Return

1704B Llano Street #347 Santa Fe, NM 87505 . 505.466.1767 . www.riogrande return.com . alan@riograndereturn.com

MIDDLE RIO GRANDE CONSERVANCY DISTRICT

Mr. Darren Olson
Bureau of Reclamation
Financial Assistance Support Section
Mail Code: 84-27814
P. O. Box 25007
Denver, CO 80255

January 24, 2018

Dear Mr. Olson:

For more than two decades, the Save Our Bosque Task Force (Task Force) has implemented comprehensive science-based planning and collaborative efforts towards ecosystem improvements. As a landowner/manager partner and member of the Task Force, the Conservancy District acknowledges the extensive coordination and diverse partnerships: private landowners, state and federal agencies, non-profit advocacy organizations and local land managers the Task Force has developed within the Rio Grande watershed in Socorro County.

Planning watershed projects with sustainability in mind and bringing in new stakeholders is important to the future of the Rio Grande ecosystem; therefore, we would like to express our support for the Task Force's WaterSMART Cooperative Watershed Management Program's grant application to update and expand its Conceptual Restoration Plan.

Sincerely,

Mike Hamman, P.E.

CEO and Chief Engineer

cc: files

P.O. Box 581
87103-0581
1931 Second St. SW
Albuquerque, NM
87102-4515
505-247-0234
Fax # 505-243-7308

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Donald Griego,
Division Director
State Forestry Division

1/18/2018

To Whom It May Concern,

New Mexico State Forestry recognizes the Save Our Bosque Task Force (Task Force)'s history of comprehensive science-based planning and collaborative efforts towards ecosystem improvements. New Mexico State Forestry acknowledges the extensive coordination and diverse partnerships, including landowners, state and federal agencies, and local land managers that the Task Force has developed within the Rio Grande watershed in Socorro County.

Planning watershed projects with sustainability in mind and bringing in new stakeholders is important to the future of this ecosystem; therefore, we would like to express our support for the Task Force's WaterSMART Cooperative Watershed Management Program's grant application to update and expand its Conceptual Restoration Plan.

Sincerely,

Doug Boykin, Socorro District Forester

Socorro District • 1701 Enterprise • Socorro New Mexico 87801
Phone (575) 835-9359 • Fax (575) 835-9452 • http://www.emnrd.state.nm.us/SFD

GOVERNOR
Susana Martinez

DIRECTOR AND SECRETARY
TO THE COMMISSION
Alexandra Sandoval

DEPUTY DIRECTOR
Donald L. Jaramillo

STATE OF NEW MEXICO
DEPARTMENT OF GAME & FISH

One Wildlife Way, Santa Fe, NM 87507

Post Office Box 25112, Santa Fe, NM 87504

Tel: (505) 476-8000 | Fax: (505) 476-8123

For information call: (888) 248-6866

www.wildlife.state.nm.us

January 22, 2018

Mr. Darren Olson
Bureau of Reclamation
Financial Assistance Support Section
Mail Code: 84-27814
P. O. Box 25007
Denver, CO 80255

Support for "Save Our Bosque Task Force Funding Application to update Conceptual Restoration Plan through the Bureau of Reclamation's WaterSmart Grant Program"

Dear Mr. Olson:

The New Mexico Department of Game and Fish (Department) recognizes the Save Our Bosque Task Force (Task Force) as an organization that supports comprehensive science-based planning and collaborative efforts towards ecosystem improvements. The Department acknowledges the extensive coordination and diverse partnerships, including landowners, state and federal agencies, and local land managers that the Task Force has developed within the Rio Grande watershed in Socorro County.

Planning watershed projects with sustainability and diverse stakeholder input as guiding principles is important to the future of this ecosystem; therefore, we would like to express our support for the Task Force's WaterSMART Cooperative Watershed Management Program's grant application to update and expand its Conceptual Restoration Plan.

Please contact Donald Auer with any questions at Donaldp.Auer@state.nm.us or 505-476-8034.

Sincerely,

Stewart Liley
Chief, Wildlife Management Division

RIO GRANDE AGRICULTURAL LAND TRUST

ACCREDITED LAND TRUST ACCREDITATION COMMISSION

January 23, 2018

To Whom It May Concern,

The Rio Grande Agricultural Land Trust (RGALT), recognizes the Save Our Bosque Task Force (Task Force)'s history of comprehensive science-based planning and collaborative efforts towards ecosystem improvements. RGALT acknowledges the extensive coordination and diverse partnerships, including landowners, state and federal agencies, and local land managers that the Task Force has developed within the Rio Grande watershed in Socorro County.

Planning watershed projects with sustainability in mind and bringing in new stakeholders is important to the future of this ecosystem; therefore, we would like to express our support for the Task Force's WaterSMART Cooperative Watershed Management Program's grant application to update and expand its Conceptual Restoration Plan.

Sincerely,

Cecilia Rosacker

Cecilia Rosacker
Executive Director