



## **Elucidating Aquifer Properties in the Contributing Zone of Comanche Springs**

Applicant and Project Manager:  
Sharlene Leurig, Chief Executive Officer  
Texas Water Trade  
801 Barton Springs Road  
Austin, TX 78704  
[leurig@texaswatertrade.org](mailto:leurig@texaswatertrade.org)  
(512) 982 – 6880

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## Technical Proposal and Evaluation Criteria

### *Executive Summary*

On October 30, 2019, Texas Water Trade (TWT), located in Austin, Texas (Travis County) requests funding from the US Bureau of Reclamation to support our work with the Middle Pecos Groundwater Conservation District (the District) to generate data that can improve quantitative relationships between groundwater pumping and static water levels in monitored wells and springflow at Comanche Springs in the City of Fort Stockton. This modelling will ultimately inform the district and external stakeholders in assessing the feasibility of restoring perennial flow at Comanche Springs.

Funds committed by Reclamation will be used to pay for the preparation, execution and interpretation of results from well pumping tests in the contributing zone of Comanche Springs. Funds committed by the District will pay for development of a groundwater flow water model that will support prediction of springflow responses to seasonal groundwater pumping and the integration of the data generated by our well pumping tests into that model for its validation. The work described in this proposal, to be conducted over the course of two years, and completed no later than February 28, 2022, will contribute to developing hydrologic information and water management tools and improve modeling and forecasting capabilities which may be used by water managers to increase water supply reliability, enable conjunctive use of groundwater and surface water, assess the feasibility of meeting endangered species freshwater requirements at a restored Comanche Springs and improve water management in the District. This project is not located on a Federal facility.

### *Technical Project Description and Milestones*



Texas, with an estimated 30 billion gallons of daily flow—used as a critical water source to human settlement in the Permian Basin for thousands of years. The springs do not flowed reliably, however, since the 1950s, when irrigated agriculture expanded in the area known as the Belding Irrigation Area (Figure 1) over the aquifer feeding the springs.

Significant groundwater depletion in the Edwards - Trinity Aquifer in

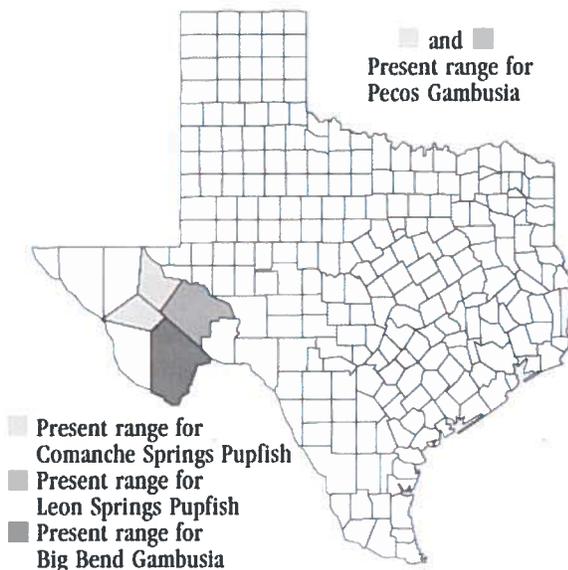
the Belding area caused spring flows to decline in the 1950s and led to a seminal court case between surface water users and groundwater users, *Pecos County Water Control and Improvement District No. 1 v. Williams et al.*. That case, which is still cited today, determined that under the Rule of Capture, no liability could be assessed against groundwater irrigators for diminishing water availability in neighboring groundwater wellfields or surface water features.

Since the *PCWCID No. 1 District v. Williams* case was decided, more than 20,000 acre-feet of surface water rights in the down-spring Comanche Creek have been rendered unreliable. The dozens of farms the creek once supported have been entirely extirpated, as have the populations of desert fish that once thrived in Comanche Springs. One of these, the endangered Comanche Springs pupfish, are now found only at three springs: Phantom Springs (a U.S. Bureau of Reclamation facility), Balmorhea (which has benefited from U.S. Bureau of Reclamation investment in supportive infrastructure) and Giffin Springs. Comanche Springs pupfish are no longer found anywhere in Pecos County, where they were once end

However, over the past decade, Comanche Springs has begun flow again from late winter to early spring when aquifer levels have recovered from summer pumping in the Belding area due to reductions in irrigation pumping and end of drought conditions.

Over the last twenty years since the formation of the District, substantial science has been developed by it a by regulated groundwater owners in its jurisdiction. That science includes exploration of underlying aquifer formations in the Belding Area, which has led to one significant groundwater user shifting a substantial portion of its demand away from the Edwards-Trinity Aquifer and into two different formations underlying it. The District and some of its regulated users have also developed a variety of models simulating the effects of enhanced pumping from the Edwards-Trinity Aquifer on well reliability.

Alongside that scientific advancement, the District has also evolved its water management objectives from strictly permitting groundwater usage to contemplation of conjunctive management of groundwater and surface water. Its most recent Water Management Plan, the District allowed for the establishment of distinct groundwater management zones, including one “over the Leon-Belding Irrigation Area and the



vicinity of the City of Fort Stockton to include the outlets of Comanche Springs”<sup>1</sup> (now known as “Management Zone 1” – see map in Project Location section). The Management Plan includes the objective of monitoring “the discharge of Comanche and related springs.” The Water Management Plan also states that “each third year, the District will assess the changes in the quantity of the discharge of Comanche and related springs and recommend to the Board of Directors whether any conservation measures are necessary to maintain the discharge of Comanche and related springs.”

As an outgrowth of these scientific and water management advancements, the District has been developing a sensitivity analysis of modeled springflow to groundwater production in the Edwards-Trinity Aquifer in Management Zone 1. That sensitivity analysis indicates that perennial springflow at Comanche Springs could be restored by a 25% reduction of pumping in the Belding area (see enclosed, *excerptsfromThornhillModelReport.pdf*). The District is now embarking upon the task of translating that model from an annual timestep to a monthly timestep, a process that is expected to be completed by the end of 2020. That monthly downscaling will be helpful in testing the springflow response to seasonal pumping, which is important as the demand profile in the Management Zone 1 is highly seasonal in nature.

The sensitivity analysis developed by the the District is an exciting advancement of the tools it has available to assess water management strategies in Management Zone 1. However, the District and other users recognize that its use as a decision support tool is limited by the lack of data available to validate its performance.

Recognizing the need to test springflow response to groundwater pumping, Texas Water Trade is proposing a workplan that would produce data for use in validating the District’s model correlating groundwater production to surface flows from Comanche Springs. Our workplan, described in more detail below, would involve running pump tests at one or more groundwater wells in Management Zone 1 and retrieving and evaluating data from nearby monitored wells and from the springs to assess changes in static water levels and surface flow rate. These analyses would advance our understanding and the District’s understanding of aquifer properties in the Edwards-Trinity Aquifer. These data will be used by the District to validate its model correlating groundwater production with springflow. To the extent that we are able to run pump tests for wells into other aquifers underlying the Edwards-Trinity in Management Zone 1, we will also be able to address ongoing questions as to how and if these formations are hydrologically connected to the Edwards-Trinity Aquifer, an important question in determining whether future Water Management Plans should attempt to shift demand from the Edwards-Trinity to underlying aquifer formations and what effect that shift in demand might have on flow at Comanche Springs. Pumping test(s) would be scheduled during non-irrigation periods.

Preliminary project schedule includes:

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<sup>1</sup> See [https://www.middlepecosgcd.org/pdf/mgt\\_plan/2010/10-19-2010\\_mgmt\\_plan\\_1-163.pdf](https://www.middlepecosgcd.org/pdf/mgt_plan/2010/10-19-2010_mgmt_plan_1-163.pdf).

Major tasks:

Task	
Scoping and Planning	Establish goals, project scope, schedule, responsibilities, review past pumping data, ID potential pumping wells
Well Owner Arrangements	Contact and visit well owners, discuss feasibility and terms of well use
Field Reconnaissance	Assess suitability of pumping well(s) (i.e. is pump of sufficient size, can/is flow being metered, run well for short period of time and measure water level, can discharge water be adequately routed to prevent immediate aquifer recharge
Pumping and Monitoring Well Instrumentation	Deploy down hole pressure transducers in all wells to be monitored, install flow measuring devise at pumping well
Background Monitoring	After transducer deployment, allow 7± days of background water level monitoring and spring discharge measurements, periodically manually measure water levels, retrieve and review data
Pump Test	Turn on pump and run for predetermined length of time (3-5 days), optional sample for general water quality at beginning and end of test, measure discharge, periodically manually measure water levels
Recovery Period	Allow wells to recover to 90-95% of pre-test levels, periodically manually measure water levels, retrieve transducers, download data
Model Preparation	Convert annual timestep model of groundwater-surface water connections into monthly timestep
Data Analysis and Report	Determine aquifer properties, make recommendations for potential additional tests, prepare report

Milestones:

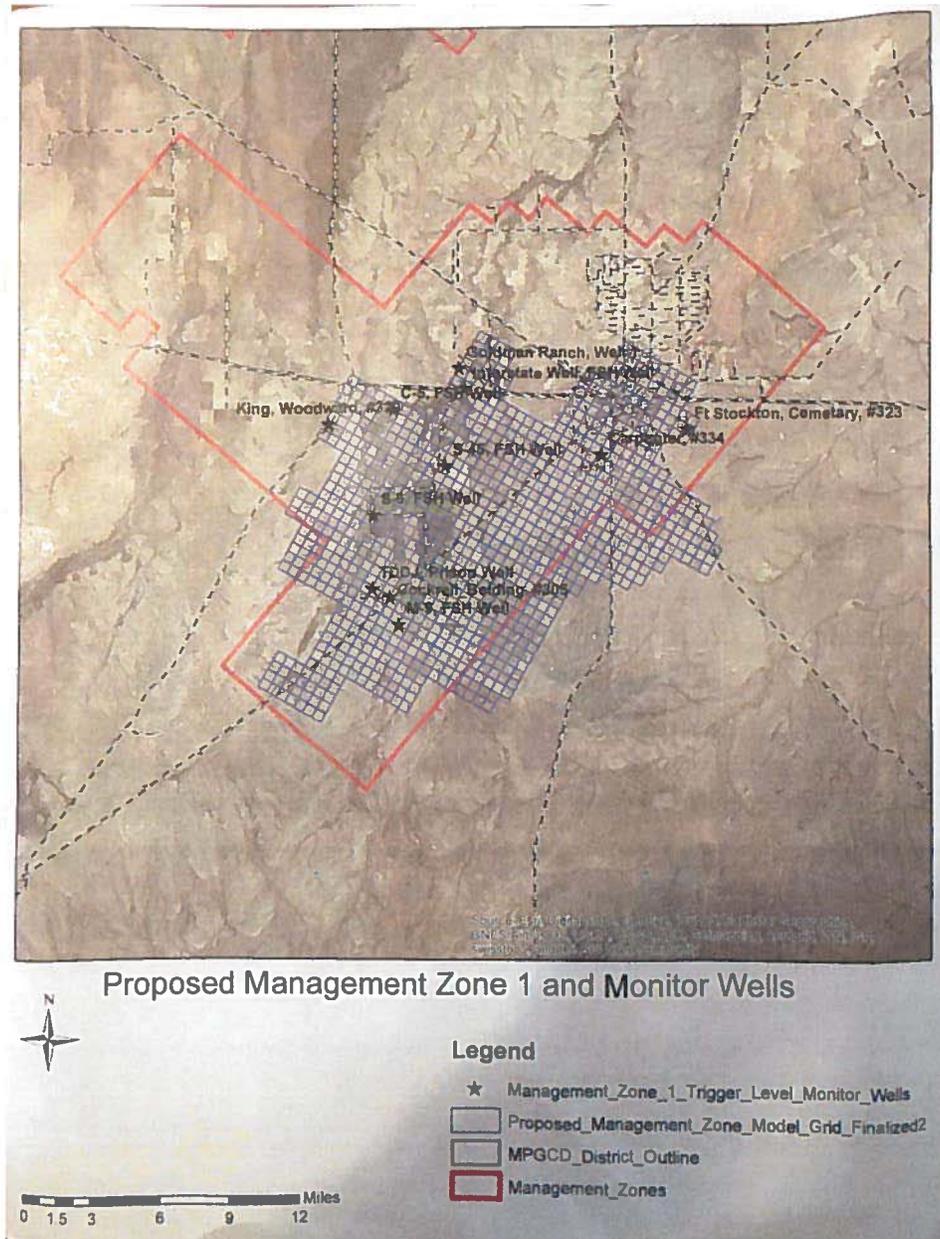
Milestone	Entity	Estimated Date
Candidate wells identified for pump tests	Texas Water Trade	June 2020

Landowner outreach initiated to recruit participation in well tests	Texas Water Trade	June 2020
Groundwater model with monthly timestep completed	Middle Pecos Groundwater Conservation District	October 2020
Agreements with landowners finalized	Texas Water Trade	December 2020
Pump Tests initiated	Texas Water Trade	February 2021
Pump Tests completed	Texas Water Trade	June 2021
Begin Data Integration into groundwater model initiated	Middle Pecos Groundwater Conservation District	July 2021
Report on results of model validation completed	Middle Pecos Groundwater Conservation District	February 2022

Texas Water Trade is a Category B applicant. TWT is partnering with the Middle Pecos Groundwater District, a Category A applicant (see enclosed Letter of Support/Participation). The Middle Pecos Groundwater District, which permits all groundwater production in the Edwards-Trinity Aquifer in Pecos County, including the Belding area, currently monitors spring flow at Comanche Springs. The district also recently designated its Management Zone 1 specifically within the contributing zone of Comanche Springs (the Leon-Belding Irrigation Area) and recognizes within its Water Management Plan that the board may elect to modify production limits within that zone to achieve specific outcomes related to springflow at Comanche Springs.

## Project Location

This project is focused on the Middle Pecos Groundwater Conservation District's Management Zone 1. (Map pictured below)



## Data Management Practices

The Data Manager will report directly to the Project Manager, and will have primary responsibility for all tasks related to data management and data quality. The data manager ensures project-level data management practices, data documentation, format standards and product delivery processes are consistent with established standard operating procedures among all project staff and contractors. All spatially explicit data or

tools developed or used in this project will be developed in industry standard formats that are compatible with industry accepted Geographic Information System (GIS) platforms.

## Evaluation Criteria

### ***Evaluation Criterion A — Benefits to Water Supply Reliability (40 points)***

**Describe how your project will benefit water supply reliability:**

1. Describe the *water management issue(s)* that your project will address. For example, will your project address water supply shortfalls or uncertainties, the need to meet competing demands for water, complications arising from drought, conflicts over water, or other water management issues? Describe the severity of the water management issues to be addressed through your project.

The project will address water supply shortfalls and uncertainties by providing data that will be used to validate the Middle Pecos Groundwater Conservation District's model of groundwater-surface water interactions in the Comanche Springs contributing zone. This project will thereby support water management decisions by the District and other stakeholders on how to balance demands for water between historic groundwater uses (municipal and agricultural), potential future demands for groundwater (oil and gas), and the potential restoration of surface flows for a range of uses, including restoration of an extirpated desert wetland.

The water resources in this region have been the subject of intense conflict and intermittent litigation since the 1950s. Those conflicts persist, although they have evolved from groundwater-surface water user conflicts to conflicts between groundwater users. Fort Stockton is in the Permian Basin, the largest global oil and gas play, and demand for source water and deep injection wells for water disposal is moving into Pecos County. This work comes at a pivotal time, as demand for oil and gas source water in Management Zone 1 has been minimal to this point but could intensify, along with demand from nearby municipalities. Establishing science on the interconnections of groundwater resources in Management Zone 1 and the groundwater-surface water connections in the Comanche Springs contributing zone can help the District navigate the potential for future conflict and enable water management decisions that could create mutual benefit for existing groundwater users, surface water rights holders, the community at large and potential future oil and gas water demands.

2. Explain *how* your project will address the water management issues identified in your response to the preceding bullet. In your response, please explain how your project will contribute to one or more of the following water management objectives and provide support for your response:
  - a) water supply reliability,
  - b) management of water deliveries,

- c) water marketing activities,
- d) drought management activities,
- e) conjunctive use of ground and surface water,
- f) water rights administration,
- g) ability to meet endangered species requirements,
- h) watershed health,
- i) conservation and efficiency, or
- j) other improvements to water supply reliability.

This project will address the following water management objectives:

*Water Supply Reliability:* Over the past decade groundwater users in Management Zone 1 have explored the potential of shifting demand from the Edwards-Trinity to deeper formations. This has the potential benefit of permanently reducing demand from the aquifer most associated with springflow at Comanche Springs, and also creates potential benefits to source higher quality water than the Edwards-Trinity, which is higher salinity than some underlying formations. However, there is relatively little data on the interactions between these aquifers in Management Zone 1.

*Conjunctive Use of Ground and Surface Water:* The workplan described herein is of immense value to the District as it evolves its Water Management Plan and contemplates what strategies it could undertake to enable development of alternative aquifer resources and which strategies might enable the restoration of perennial springflow at Comanche Springs.

*Managing for Endangered Species Needs:* Creating perennial springflow in the springs would enable the restoration of a desert ecosystem that was entirely lost for nearly 70 years. Restoration of these flows would benefit migratory and resident bird species who rely on desert wetlands for water and habitat that is increasingly at risk from climate change and groundwater production.

*Water Marketing:* Texas Water Trade is now in the midst of developing a market strategy for reducing groundwater production in the Edwards-Trinity Aquifer within Management Zone 1 as a means of permanently restoring perennial flow at Comanche Springs.

3. Describe *to what extent* your project will benefit one of the water management objectives listed in the preceding bullets. In other words, describe the significance or magnitude of the benefits of your project, either quantitatively or qualitatively, in meeting one or more of the listed objectives.

*Water Supply Reliability:* The data that would be produced from the proposed well tests would be useful both in ascertaining the potential to create reliable yield from groundwater and surface water for historic users, as well as the ability to increase yield from deeper formations without unintended take from the Edwards-Trinity.

*Conjunctive Use of Ground and Surface Water:* Achieving the restoration of the springs would benefit groundwater owners and other water managers, including the Pecos County Water Control and Improvement District No. 1, which still holds active water rights to some 20,000 acre-feet of surface flows in Comanche Creek (water which has not flowed reliably since the 1950s). Restoring flows at Comanche Creek could also create marketable, reliable surface water for uses including oil and gas production and municipal demand, which could be captured downstream of the springs without sacrificing the environmental benefit of spring restoration. Historically Comanche Creek was a losing reach just 2-3 miles downstream of Comanche Springs, losing all of its surface flow to the Pecos Alluvium. The ecological benefit of Comanche Springs was therefore historically limited to the spring outlet, the desert wetland it sustained and only a 2-3 mile watercourse.

*Managing for Endangered Species Needs:* Through Safe Harbor provisions in the Endangered Species Act, endemic endangered species such as the Comanche Springs pupfish and Pecos gambusia could one day be reintroduced without creating liability for takings, and could create a refugium for these desert fish which are at high risk of groundwater depletion-based ecosystem loss.

*Water Marketing:* The water market mentioned above would compensate groundwater owners for voluntary reductions in groundwater pumping. Validating the District's groundwater-surface water model would allow us to focus efforts and financial resources on arrangements with groundwater owners whose actions are most likely to restore springflow, and to avoid potential transactions that could inadvertently take springflow through aquifer-to-aquifer drawdown.

4. Explain how your project complements other similar applicable to the area where the project is located. Will your project complement or add value to other, similar efforts in the area, rather than duplicate or complicate those efforts? Applicant should make a reasonable effort to explore and briefly describe related ongoing projects.

This project is complementary to Reclamation's existing investments in Comanche Springs pupfish habitat at Balmorhea and Phantom Springs. These springs are two of only three refugia where the Comanche Springs pupfish are now found, and are highly vulnerable to climate change and increased groundwater production from oil and gas activity in the Permian Basin. Adding refugia for this species and Pecos gambusia, another endangered species historically found at Comanche Springs, is recognized by United States Fish and Wildlife Service and Texas Parks and Wildlife Department as a need for species resilience and survival. This project will provide necessary data to validate modeling of groundwater-surface water connections in Comanche Springs that will need to be in place to evaluate the potential for permanently restoring flows at Comanche Springs.

This project is complementary to the Middle Pecos Groundwater Conservation District's efforts to evaluate potential adaptations to water management to meet diverse human and environmental needs.

***Evaluation Criterion B — Need for Project and Applicability of Project Results (25 points)***

**Explain how your project will result in readily useful applied science tools that meet an existing need:**

1. Does your project meet an existing need identified by a water resource manager(s) within the 17 Western States?
  - a) Explain who has expressed the need and describe how and where the need for the project was identified (even if the applicant is the primary beneficiary of the project). For example, was the need identified as part of a prior water resources planning effort, through the course of normal operations, or raised by stakeholders? Provide support for your response (e.g., identify the entities that have expressed a need or cite planning or other documents expressing a need for the project).

Yes, this project meets the Middle Pecos Groundwater District's existing needs. As mentioned above, the Middle Pecos Groundwater District, which permits all groundwater production in the Edwards-Trinity Aquifer in Pecos County, including the Belding area, currently monitors spring flow at Comanche Springs. The District also recently designated its Management Zone 1 specifically within the contributing zone of Comanche Springs (the Leon-Belding Irrigation Area) and recognizes within its Water Management Plan that the board may elect to modify production limits within that zone to achieve specific outcomes related to springflow at Comanche Springs.

- b) Provide letters of support from any resource managers, stakeholders or partners that have stated that they will benefit from the project, or, for Category B applicants, letters of participation from partners who have committed to participate in the proposed project. Identify any contribution (e.g., cost share, staff time, or other resources) by partners other than the applicant to the non-Federal cost share requirement for the project.

Please see enclosed Letter of Support/Participation from our Category A partner, the Middle Pecos Groundwater District.

2. Will the project result in an applied science tool(s) or information that is readily applicable, and highly likely to be used by water resource managers in the West?
  - a) How will the project results be used?

The project results will be used by the District to evaluate potential changes to water management that could enable conjunctive ground and surface water use. For example, it could be used by the District to evaluate changes to maximum permitted groundwater production from the Edwards-Trinity in Management Zone 1 or increased production limits to other formations in Management Zone 1. It could be used by the District to support a decision of whether to define a Desired Future Condition of a certain amount of springflow from Comanche Springs.

In addition, Texas Water Trade will use the project results to focus resources on development of voluntary arrangements with groundwater owners in Management Zone 1 that would result in reduced pumping from the Edwards-Trinity Aquifer, either through total demand reduction or through shifting of demand to other formations with lower springflow contribution, for the purposes of attempting to restore perennial flow at Comanche Springs.

- b) Will the results of your project inform water resource management actions and decisions immediately upon completion of the project, or will additional work be required?

Texas Water Trade will immediately use the project results to inform voluntary arrangements with groundwater owners. The District updates its Water Management Plan every five years (the next plan is scheduled to be updated in 2020), although the District Board of Directors has the discretion to change elements of its plan or its rules and objectives more frequently.

- c) Will the results of your project be transferrable to other users and locations?

Yes, the results of this project would be informative to other water managers in karstic aquifer systems like the Edwards-Trinity.

- d) If the applicant is not the primary beneficiary of the project (e.g., if the applicant is a university or research institute), describe how the project beneficiaries have been or will be involved in planning and implementing the project?

The District is a participant in this project (See Letter of Support/Participation attached). We have coordinated our activities with the General Manager of the District and with the hydrogeologist who is currently contracted with the District to develop and manage groundwater models in Management Zone 1. The District will be involved in planning the project by having the opportunity to guide selection of prospective wells for pumping tests, will pull data from monitoring wells as part of their normal data collection protocol and will integrate data from the pump tests into its monthly groundwater model for Management Zone 1.

## ***Evaluation Criterion C — Project Implementation (15 points)***

### **Describe your project implementation plan:**

1. Describe the objectives of the project and the methodology and approach that will be undertaken. Provide support for your methodology and approach.

The project's objective is to address water supply shortfalls and uncertainties in the Edwards-Trinity Aquifer by providing data that will be used to validate the Middle Pecos Groundwater Conservation District's model of groundwater-surface water interactions in the Comanche Springs contributing zone.

The District has been developing a sensitivity analysis of modeled springflow to groundwater production in the Edwards-Trinity Aquifer in Management Zone 1. That sensitivity analysis indicates that perennial springflow at Comanche Springs could be restored by a 25% reduction of pumping in the Belding area. The District is now translating that model from an annual timestep to a monthly timestep, a process that is expected to be completed by the end of 2020. That monthly downscaling will be helpful in testing the springflow response to seasonal pumping, which is important as the demand profile in the Management Zone 1 is highly seasonal in nature. The District and other users recognize that its use as a decision support tool is limited by the lack of data available to validate its performance.

Recognizing the need to test springflow response to groundwater pumping, Texas Water Trade is proposing a methodology and approach that would produce data for use in validating the District's model correlating groundwater production to surface flows from Comanche Springs. Our workplan would involve running pump tests at one or more groundwater wells in Management Zone 1 and retrieving and evaluating data from nearby monitored wells and from the springs to assess changes in static water levels and surface flow rate. These analyses would advance our understanding and the District's understanding of aquifer properties in the Edwards-Trinity Aquifer. These data will be used by the District to validate its model correlating groundwater production with springflow. To the extent that we are able to run pump tests for wells into aquifers underlying the Edwards-Trinity in Management Zone 1, we will also be able to address ongoing questions as to how and if these formations are hydrologically connected to the Edwards-Trinity Aquifer, an important question in determining whether future Water Management Plans should attempt to shift demand from the Edwards-Trinity to underlying aquifer formations and what effect that shift in demand might have on flow at Comanche Springs.

2. Describe the work plan for the project. Include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

Major tasks:

Task	Activities	Staffing Team	# of Hours
Scoping and Planning	Establish goals, project scope, schedule, responsibilities, review past pumping data, ID potential pumping wells	Hydrogeologist A TWT	50 40
Well Owner Arrangements	Contact and visit well owners, discuss feasibility and terms of well use	Hydrogeologist A TWT Field Team A	24 60 40
Field Reconnaissance	Assess suitability of pumping well(s) (i.e. is pump of sufficient size, can/is flow being metered, run well for short period of time and measure water level, can discharge water be adequately routed to prevent immediate aquifer recharge)	Field team A	60
Pumping and Monitoring Well Instrumentation	Deploy down hole pressure transducers in all wells to be monitored, install flow measuring devise at pumping well	TWT Field team A Hydrogeologist A	4 68 40
Background Monitoring	After transducer deployment, allow 7± days of background water level monitoring and spring discharge measurements, periodically manually measure water levels, retrieve and review data	TWT Field team A Field team B (isotope analysis and writeup)	4 40 200
Pump Test	Turn on pump and run for predetermined length of time (3-5 days), optional sample for general water quality at beginning and end of test, measure discharge, periodically manually measure water levels	TWT Field team A	4 200
Recovery Period	Allow wells to recover to 90-95% of pre-test levels, periodically manually	Field team A	67

	measure water levels, retrieve transducers, download data		
Model Preparation	Convert annual timestep model of groundwater-surface water connections into monthly timestep	Hydrologist B	350
Data Analysis and Report	Determine aquifer properties, make recommendations for potential additional tests, prepare report	Hydrologist B Hydrologist A	150 55

Milestones:

Milestone	Entity	Estimated Date
Candidate wells identified for pump tests	Texas Water Trade	June 2020
Landowner outreach initiated to recruit participation in well tests	Texas Water Trade	June 2020
Groundwater model with monthly timestep completed	Middle Pecos Groundwater Conservation District	October 2020
Agreements with landowners finalized	Texas Water Trade	December 2020
Pump Tests initiated	Texas Water Trade	February 2021
Pump Tests completed	Texas Water Trade	June 2021
Begin Data Integration into groundwater model initiated	Middle Pecos Groundwater Conservation District	July 2021
Report on results of model validation completed	Middle Pecos Groundwater Conservation District	February 2022

3. Describe the availability and quality of existing data and models applicable to the project.

The District has been developing a sensitivity analysis of modeled springflow to groundwater production in the Edwards-Trinity Aquifer in Management Zone 1. The District is now translating that model from an annual timestep to a monthly timestep, a process that is expected to be completed by the end of 2020. That monthly downscaling will be helpful in testing the springflow response to seasonal pumping,

which is important as the demand profile in the Management Zone 1 is highly seasonal in nature. The District and other users recognize that its use as a decision support tool is limited by the lack of data available to validate its performance.

Recognizing the need to test springflow response to groundwater pumping, this project will produce data for use in validating the District's model correlating groundwater production to surface flows from Comanche Springs.

Presently the Groundwater Conservation District monitors 11 wells in Management Zone 1 (those wells are located on the Project Map above). This Fall, the District will begin using a mobile flow meter to take intermittent flow measurements in the irrigation canal downstream of Government and Big Chief Springs in the Comanche Springs complex (this would be the District's twelfth monitoring location).

Measuring the actual flow rate and monitoring its daily change during the off-irrigation season will support coordinated efforts at the Middle Pecos Groundwater Conservation District to model the correlation between pumping, aquifer storage and springflow. That will, in turn, assist us in targeting the wells most closely associated with springflow and in narrowing in on the minimum amount of curtailment that would be needed to support perennial flow restoration.

4. Identify staff with appropriate credentials and experience and describe their qualifications. Describe the process and criteria that will be used to select appropriate staff members for any positions that have not yet been filled. Describe any plans to request additional technical assistance from Reclamation or via a contract.
  - a) Have the project team members accomplished projects similar in scope to the proposed project in the past either as a lead or team member?

Texas Water Trade's Chief Executive Officer, Sharlene Leurig, has led the financial and economic workstream for a feasibility assessment of restoring Comanche Springs. In that effort, she has coordinated data exchange with the District, consulted with the District hydrogeologist on data interpretation and modeling methodologies and engaged groundwater users in Management Zone 1 on potential groundwater use adaptations to result in springflow restoration.

- b) Is the project team capable of proceeding with tasks within the proposed project immediately upon entering into a financial assistance agreement? If not, please explain the reason for any anticipated delay.

Yes, the project team can immediately proceed with the tasks in the proposed project upon entering into a financial assistance agreement.

5. Provide a summary description of the products that are anticipated to result from the project. These may include data, metadata, digital or electronic products, reports and publications.

The results of these tests will provide aquifer parameter data that can be used as inputs to the updated groundwater flow model. Potential interconnection of lower aquifers to the Edwards-Trinity Aquifer may be quantified.

### ***Evaluation Criterion D — Dissemination of Results (10 Points)***

**Explain how project results will be disseminated, including:**

1. Describe how the tools, frameworks, or analyses being developed will be disseminated, communicated, or made available to water resources managers who may be interested in the results.

- a) If the applicant is the primary beneficiary of the project, explain how the project results will be communicated internally, and to interested stakeholders and interested water resources managers in the area, if appropriate.

Texas Water Trade is not the primary beneficiary of the project.

- b) If the applicant is not the primary beneficiary of the project (e.g., universities or research institutes) describe how project results will be communicated to project partners and interested water resources managers in the area.

The District, as a Category A partner, has existing data collection arrangements with landowners in control of the surface estate where the 11 monitoring wells are located. The District routinely accesses these wells to maintain data collection instruments and harvest data and will therefore have access to the raw data directly. In addition, the District will lead on data analysis, and plans to integrate these data into its groundwater-surface water model to validate its performance.

- c) Explain why the chosen approach is the most effective way to disseminate the information to end users in a usable manner.

The District regulates groundwater production in the area and therefore has a direct line of communication with all regulated and unregulated groundwater users in its jurisdiction. The District routinely makes its models and data available to end users through data requests.

### ***Evaluation Criterion E — Department of the Interior Priorities (10 points)***

**Explain how your project supports Department of the Interior Priorities (or at least one priority):**

1. ***Creating a conservation stewardship legacy second only to Teddy Roosevelt***

- a) utilize science to identify best practices to manage land and water resources and adapt to changes in the environment;

This project supports Department of the Interior's priority of creating a conservation stewardship legacy second only to Teddy Roosevelt. We are utilizing science, data and modeling to identify water management practices that could support perennial flow restoration at Comanche Springs.

**Environmental and Cultural Resources Compliance *(as applicable to the project)***

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

The proposed project will temporarily stress the aquifer through well pump tests designed to provoke a response in the form of reduction of static water levels in neighboring wells or reductions in springflow. This aquifer response is anticipated to be short-lived (measured in days to weeks) as the Edwards-Trinity Aquifer is a self-regulating system and highly responsive to natural recharge. No permanent reductions in aquifer storage are anticipated at historic recharge rates. Surface flows from the produced water will be directed to existing tail water storage facilities on private land, where the water can be reused or lost to evapotranspiration.

- 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.

- 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.

No.

- When was the water delivery system constructed?

Private water wells and conveyance infrastructure to be used in the course of this project were constructed from the 1940s onward on private lands.

- 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.

- 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.

No.

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

No.

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

No.

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

No.

- 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.

### **Required Permits or Approvals**

Special permits from the Middle Pecos Groundwater Conservation District are not required for pump tests. The only wells we would be pumping for the purposes of this project are those already in operation with existing groundwater production permits.

### **Project Budget**

The project budget includes:

- (1) Funding plan and letters of funding commitment

- (2) Budget proposal
- (3) Budget narrative

***Funding Plan and Letters of Funding Commitment***

Sources of the non-Federal cost share contribution for the project includes:

- \$75,000 of in-kind costs contributed by Middle Pecos Groundwater District for groundwater modeling. (See enclosed Letter of Support/Participation)
- \$50,000 general support funding received and allocated from Lyda Hill Philanthropies (See enclosed award letter).
- \$20,000 general support funding received and allocated from Shield-Ayres Foundation (See enclosed award letter).
- \$5,000 support for Scaling Environmental Water Markets in Texas, a non-federal grant from the National Fish and Wildlife Foundation

***Budget Proposal***

The total project cost is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party contributions, that are necessary to complete the project.

**Table 1.—Total Project Cost Table**

<b>Source</b>	<b>Amount</b>
Costs to be reimbursed with the requested Federal funding	<b>\$150,000</b>
Costs to be paid by the applicant	<b>\$75,000</b>
Value of third-party contributions	<b>\$75,000</b>
<b>TOTAL PROJECT COST</b>	<b>\$300,000</b>

**Table 2.—Itemized Budget Proposal**

BUDGET ITEM DESCRIPTION	COMPUTATION		QUANTITY TYPE	TOTAL COST
	\$/Unit	Quantity		
<b>SALARIES/WAGES</b>				
Sharlene Leurig, Chief Executive Officer	\$72.12	416	Hours	\$30,001.92
Robin Johnson, Director of Development	\$57.69	70	Hours	\$4,038.30
<b>FRINGE BENEFITS</b>				
Sharlene Leurig, Chief Executive Officer	30%		Hours	\$9,000.58
Robin Johnson, Director of Development	30%		Hours	\$1,211.49
<b>TRAVEL</b>				
Lodging	\$96.00	25	Hotel room/night	\$2,400.00
Per Diem	\$55.00	36	Per day	\$1,980.00
Mileage	\$0.58	9759	Per mile	\$5,660.22
<b>EQUIPMENT</b>				
Energy costs for pump tests	\$51.51	830	kWh/acre-foot	\$42,753.30
Flow meter for pumping well				\$5,000.00
<b>SUPPLIES AND MATERIALS</b>				
Water quality sample equipment	\$300.00	10	Cost per sampling kit	\$3,000.00
Pump test laboratory water analysis				\$1,000.00
Transducers	\$1,250.00	6	Cost per transducer	\$7,500.00
<b>CONTRACTUAL</b>				
Scoping and planning - Hydrogeologist A	\$150.00	50	Hours	\$7,500.00
Well Owner Arrangements - Field Team A	\$75.00	40	Hours	\$3,000.00
Field Reconnaissance - Field Team A	\$75.00	60	Hours	\$4,500.00
Pumping and Monitoring Well Instruments - Field Team A	\$75.00	68	Hours	\$5,100.00
Pumping and Monitoring Well Instruments - Hydrogeologist A	\$150.00	40	Hours	\$6,000.00
Background Monitoring - Field Team A	\$75.00	40	Hours	\$3,000.00
Background Monitoring - Field Team B (Isotope Analysis and Writeup)	\$125.00	200	Hours	\$25,000.00
Background Monitoring - Field Team B (Lab Sample Testing)	\$1,500.00	10	Cost per sample	\$15,000.00
Pump Test - Field Team A	\$75.00	200	Hours	\$15,000.00
Recovery Period - Field Team A	\$75.00	67	Hours	\$5,025.00
Data Analysis and Report - Hydrogeologist A	\$150.00	55	Hours	\$8,250.00
<b>THIRD-PARTY IN-KIND CONTRIBUTIONS</b>				
Middle Pecos Groundwater District - Hydrogeologist B- data integration and model development	\$150.00	350	Hours	\$52,500.00
Data Analysis and Report - Middle Pecos Groundwater District - Hydrogeologist B	\$150.00	150	Hours	\$22,500.00
				\$0.00
				\$0.00
<b>TOTAL DIRECT COSTS</b>				<b>\$285,920.81</b>
<b>INDIRECT COSTS</b>				
Modified Total Direct Costs	10%		base	\$14,079.25
<b>TOTAL ESTIMATED PROJECT COSTS</b>				<b>\$300,000</b>

## **Budget Narrative**

The budget has been constructed assuming that the award would be announced early February 2020. Texas Water Trade and Middle Pecos Groundwater Conservation District will rely upon staff and contractors to execute the activities described in the workplan.

We will comply with OMB procurement standards for the activities defined in this proposal as defined below:

**a) Micro Purchases (applicable to procurements valued at less than \$10,000\*):**

- i) Purchases will be made from qualified suppliers with reasonable prices; competitive written bids are not required.
- ii) If an unanticipated price adjustment is made after the work has begun that results in the total cost exceeding the micro purchase threshold, the situation will be evaluated to determine whether bids can reasonably be obtained from additional vendors without unduly delaying projects. If using a new vendor for the additional work is not feasible, documentation will be maintained to support the lack of bids. Circumstances may require additional work unforeseen at the beginning of the project, but contracts will not be broken down into smaller components merely to meet the micro purchase threshold.

**b) Small Purchases (applicable to procurements valued \$10,000 - \$250,000):**

- i) Bids will be obtained from at least three (3) vendors.
- ii) Written documentation will be maintained to justify the vendor selection.

**c) Noncompetitive Proposals (applicable to procurement of \$10,000 or more):**

Multiple bids are not necessary if at least one of the following situations applies:

1. The item/service is only available from a single source;
2. An emergency need exists that will not permit a delay resulting from competitive solicitation of bids;
3. The funding source expressly authorizes in writing noncompetitive bidding; or
4. Competition is deemed inadequate after solicitation from several sources.

**d) Competitive Proposals (applicable to procurements for a singular service or item valued at more than \$250,000):**

- i) Written Quotation: After obtaining approval from the Chief Executive Officer, written quotations will be sought from at least three (3) suppliers. Notice of invitation for bids, including assessment criteria, will be advertised in the press for free response by all interested suppliers or contractors. If a list of suppliers is used, quotations will be sought from the suppliers on the list by rotation. The quotation that best meets the assessment criteria will be accepted unless justification for choosing another bidder is approved by the Board of Directors. Maintain the bids and approval of the chosen vendor as documentation for the decision.
- ii) Verbal Quotation: Written quotations are always preferable. If a verbal quotation is received, it must be documented in writing by the vendor within a timeframe specified. If the vendor does not honor the verbal quote, the next best vendor will be chosen.
- iii) Exemption: In general, all procurements must comply with the procedures outlined above. Some situations may require special consideration, which will be considered based on the specific facts and circumstances. Written documentation of the justification for the exemption and approval will be attached to the RFP.

### ***Travel Expenses***

Travel expenses have been calculated using per diem rates as set forth by the General Services Administration for Fort Stockton.

Mileage was estimated at 775 miles per non-local trip and 100 miles per local trip. A total of 10 non-local trips and 20 local trips were estimated, for a total of 9759 miles. Travel expenses also includes estimated travel by activity supplied by the contractors.

### ***Salaries and Wages***

Salaries and wages includes the project manager, Sharlene Leurig, Chief Executive Officer of Texas Water Trade. Other personnel includes Robin Johnson, Director of Development of Texas Water Trade for 60 hours of time anticipated for grant reporting activities. Please see itemized budget for salaries and wages, estimated hours and rate of compensation.

### ***Fringe Benefits***

Fringe benefits are estimated as a percentage of time. Costs included in this category include all benefits including health insurance, vacation and sick days, and employer retirement contribution matches.

### ***Equipment***

Energy costs for pump tests have been calculated assuming a cost of \$.1176/kWh, which was the average electricity rate in Texas in 2019 (see <https://comparepower.com/electricity-rates/texas/>). This budget line item assumes an average lift of 300 feet required for the pump tests and the energy required to lift one acre-foot of water one foot being 1.46 kWh at a pump efficiency of 70% (see Table 1 from <http://cetulare.ucanr.edu/files/82040.pdf>). Per acre-foot of water lifted, that is \$51.51 for energy costs. Our budgeted amount to be expended on pump test energy costs is for 500 acre-feet of water.

Equipment also includes transducers for pumping and monitoring well instrumentation.

### ***Materials and Supplies***

Water quality sample equipment includes cost per sample kit. Materials and supplies also includes pump test laboratory water analysis.

### ***Contractual***

Contractual line items include all work that will be accomplished by contractors, itemized by tasks to be completed and budget estimate of time. Contractors include one contract for Hydrogeologist A, one contract for Field team A, and one contract for Field team B (which will include isotope analysis and write up, and lab sample testing).

### ***Third-Party In-Kind Contributions***

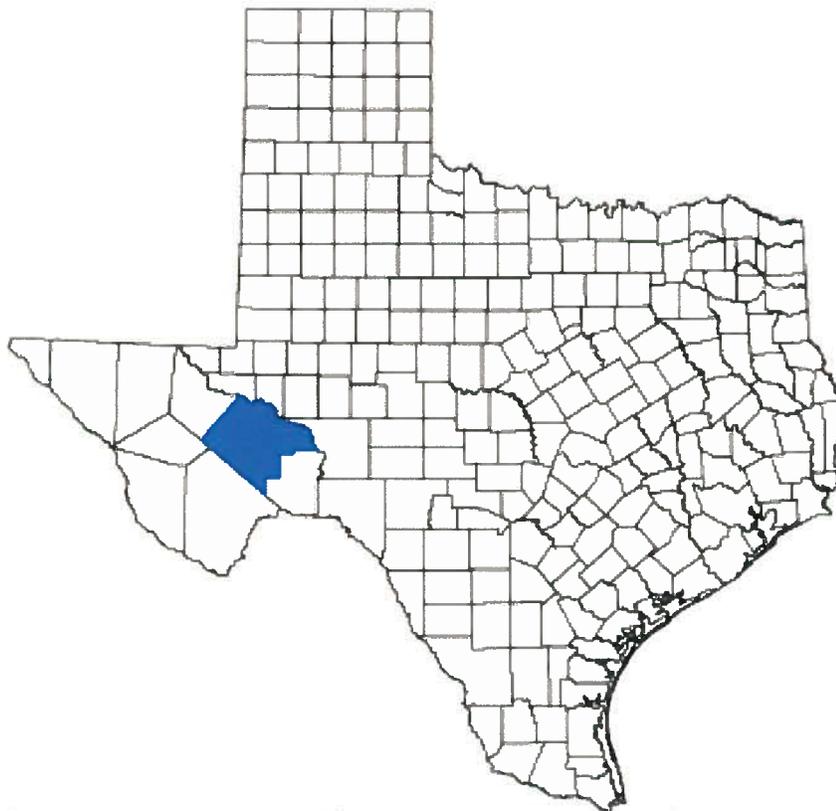
The Middle Pecos Groundwater District is contributing \$75,000 of in-kind support for groundwater modeling which includes Hydrogeologist B time in-kind.

### ***Indirect Costs***

This budget includes a *de minimis* rate of 10 percent of modified total direct costs, including all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward. We have excluded equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of \$25,000.



# Review of Western Pecos County Groundwater Model (Draft 1)

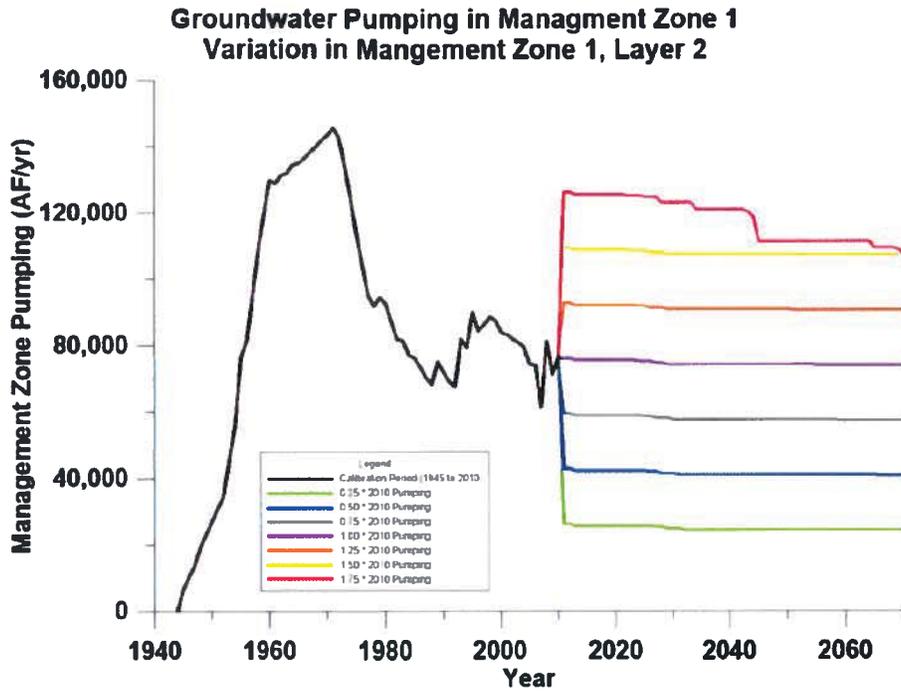


*Prepared for:*  
Middle Pecos Groundwater Conservation District  
PO Box 1644  
Ft. Stockton, TX 79735  
432-336-0698

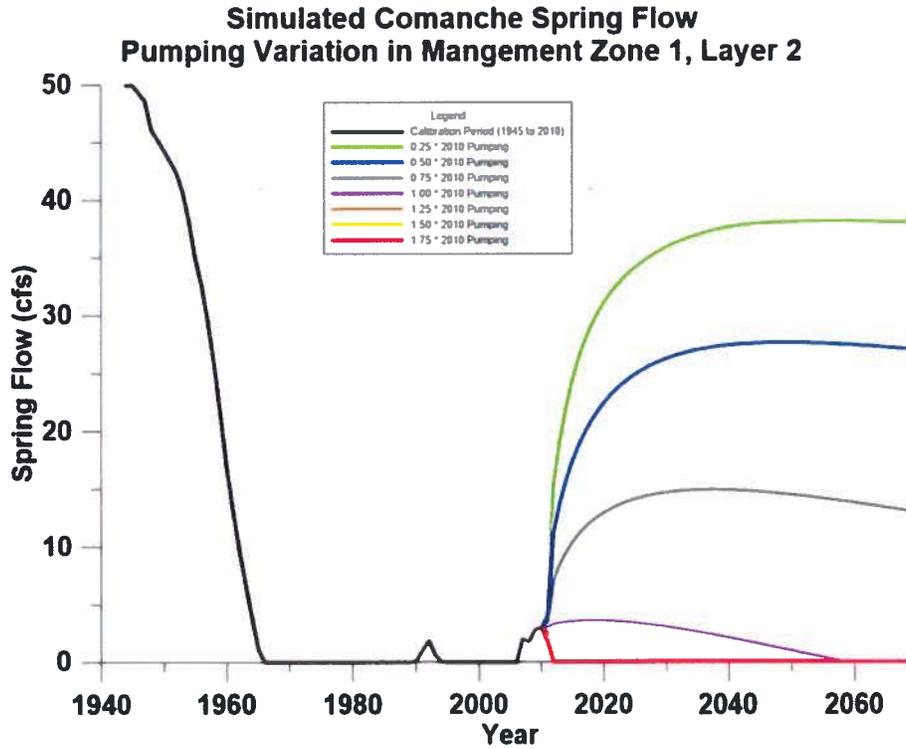
*Prepared by:*  
**William R. Hutchison, Ph.D., P.E., P.G.**  
Independent Groundwater Consultant  
9305 Jamaica Beach  
Jamaica Beach, TX 77554  
512-745-0599  
[billhutch@texasgw.com](mailto:billhutch@texasgw.com)

March 10, 2017

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**Exhibit A**

<b>2021 BUDGET</b>	<b>Transactor Capacity Building</b>	<b>Transaction Funding</b>	<b>Goal Setting and Monitoring</b>	<b>Total</b>
<b>TEXAS WATER TRADE</b>				
<b>Contracts</b>				
<i>Hydrologic, ecological analysis</i>			\$15,000	\$15,000
<i>Deal pricing, negotiation support</i>	\$15,000			\$15,000
<i>Outreach and education</i>	\$15,000			\$15,000
<i>Subtotal TWT Contracts</i>	\$30,000		\$15,000	\$45,000
<b>Texas Water Transaction Fund</b>				\$0
<b>TWT Personnel &amp; Fringe</b>	\$50,000			\$50,000
<b>TWT Travel</b>				\$0
<i>Subtotal TWT Direct Costs</i>	\$80,000	\$0	\$15,000	\$95,000
<b>TWT Indirect Costs (10%)</b>	\$5,000.00	\$0	\$0	\$5,000
<b>Total TWT</b>	<b>\$85,000</b>	<b>\$0</b>	<b>\$15,000</b>	<b>\$100,000</b>

<b>PROJECTED REVENUE</b>		
National Fish & Wildlife Foundation	Finalizing agreement	\$250,000
Harte Charitable Foundation	Awarded	\$250,000
Campbell Foundation	Awarded as challenge grant	\$25,000
Houston Endowment	Awarded	\$50,000
Mitchell Foundation	Not yet applied	\$100,000
Lyda Hill	In process	\$100,000
Meadows Foundation	Proposal invited for September	\$250,000
Shield-Ayres Foundation	Awarded	\$20,000
Federal	Applications under development	\$100,000
Corporate funders	Not yet applied	\$50,000
Individuals / Annual Fund		\$50,000
Contract Income		\$113,000
<b>TOTAL</b>		<b>\$1,358,000</b>

**21. REPORTING DUE DATES/ SUBRECIPIENT REPORTING SCHEDULE**

Task Due Date	Reporting Task
July 1, 2019	Interim Programmatic Report
October 1, 2019	Interim Programmatic Report
October 31, 2019	Annual Financial Report
January 1, 2020	Interim Programmatic Report
April 1, 2020	Interim Programmatic Report
July 1, 2020	Interim Programmatic Report
October 1, 2020	Interim Programmatic Report
October 31, 2020	Annual Financial Report
March 31, 2021	Final Financial Report
March 31, 2021	Final Programmatic Report



## **SECTION 1 AGREEMENT ADMINISTRATION**

### **1.1. Project Description/Purpose of Grant.**

Texas Water Trade will support the growth of conservation practitioners pursuing and executing environmental water transactions to protect the health of Texas's rivers, bays and estuaries during future drought. The work will focus on using Texas's considerable science on environmental water needs and an assessment of current and future environmental flows shortages to identify priority basins and bays for transaction development, action plans for securing flows in those priority geographies and 10-year targets for flows protection/restoration in those priority geographies to be achieved through market means. With that blueprint, Texas Water Trade will recruit, train and empower conservation groups in priority geographies to execute transactions to meet flows needs, and provide funding for qualifying transactions to demonstrate the efficacy of water transactions in achieving conservation objectives.

### **1.2. Amendments**

During the life of the Project, the NFWF Subrecipient is required to inform the NFWF Grants Administrator of any changes in contact information or in the Project scope of work, as well as any difficulties in completing the performance goals articulated by the Project description immediately. If the NFWF Subrecipient determines that the amount of the budget is going to change in any one budget category by an amount that exceeds 10% of the Award, the NFWF Subrecipient must seek prior written approval from the Grants Administrator. NFWF Subrecipients must seek an amendment request upon determination of a deviation from the original Grant Agreement as soon as such deviation is detected. However, NFWF may initiate the amendment if NFWF determines an amendment is necessary at any time. Amendment requests are to be submitted via NFWF's Easygrants system.

### **1.3. Matching Contributions**

Matching Contributions consist of cash, contributed goods and services, volunteer hours, and/or property raised and spent for the Project. Matching Contributions for the purposes of this Project must meet the following criteria: (1) Are verifiable from the NFWF Subrecipient's records; (2) Are not included as contributions for any other Federal award; (3) Are necessary and reasonable for the accomplishment of project or program objectives; (4) Are allowable under OMB Cost Principles; (5) Are not paid by the U.S. Government under another Federal award except where the Federal statute authorizing a program specifically provides that Federal funds made available for such program can be applied to matching or cost sharing requirements of other Federal programs when authorized by Federal statute; (6) Are provided for in the approved budget when required by the Federal awarding agency; (7) Are committed directly to the project and must be used within the period of performance as identified in this Grant Agreement; (8) Otherwise conform to the law; and, (9) Are in compliance with the requirements of Section 2 of this Grant Agreement concerning

Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes and Other Restrictions.

**1.3.1. Documentation and Reporting of Matching Contributions.** The NFWF Subrecipient must retain detailed time records for contributed services and original receipts and appraisals of real property and comparable rentals for other contributed property at its place of business in the event of an audit of the NFWF Subrecipient as required by applicable Federal regulations.

**1.3.2. Cash, Goods and Services, and/or Property.** The NFWF Subrecipient must report to NFWF as a part of the Final Report, the Matching Contributions received by the NFWF Subrecipient and expended in connection with the Project. Fair market value of donated goods and services, including volunteer hours, shall be computed as outlined in §200.306 of 2 CFR Subtitle A, Chapter II, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, (hereinafter "OMB Uniform Guidance"), regardless of whether this Grant Agreement is federally funded.

**1.3.3. Property.** The NFWF Subrecipient may have a third party donor submit a letter to NFWF, documenting the fair market value and date of a Matching Contribution and stating that the donation is non-Federal, voluntary, and intended to qualify as a Matching Contribution. A letter provided to document a donation of real property must be accompanied by an appraisal by a certified appraiser; a letter provided to document rental of equipment or space must list three comparable rentals in the location of the Project.

#### **1.4. Payment of Funds**

To be eligible to receive funds, NFWF Subrecipient must (1) return to NFWF an original executed copy of the grant agreement for the Project; (2) submit any due financial and programmatic reports; and (3) submit a complete and accurate payment request submitted no later than 90 days of incurred expenses; and (4) submit copies of timesheet summaries, contracts, and receipts accounting for all funds requested. NFWF Subrecipient may request funds by submitting a Payment Request via Easygrants. Funding under this agreement is disbursed on a reimbursable-only basis. NFWF reserves the right to retain up to ten percent (10%) of funds until submission and acceptance of the final reports. Unsubstantiated expenditures may not be reimbursed.

#### **1.5. Reports**

##### **1.5.1 Interim Programmatic and Financial Reports**

The NFWF Subrecipient will submit interim programmatic and financial reports to NFWF based on the reporting schedule in Line 21 of the Cover Sheet to this Agreement. The interim programmatic report shall consist of written statements of Project accomplishments since Project initiation, or since the last reporting period, and shall be uploaded via NFWF's Easygrants system. The interim financial report shall consist of financial information detailing cumulative receipts and expenditures made under this Project since Project initiation, and shall be uploaded via NFWF's Easygrants system.

##### **1.5.2. Annual Financial Report.**

An annual financial report detailing cumulative receipts and expenditures made under this Project is required annually, due on October 31st of each year of the grant term. In the

annual financial report, the NFWF Subrecipient must report the amount of NFWF Funds expended during NFWF's fiscal year (October 1 – September 30). The NFWF Subrecipient must enter a justification when there is a difference between the amount disbursed by NFWF and the amount expended by the grantee. Failure to submit an annual financial report in a timely manner will delay payment of submitted payment requests.

### **1.5.3. Final Reports**

No later than 90 days after the completion of the Project, the NFWF Subrecipient will submit (1) a Final Financial Report accounting for all Project receipts, Project expenditures, and budget variances (if any) compared to the approved budget; (2) a Final Programmatic Report summarizing and evaluating the accomplishments achieved during the Period of Performance; (3) copies of any publications, press releases and other appropriate products resulting from the Project; and (4) Photographs as described in Section 1.5.3.1 below. The final reports and digital photo files should be uploaded via NFWF's Easygrants system. Any requests for extensions of the final reports submission date must be made in writing to the NFWF Grants Administrator and approved by NFWF in advance.

#### **1.5.3.1. Photographs**

Together with the Final Programmatic Report NFWF Subrecipient will submit a representative number (minimum of 5) of high-resolution (minimum 300 dpi) photographs depicting the Project. Photographs should be uploaded via NFWF's Easygrants system as individual .jpg files. NFWF requests, as appropriate for the Project, before-and-after images of the Project, images of species impacted by the Project, and images of staff/volunteers working on the Project. In the Final Programmatic Report narrative include for each submitted photograph the date the photograph was taken, the location of the photographed image, caption, photo credit, and any other pertinent information. By uploading photographs to NFWF's Easygrants system the NFWF Subrecipient certifies that the photographs are unencumbered and may be used by NFWF and Project Funders as part of or separately from the permissions pertaining to the use of posting of Final Reports in Section 2.

### **1.5.4 Significant Developments**

The NFWF Subrecipient shall report on events that may occur between the scheduled performance reporting dates that have a significant impact on the Project. Such reporting shall be made as soon as the following conditions become known:

**1.5.4.1** Problems, delays, or adverse conditions which will materially impair the ability to meet the Project objective. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the matter; and,

**1.5.4.2** Favorable developments which enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more or different beneficial results than originally planned.

### **1.5.5. Certification and Representation.**

For each report in this section, except for 1.5.4, NFWF Subrecipient shall include the appropriate certification and representation pursuant to section 4.8.

### **1.6. Access to Records**

NFWF Subrecipient shall maintain all records connected with this Agreement for a period of at least three (3) years following the date of final payment or the close-out of all pending matters or audits related to this Agreement, whichever is later. NFWF or any of its authorized representatives shall have access to such records and financial statements upon request, as shall Inspectors General, the Comptroller General of the United States or any of their authorized representatives if the Funding Source or any funding entity (*i.e.*, a secondary funding source) is a federal agency and/or any portion of the Project provided herein is paid with federal funds. NFWF Subrecipient must maintain records that demonstrate its compliance with federal statutory and regulatory requirements and that it is meeting the subaward project goals. Records for real property and equipment acquired with federal funds must be retained for at least three (3) years following disposition.

## **SECTION 2 NFWF AGREEMENT CLAUSES**

### **2.1. Restrictions on Use of Funds**

The NFWF Subrecipient agrees that any funds provided by NFWF and all Matching Contributions will be expended only for the purposes and programs described in this Grant Agreement. No funds provided by NFWF pursuant to this Grant Agreement or Matching Contributions may be used to support litigation expenses, lobbying activities, or any other activities not authorized under this Grant Agreement or allowable under the Federal Cost Principles set forth in the OMB Uniform Guidance.

### **2.2. Assignment.**

The NFWF Subrecipient may not assign this Grant Agreement, in whole or in part, to any other individual or other legal entity without the prior written approval of NFWF.

### **2.3. Subawards and Contracts**

When making subawards or contracting, NFWF Subrecipient (1) shall abide by all required granting and contracting procedures, including but not limited to those requirements of the OMB Uniform Guidance; (2) shall ensure that all applicable federal, state and local requirements are properly flowed down to the subawardee or contractor, including but not limited to the provisions of the OMB Uniform Guidance; and (3) shall ensure that such subaward or contracting complies with the requirements in Section 2.9.2 of this Grant Agreement concerning Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes and Other Restrictions. NFWF Subrecipient shall also include in any subaward or contract a similar provision to this, requiring the use of proper grant and contracting procedures and subsequent flow down of federal, state and local requirements to lower-tiered subawardees and contractors.

### **2.4. Unexpended Funds**

Any funds provided by NFWF and held by the NFWF Subrecipient and not expended at the end of the Period of Performance will be returned to NFWF within ninety (90) days after the end of the Period of Performance.

### **2.5. Publicity and Acknowledgement of Support.**

The NFWF Subrecipient gives NFWF the right and authority to publicize NFWF's financial support for this Grant Agreement and the Project in press releases, publications and other public communications. NFWF Subrecipient agrees to: (i) give appropriate credit to NFWF and any Funding Sources identified in this Grant Agreement for their financial support in any and all press releases, publications, annual reports, signage, video credits, dedications, and other public communications regarding this Grant Agreement or any of the project deliverables associated with this Grant Agreement, subject to any terms and conditions as may be stated in Section 5 and Section 6 of this Agreement; and (ii) include the disclaimer provided for herein. The NFWF Subrecipient must obtain prior NFWF approval for the use relating to this Award of the NFWF logo or the logo of any Funding Source.

#### **2.5.1. Disclaimers**

Payments made to the NFWF Subrecipient under this Grant Agreement do not by direct reference or implication convey NFWF's endorsement nor the endorsement by any other

entity that provides funds to the NFWF Subrecipient through this Grant Agreement, including the U.S. Government, as applicable, for the Project. All information submitted for publication or other public releases of information regarding this Grant Agreement shall carry the following disclaimer:

**For Projects funded in whole or part with Federal funds:** "The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions or policies of the U.S. Government or the National Fish and Wildlife Foundation and its funding sources. Mention of trade names or commercial products does not constitute their endorsement by the U.S. Government, or the National Fish and Wildlife Foundation or its funding sources."

**For Projects not funded with Federal funds:** "The views and conclusions contained in this document are those of the authors and should not be interpreted as representing the opinions of the National Fish and Wildlife Foundation or its funding sources. Mention of trade names or commercial products does not constitute their endorsement by the National Fish and Wildlife Foundation or its funding sources."

## **2.6. Posting of Final Reports**

The NFWF Subrecipient hereby acknowledges its consent for NFWF and any Funding Source identified in this Grant Agreement to post its final reports on their respective websites. In the event that the NFWF Subrecipient intends to claim that its final report contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the NFWF Subrecipient shall so notify NFWF and any Funding Source identified in this Grant Agreement and clearly mark all such potentially protected materials as "PROTECTED," providing an accurate and complete citation to the statutory or regulatory source for such protection.

## **2.7. Website Links**

The NFWF Subrecipient agrees to permit NFWF to post a link on any or all of NFWF's websites to any websites created by the NFWF Subrecipient in connection with the Project.

## **2.8. Evaluation.**

The NFWF Subrecipient agrees to cooperate with NFWF by providing timely responses to all reasonable requests for information to assist in evaluating the accomplishments of the Project for a period of five (5) years after the project end date, unless if any litigation, claim, or audit is started (irrespective of the NFWF Subrecipient's involvement in such matter) before the expiration of the 5-year period, the records shall be retained until all litigation, claims or audit findings or pending matters involving the records have been resolved and final action taken. NFWF shall notify NFWF Subrecipient if any such litigation, claim or audit takes place so as to extend the retention period.

## **2.9. Compliance with Laws**

**2.9.1 In General.** The NFWF Subrecipient agrees to conduct all such activities in compliance with all applicable Federal, State, and local laws, regulations, and ordinances and to secure all appropriate necessary public or private permits and consents. The terms of this provision will survive termination of this Grant Agreement and must be flowed down to any and all contractors, subcontractors or subrecipients entered into by NFWF Subrecipient in the performance of this Grant Agreement.

## **2.9.2. Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Other Restrictions**

**2.9.2.1.** The NFWF Subrecipient shall ensure that no payments have been or will be made or received by the NFWF Subrecipient in connection with this Agreement in violation of the U.S. Foreign Corrupt Practices Act of 1977, as amended (15 U.S.C. §dd-1 *et seq.*), the UK Bribery Act 2010, or any other applicable anti-corruption laws or regulations in the countries in which the NFWF Subrecipient performs under this Grant Agreement.

**2.9.2.2.** The NFWF Subrecipient shall not provide material support or resources directly or indirectly to, or knowingly permit any funds provided by NFWF pursuant to this Grant Agreement or Matching Contributions to be transferred to, any individual, corporation or other entity that the NFWF Subrecipient knows, or has reason to know, commits, attempts to commit, advocates, facilitates, or participates in any terrorist activity, or has committed, attempted to commit, advocated, facilitated or participated in any terrorist activity, including, but not limited to, the individuals and entities (1) on the master list of Specially Designated Nationals and Blocked Persons maintained by the U.S. Department of Treasury's Office of Foreign Assets Control, which list is available at [www.treas.gov/offices/enforcement/ofac](http://www.treas.gov/offices/enforcement/ofac); (2) on the consolidated list of individuals and entities maintained by the "1267 Committee" of the United Nations Security Council at [http://www.un.org/sc/committees/1267/aq\\_sanctions\\_list.shtml](http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml); (3) on the consolidated list maintained by the U.S. Department of Commerce at [http://export.gov/ecr/eg\\_main\\_023148.asp](http://export.gov/ecr/eg_main_023148.asp), or (4) on such other list as NFWF may identify from time to time.

**2.9.2.3.** The NFWF Subrecipient shall ensure that its activities under this Grant Agreement comply with all applicable U.S. laws, regulations and executive orders regarding money laundering, terrorist financing, U.S. sanctions laws, U.S. export controls, restrictive trade practices, boycotts, and all other economic sanctions or trade restrictions promulgated from time to time by means of statute, executive order, regulation or as administered by the U.S. Department of State, the Office of Foreign Assets Control, U.S. Department of the Treasury, or the Bureau of Industry and Security, U.S. Department of Commerce.

## **2.10. Arbitration.**

All claims, disputes, and other matters in question arising out of, or relating to this Grant Agreement, its interpretation or breach, shall be decided through arbitration by a person or persons mutually acceptable to both NFWF and the NFWF Subrecipient. Notice of the demand for arbitration shall be made within a reasonable time after the claim, dispute, or other matter in question has arisen. The award rendered by the arbitrator or arbitrators shall be final. The terms of this provision will survive termination of this Grant Agreement.

## **2.11. Indemnity.**

The NFWF Subrecipient shall indemnify and hold harmless NFWF, any Funding Source identified in this Grant Agreement, their respective officers, directors, agents, and employees in respect of any and all claims, injuries, losses, diminution in value, damages, liabilities, whether or not currently due, and expenses including without limitation, settlement costs and any legal or other expenses for investigating or defending any actions or threatened actions or liabilities arising from or in connection with the Project. The terms of this provision will survive termination of this Grant Agreement.

## **2.12. Insurance.**

The NFWF Subrecipient agrees to obtain and maintain all appropriate and/or required insurance coverages against liability for injury to persons or property from any and all activities undertaken by the NFWF Subrecipient and associated with this grant agreement in any way. NFWF reserves the right to require additional insurance limits and policies based on specific activities under this Grant Agreement, that NFWF be named insured on all applicable insurance policies, and that the NFWF Subrecipient provide a certificate of insurance and/or copies of applicable insurance policies as requested by NFWF. The terms of this provision will survive termination of this Grant Agreement.

## **2.13. Choice of Law/ Jurisdiction.**

This Grant Agreement shall be subject to and interpreted by the laws of the District of Columbia, without regard to choice of law principles. By entering into this Grant Agreement, the NFWF Subrecipient agrees to submit to the jurisdiction of the courts of the District of Columbia. The terms of this provision will survive termination of this Grant Agreement.

## **2.14. Termination.**

**2.14.1.** Upon the occurrence of any of the following enumerated circumstances, NFWF may terminate this Grant Agreement, or any portion thereunder, for default effective upon receipt by the NFWF Subrecipient of NFWF's written notice of termination, or as otherwise specified in the notice of termination:

**2.14.1.1.** The NFWF Subrecipient is adjudged or becomes bankrupt or insolvent, is unable to pay its debts as they become due, or makes an assignment for the benefit of its creditors; or,

**2.14.1.2.** The NFWF Subrecipient voluntarily or involuntarily undertakes to dissolve or wind up its affairs; or,

**2.14.1.3.** In the event of suspension or debarment by the Government of the NFWF Subrecipient; or,

**2.14.1.4.** In the event of any breach of the requirements set forth in Section 2 of this Grant Agreement concerning Compliance with Anti-Corruption, Anti-Money Laundering, Terrorist Financing, and Trafficking in Persons Statutes and Other Restrictions; or,

**2.14.1.5.** In the event NFWF learns that NFWF Subrecipient has an organizational conflict of interest, or any other conflict of interest, as determined in the sole discretion of NFWF, that NFWF believes cannot be mitigated; or,

**2.14.1.6.** After written notice and a reasonable opportunity to cure the perceived non-compliance with any material term of this Grant Agreement. The cure period shall be considered the timeframe specified by the Government, if any, minus one (1) to five (5) days or as agreed upon by the Parties in writing, or if no time is specified by the Government, ten (10) days or as otherwise agreed upon by the Parties. Within this time period the NFWF Subrecipient shall, as determined by NFWF, (a) satisfactorily demonstrate its compliance with the term(s) originally believed to be in non-compliance; or (b) NFWF, at its sole discretion, may determine that NFWF Subrecipient has satisfactorily demonstrated that reasonable progress has been made so as not to endanger performance under this Grant Agreement.

**2.14.2.** Either Party may terminate this Grant Agreement by written notice to the other Party for any reason by providing thirty (30) days' prior written notice to the other Party. NFWF shall have the right to terminate this Agreement in whole or in part at any time, if the Funding Source issues an early termination under the funding agreement(s) covering all or part of the Project at issue hereunder.

**2.14.3.** In the event of termination of this Grant Agreement prior to Project completion, the NFWF Subrecipient shall immediately (unless otherwise directed by NFWF in its notice if NFWF initiated the termination) undertake all reasonable steps to wind down the Project cooperatively with NFWF, including but not limited to the following:

**2.14.3.1.** Stop any portion of the Project's work that is incomplete (unless work to be completed and a different date for termination of work are specified in NFWF's notice).

**2.14.3.2.** Place no further work orders or enter into any further subawards or contracts for materials, services or facilities, except as necessary to complete work as specified in NFWF's notice.

**2.14.3.3.** Terminate all pending Project work orders, subawards, and contracts for work that has not yet commenced.

**2.14.3.4.** With the prior written consent of NFWF, promptly take all other reasonable and feasible steps to minimize and/or mitigate any damages that may be caused by the failure to complete the Project, including but not limited to reasonable settlements of any outstanding claims arising out of termination of Project work orders, subawards, and contracts.

**2.14.3.5.** Deliver or make available to NFWF all data, drawings, specifications, reports, estimates, summaries, and such other information and material as may have been accumulated by the NFWF Subrecipient under this Grant Agreement, whether completed or in progress.

**2.14.3.6.** Return to NFWF any unobligated portion of the Award.

**2.15. Entire Agreement.**

These terms and conditions, including the Attachments hereto, constitute the entire agreement between the Parties relating to the Project described herein and supersede all previous communications, representations, or agreements, either oral or written, with respect to the subject matter hereof. No representations or statements of any kind made by any representative of a Party, which are not stated herein, shall be binding on said Party.

**2.16. Severability.**

Each provision of this Grant Agreement is distinct and severable from the others. If one or more provisions is or becomes invalid, unlawful, or unenforceable in whole or in part, the validity, lawfulness and enforceability of the remaining provisions (and of the same provision to the extent enforceable) will not be impaired, and the Parties agree to substitute a provision as similar to the offending provision as possible without its being invalid, unlawful or unenforceable.

**2.17. Interpretation and Construction.**

**2.17.1.** This Grant Agreement shall be interpreted as a unified contractual document with the Sections and the Attachments having equal effect, except in the event of any inconsistency between them. In the event of a conflict between any portion of this Grant Agreement and another portion of this Grant Agreement, first the Sections will apply, then any supplemental attachments.

**2.17.2.** The title designations of the provisions to this Grant Agreement are for convenience only and shall not affect the interpretation or construction of this Grant Agreement.

**2.17.3.** Every right or remedy conferred by this Grant Agreement upon or reserved to the Parties shall be cumulative and shall be in addition to every right or remedy now or hereafter existing at law or in equity, and the pursuit of any right or remedy shall not be construed a selection.

**2.17.4.** The failure of NFWF to exercise any right or privilege granted hereunder or to insist upon the performance and/or compliance of any provision of this Grant Agreement, a referenced contractual, statutory or regulatory term, or an Attachment hereto, shall not be construed as waiving any such right, privilege, or performance/compliance issue, and the same shall continue in full force and effect.

**2.17.5.** Notwithstanding any express statements regarding the continuation of an obligation beyond the expiration or termination of this Grant Agreement, the rights and obligations of this Grant Agreement which by their nature extend beyond its expiration or termination shall remain in full force and effect and shall bind the Parties and their legal representatives, successors, heirs, and assigns.

## **SECTION 3 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS GENERAL**

### **3.1. Binding Obligation.**

By execution of this Grant Agreement, NFWF Subrecipient represents and certifies that this Grant Agreement has been duly executed by a representative of the NFWF Subrecipient with full authority to execute this Grant Agreement and binds the NFWF Subrecipient to the terms hereof. After execution by the representative of the NFWF Subrecipient named on the signature page hereto, this Grant Agreement represents the legal, valid, and binding obligation of the NFWF Subrecipient, enforceable against the NFWF Subrecipient in accordance with its terms.

### **3.2. Additional Support.**

In making this Award, NFWF assumes no obligation to provide further funding or support to the NFWF Subrecipient beyond the terms stated in this Grant Agreement.

### **3.3. Compliance with Laws**

By execution of this Grant Agreement and through its continued performance hereunder, the NFWF Subrecipient represents and certifies that it is conducting all such activities in compliance with all applicable Federal, State, and local laws, regulations, and ordinances and to secure all appropriate necessary public or private permits and consents.

### **3.4. Conflicts of Interest.**

By execution of this Grant Agreement, NFWF Subrecipient acknowledges that it is prohibited from using any Project funds received under this Grant Agreement in a manner which may give rise to an apparent or actual conflict of interest, including organizational conflicts of interest, on the part of the NFWF Subrecipient. Such a conflict of interest would arise when the employee, officer, or agent, any member of his or her immediate family, his or her partner, or an organization which employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of NFWF Subrecipient may neither solicit nor accept gratuities, favors, or anything of monetary value from contractors or parties to subcontracts. An organizational conflict of interest is defined as a relationship that because of relationships with a parent company, affiliate, or subsidiary organization, the non-Federal entity is unable or appears to be unable to be impartial in conducting a procurement action involving a related organization. The NFWF Subrecipient represents and certifies that it has adopted a conflict of interest policy that, at a minimum, complies with the requirements of the OMB Uniform Guidance, and will comply with such policy in the use of any Project funds received under this Agreement. NFWF Subrecipient may set standards for situations in which the financial interest is not substantial or the gift is an unsolicited item of nominal value. The standards of conduct must provide for disciplinary actions to be applied for violations of such standards by officers, employees, or agents of NFWF Subrecipient. If NFWF Subrecipient becomes aware of any actual or potential conflict of interest or organizational conflict of interest, during the course of performance of this Grant Agreement, NFWF subrecipient will immediately notify NFWF in writing of such actual or potential conflict of interest, whether organizational or otherwise.

## **SECTION 4 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS RELATING TO FEDERAL FUNDS**

**4.1.** If the Funding Source or any funding entity (*i.e.*, a secondary funding source) is a federal agency and/or any portion of the Project provided herein is paid with federal funds, the NFWF Subrecipient must read and understand certain applicable Federal regulations, including but not limited to, the following in Sections 4 and 5 of this Agreement as set forth herein.

If the NFWF Subrecipient is a Non-Profit Organization, Institution of Higher Education, State, Local or Tribal Government, it will need to understand and comply with the OMB Uniform Guidance (including related Supplements as may be applicable to a specific federal funding source(s), and Appendices as may be applicable), in addition to other applicable Federal regulations.

If NFWF Subrecipient subawards any portion of the Project under this Agreement to a third-party, NFWF Subrecipient shall, at a minimum, flow down those requirements and provisions required to be flowed down pursuant to the applicable regulations set forth above.

### **4.2. A-133 and 2 CFR § 200 Subpart F Audits.**

It is the responsibility of subrecipients that are Non-Profit Organizations, State, Local or Tribal Governments to arrange for the conduct of audits as required by either OMB Circular A-133, "Audits of States, Local Governments, and Non Profit Organizations" or 2 CFR Part 200, Subpart F– Audit Requirements, whichever is applicable.

### **4.3. Interest.**

Any interest earned in any one year on Federal funds advanced to the NFWF Subrecipient that exceeds \$500 must be reported to NFWF, and the disposition of those funds negotiated with NFWF. Interest amounts up to \$500 per year may be retained by the Subrecipient for administrative expense.

### **4.4. Subrecipient Debarment and Suspensions**

Unless NFWF Subrecipient has submitted a written justification fourteen (14) days prior to execution of this Grant Agreement, stating the reason that this term does not apply, which has been expressly accepted and approved by NFWF prior to execution, by and through NFWF Subrecipient's execution of this Grant Agreement, NFWF Subrecipient warrants and represents its initial and continued compliance that it is not listed on the General Services Administration's, government-wide System for Award Management Exclusions (SAM Exclusions), in accordance with the OMB guidelines at 2 C.F.R Part 180 that implement E.O.s 12549 (3 C.F.R., 1986 Comp., p. 189) and 12689 (3 C.F.R., 1989 Comp., p. 235), "Debarment and Suspension." The NFWF Subrecipient further provides that it shall not enter into any subaward, contract or other agreement using funds provided by NFWF with any party listed on the SAM Exclusions in accordance with Executive Orders 12549 and 12689. The SAM Exclusions can be found at <https://www.sam.gov/portal/public/SAM/>.

### **4.5. Mandatory Disclosure.**

NFWF Subrecipient must disclose, in a timely manner, in writing to NFWF all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award. Failure to make required disclosures can result in any of the remedies described in this Grant Agreement, including termination, and any remedies provided under law, including suspension or debarment by cognizant federal authorities.

#### 4.6. Trafficking in Persons

Pursuant to section 106(a) of the Trafficking Victims Protection Act of 2000, as amended (22 U.S.C. 7104(g)) (codified at 2 C.F.R. Part 175), NFWF Subrecipient shall comply with the below provisions. Further, NFWF Subrecipient shall flow down these provisions in all subawards and contracts, including a requirement that Subrecipients similarly flow down these provisions in all lower-tiered subawards and subcontracts. The provision is cited herein:

- I. Trafficking in persons.
  - a. *Provisions applicable to a recipient that is a private entity.*
    1. You as the recipient, your employees, subrecipients under this award, and subrecipients' employees may not—
      - i. Engage in severe forms of trafficking in persons during the period of time that the award is in effect;
      - ii. Procure a commercial sex act during the period of time that the award is in effect; or
      - iii. Use forced labor in the performance of the award or subawards under the award.
    2. We as the Federal awarding agency's pass-through entity may unilaterally terminate this award, without penalty, if you or a subrecipient that is a private entity—
      - i. Is determined to have violated a prohibition in paragraph a.1 of this award term; or
      - ii. Has an employee who is determined by the agency official authorized to terminate the award to have violated a prohibition in paragraph a.1 of this award term through conduct that is either—
        - A. Associated with performance under this award; or
        - B. Imputed to you or the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement),".
  - b. *Provision applicable to a recipient other than a private entity.* We as the Federal awarding agency's pass-through entity may unilaterally terminate this award, without penalty, if a subrecipient that is a private entity-
    1. Is determined to have violated an applicable prohibition in paragraph a.1 of this award term; or
    2. Has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in paragraph a.1 of this award term through conduct that is either—
      - i. Associated with performance under this award; or
      - ii. Imputed to the subrecipient using the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, "OMB Guidelines to Agencies on Government-wide Debarment and Suspension (Nonprocurement),".
  - c. *Provisions applicable to any recipient.*
    1. You must inform us immediately of any information you receive from any source alleging a violation of a prohibition in paragraph a.1 of this award term.

2. Our right to terminate unilaterally that is described in paragraph a.2 or b of this section:
    - i. Implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C 7104(g)), and
    - ii. Is in addition to all other remedies for noncompliance that are available to us under this award.
  3. You must include the requirements of paragraph a.1 of this award term in any subaward you make to a private entity.
- d. *Definitions.* For purposes of this award term:
1. "Employee" means either:
    - i. An individual employed by you or a subrecipient who is engaged in the performance of the project or program under this award; or
    - ii. Another person engaged in the performance of the project or program under this award and not compensated by you including, but not limited to, a volunteer or individual whose services are contributed by a third party as an in-kind contribution toward cost sharing or matching requirements.
  2. "Forced labor" means labor obtained by any of the following methods: the recruitment, harboring, transportation, provision, or obtaining of a person for labor or services, through the use of force, fraud, or coercion for the purpose of subjection to involuntary servitude, peonage, debt bondage, or slavery.
  3. "Private entity":
    - i. Means any entity other than a State, local government, Indian tribe, or foreign public entity, as those terms are defined in 2 CFR 175.25.
    - ii. Includes:
      - A. A nonprofit organization, including any nonprofit institution of higher education, hospital, or tribal organization other than one included in the definition of Indian tribe at 2 CFR 175.25(b).
      - B. A for-profit organization.
  4. "Severe forms of trafficking in persons," "commercial sex act," and "coercion" have the meanings given at section 103 of the TVPA, as amended (22 U.S.C 7102).

#### **4.7. Subrecipient Monitoring Requirements.**

NFWF Subrecipients receiving federal funds understand that NFWF may require NFWF Subrecipient to take corrective action measures in response to a deficiency brought to NFWF and NFWF Subrecipient's attention during the course of an audit.

#### **4.8. Certification and Representation.**

NFWF Subrecipient must submit those certifications and representations required by Federal statutes, or regulations to NFWF on an annual basis. Submission may be required more frequently if the NFWF Subrecipient entity fails to meet a requirement of a Federal award.

Programmatic and financial reports or payment requests under a Federal award must be submitted by a representative of the NFWF Subrecipient who has the NFWF Subrecipient's full authority to render such reports and requests for payment and certify to the following at time of submission:

By signing this [report] [payment request], I certify to the best of my knowledge and belief that the [report] [payment request] is true, complete, and accurate. [The

expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of the Grant Agreement.]. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812).

**4.9. 41 United States Code (U.S.C) 4712, Enhancement of Recipient and Subrecipient Employee Whistleblower Protection:**

(a) This award, related subawards, and related contracts over the simplified acquisition threshold and all employees working on this award, related subawards, and related contracts over the simplified acquisition threshold are subject to the whistleblower rights and remedies established at 41 U.S.C. 4712.

(b) Recipients, their subrecipients, and their contractors awarded contracts over the simplified acquisition threshold related to this award, shall inform their employees in writing, in the predominant language of the workforce, of the employee whistleblower rights and protections under 41 U.S.C. 4712.

(c) The recipient shall insert this clause, including this paragraph (c), in all subawards and contracts over the simplified acquisition threshold related to this award.

**4.10. 41 USC §6306, Prohibition on Members of Congress Making Contracts with Federal Government.**

No member of or delegate to Congress or Resident Commissioner shall be admitted to any share or part of this award, or to any benefit that may arise therefrom; this provision shall not be construed to extend to an award made to a corporation for the public's general benefit.

**4.11. Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving.**

(Sub)Recipients are encouraged to adopt and enforce policies that ban text messaging while driving, including conducting initiatives of the type described in section 3(a) of the order.

**4.12. 43 CFR §18 New Restrictions on Lobbying.**

The NFWF Subrecipient agrees to comply with 43 CFR 18, New Restrictions on Lobbying, including the following certification:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the NFWF Subrecipient, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(b) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

(c) The NFWF Subrecipient shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all Subrecipients shall certify accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

**SECTION 5 REPRESENTATIONS, CERTIFICATIONS, AND OTHER  
STATEMENTS RELATING TO FEDERAL FUNDS– FUNDING SOURCE  
SPECIFIC**

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## **SECTION 6 REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS RELATING TO NON-FEDERAL FUNDS – FUNDING SOURCE SPECIFIC**

### **Water Right Acquisition.**

Because this project involves water right acquisition, the Award is subject to the following:

Prior to the disbursement of any water transaction funds, the NFWF Subrecipient shall provide NFWF with copies of the following documents: 1) documentation of value; 2) official documentation of water rights [e.g., copy of the state issued permit, certificate or decree] describing the water rights; 3) title review opinion of the water rights from a third party review or preliminary title insurance report for the appurtenant property; 4) draft of the proposed conveyance of title; 5) purchase and sale agreement; 6) draft settlement statement; 7) escrow instructions for title/settlement company, including wire transfer instructions; 8) instream transfer decision documentation, as appropriate, or other form of assurance acceptable to NFWF that the acquired water will be used for its intended environmental purpose 9) letter from federal, state, or local agency or other entity stating that they will accept the property (applicable only to acquisitions involving subsequent third party transfer of title).

The NFWF Subrecipient will ensure that the deed contains NFWF-approved language regarding the purpose for which the property was acquired, and disposition instructions.

Following the disbursement of funds to acquire the Property, the NFWF Subrecipient shall provide NFWF with copies of the following documents: 1) final executed settlement statement; 2) copy of filed report of conveyance; 3) title policy; and 4) recorded deed conveying new title.