CARSON RIVER WATERSHED WATER MARKET (EXCHANGE/TRANSFER) PROGRAM

Water Smart Grant Application; FOA # BOR-DO-18-F010; Funding Group 1

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1.0 Executive Summary

In the Carson River Watershed (Watershed), all the water is allocated which means any new water demand must get its water from an existing user. Enhancing water reliability for the entire Watershed is critical in addressing and reducing potential conflict between agricultural, municipal and industrial, and environmental users; and conflict between upstream and downstream users. The Carson River Watershed has limited upstream storage; therefore, maintaining a consistent water supply which meets all the demands of diverse users has always been a challenge. In addition, all of the groundwater basins are over-allocated, and some basins are facing possible pumping curtailment by the Nevada Division of Water Resources. Users downstream of Lahontan Reservoir (Newlands Project) are concerned with increased groundwater pumping in the upper and middle portions of the watershed which may potentially reduce flows into Lahontan Reservoir. Exacerbating this concern is the change in runoff patterns. Current streamflow data shows that the spring runoff has been coming earlier in the spring and there is less flow in the summer time. Recent work done by the USGS shows that this trend will continue in the future. This earlier runoff will impact agricultural users and municipalities who will need surface water to meet future demands and the environmental uses of the river. By developing a water marketing plan for the Carson River Watershed, Carson Water Subconservancy District (CWSD) will address the instability of the water supply; consider legal and physical constraints; and identify and rank possible storage locations in the system. Developing this water market (exchange/transfer) program will address and reduce potential conflict between agricultural, municipal and industrial, and environmental users by enhancing water reliability for the entire Watershed. Development of the Carson River Water Marketing Strategy will take two years to complete. The tentative project schedule would begin October 1, 2018 and conclude September 30, 2020.

The Water Market (Exchange/Transfer) Program will evaluate water opportunities from the headwater to the terminus, which includes the Newlands Project, the first U.S. Bureau of Reclamation (Reclamation) project in the United States. The Newlands Project provides water to farmlands in Churchill and Lyon Counties utilizing Lahontan Reservoir. This storage facility is located two-thirds down the river and is the largest surface water storage on the Carson River. Water demands in the Newlands Project often exceed the available supplies coming from the Carson River. To augment the water needs of the Newlands Project water is diverted from the Truckee River through the Truckee Canal which links the Truckee and Carson Rivers.

JULY 16, 2018

CARSON WATER SUBCONSERVANCY DISTRICT

CARSON CITY, COUNTY OF CARSON CITY, NEVADA

2.0 Background Data

2.1 Carson River Watershed

The Carson River Watershed (Watershed) encompasses approximately 3,966 square miles in California and Nevada. The Carson River begins as two separate tributaries, the East and West Forks, high in the Sierra Nevada in California. These forks join to form the main stem of the Carson River near Genoa, Nevada before continuing its journey to its terminus in the Carson Sink (Churchill County). The Watershed also encompasses five major groundwater basins: Carson Valley, Eagle Valley, Dayton Valley, Churchill Valley, and Carson Desert Valley (Fallon Area). All the water in the Watershed, both surface and groundwater, is fully allocated, so any new demands for water must come from existing sources.

The largest surface storage on the Carson River is located two-thirds down the river. This storage facility, known as Lahontan Reservoir, provides water to the Newlands Project. The Newlands Project was the first U.S. Bureau of Reclamation (Reclamation) project in the United States and provides water to farmlands in Churchill and Lyon Counties. Water demands in the Newlands Project often exceed the available supplies coming from the Carson River. To augment the water needs of the Newlands Project water is diverted from the Truckee River through the Truckee Canal which links the Truckee and Carson Rivers.

There is very limited surface water storage upstream of Lahontan Reservoir. The water supply of the Carson River is almost entirely dependent upon the winter snow pack that accumulates in the Sierra Nevada Mountains. Most of the annual runoff is concentrated in a three- or four-month period in the spring. Today, most municipalities within the Watershed utilize groundwater to meet their water demands. However, as growth continues in the Watershed many water purveyors will need to consider developing surface water supplies. The availability and timing of the water runoff is further limited by the potential impacts of climate change. Climate change could mean agricultural users will be out of water earlier than they were historically, resulting in more groundwater pumping or less production for farmers. Those water purveyors who have to use surface water to meet their water demands will have to evaluate ways of utilizing the water resources in the spring time when water demands are low. This will involve conjunctive use and storing spring runoff for summer use. Any of those projects will require an active water marketing program to move water in the watershed.

All the surface water is allocated through a federal decree known as the Alpine Decree. The Alpine Decree allocated the East and West Forks, and main stem of the Carson River into eight autonomous segments. Transferring water rights from one segment to another segment changes the priority of a given water right. Based on this and other restrictions in the Alpine Decree, the movement of water must be done in a systematic and careful manner.

2.2 Description of the Study Area

This project would develop an exchange/transfer program for the entire Carson River Watershed (Watershed), a large watershed encompassing over 3,966 square miles within portions of six counties in California and Nevada (Figure 1). From the headwaters to the terminus, the Carson River Watershed encompasses five major groundwater basins: Carson Valley, Eagle Valley, Dayton Valley, Churchill Valley, and Carson Desert Valley.

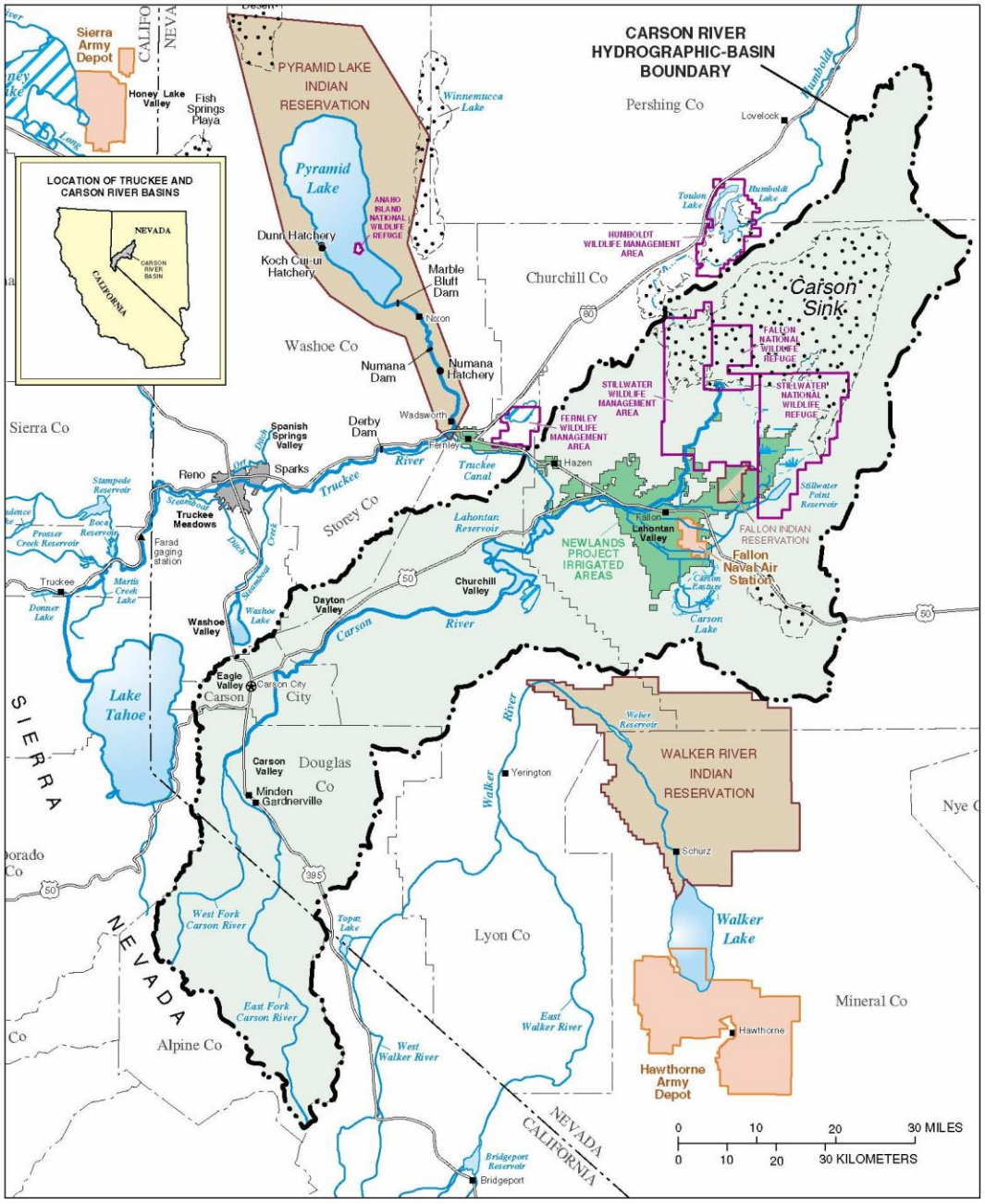

Figure1. USGS hydrologic features map of the Carson River watershed and surroundings.

2.3 Carson Water Subconservancy District

The Carson Water Subconservancy District (CWSD) was originally formed in 1959 to contract with the farmers in Douglas County and Lyon County to pay back the Bureau of Reclamation for the construction of the Watasheamu Dam, located in the upper Watershed. The purpose of the dam was to enhance water supply for agricultural development, meet future municipal demands, and provide flood control protection.

In the 1980s, the Federal government abandoned the Watasheamu Dam Project. However, during this time CWSD continued to play a key role in the study of building a large dam on the Carson River. In 1989, the Nevada Legislature charged CWSD with the responsibility of "management and development of the water resources in the upper Carson River to alleviate reductions and loss of water supply, the fragmented responsibilities for conservation and supply of water, and of any threats to the health, safety and welfare of the people of the upper Carson Watershed." CWSD was created pursuant to Chapter 541 of Nevada Revised Statutes (NRS). CWSD has the authority to maintain and operate water works and deliver water to various water purveyors in the Watershed. In 1989, the CWSD area of service covered Carson City, Douglas County and Lyon County. In 1999, legislation added Churchill County to the organization. In 2001, through a Joint Powers Agreement, Alpine County, California became a member making CWSD a bi-state, multi-county organization. In 2017, Storey County joined CWSD by a Memorandum of Understanding. The CWSD Board is made up of 14 members. There is at least one elected official from each county, except for Storey County, and several agricultural representatives from several counties. Granted no regulatory authority of its own, CWSD's mission is to work within existing government frameworks to promote cooperative action for the Carson River that crosses both physical and political boundaries. CWSD has served as an information resource for the Watershed and has overseen and funded numerous studies to better understand the complex dynamics of the region. Over 190 reports are currently catalogued in CWSD's library for use by the public.

2.4 Carson River Coalition (CRC)

In 1998, the Carson River Coalition (CRC) was formed to address Watershed issues on an integrated basis. The CRC is not an entity but a process to bring individuals, groups, and entities together who have an interest in or concern about the Carson River Watershed. The CRC pursues broad representation from federal, state, and local agencies; landowners; farmers; environmental groups; tribes; and any other interested individual. CRC working groups, such as the Water Purveyors Working Group, address specific issues within the Watershed. CWSD staff coordinates the CRC process. Over the years the CRC has helped developed a Stewardship Plan that meets the nine EPA Clean Water Act required elements of a watershed-based plan. This document guides the Integrated Watershed Planning Process for watershed projects, and one of its guiding principles is to meet demands for future water supplies. The CRC, guided by the Floodplain and River Management Working Group, also developed the Regional Floodplain Management Plan and is working with CWSD and the counties on the implementation of many suggested action projects identified in the Plan.

2.5 Laws, Regulations, Decrees

2.5.1 Alpine Decree

The Alpine Decree (Decree), the culmination of a 56-year long dispute, has adjudicated the use of all surface water associated with the Carson River since 1980. The Decree divides the river into eight different segments, with each segment regulated within itself. Per the Decree, water will not be delivered to a senior priority in one segment against a junior priority in another segment. This division of the river into segments and the management of the water as it moves downstream is one of the challenges in dealing with water management along the Carson River Basin. The ability to leave water in the river for transport downstream or upstream for use in a different segment is limited due to the amount and timing of when water can be used.

Cooperation between surface water users will become more important as future growth strains available water resources. Developing agreements to move water through the river system could provide greater flexibility in meeting varying water demands as well as enhancing flows in the river for habitat. Further research and development of a viable plan to manage water between segments of the Carson River is a significant task that will need to be evaluated and undertaken as part of an overall watershed management system/plan.

2.5.2 Nevada Water Law

Nevada Water Law is based upon two fundamental theories of appropriation and beneficial use. This essentially means that water rights are based upon the State allowing individuals or entities the right to appropriate waters, both surface and groundwater, based on a priority system and availability. The priority is linked to the date of the first action taken to place water to a beneficial use. The earlier the priority date on a water right permit/certificate, the better its claim to utilize either surface or groundwater. Nevada Water Law is administered through the office of the Nevada State Engineer.

2.5.3 Other Adjudicated Streams

Other streams that feed into the Carson River that are not specifically adjudicated by the Alpine Decree are typically adjudicated by their own decrees for use along the streams. If a stream reaches the Carson River in theory an owner of rights along the adjudicated stream could place the rights into the Carson River for use downstream. However, this process is most likely to be challenged in court and may take years to resolve. Accumulation of rights from another decreed stream or surface water source for transmission along the Carson River may be viable; however, this again is a specific research task linked to the various segments in the Carson River.

2.6 Water Users: Agricultural

Over 95% of the surface water of the Carson River is utilized by agricultural users. The average yearly flows (based on USGS streamflow data from 1940 to 2017) on the East and West Forks are 264,062 acre-feet and 74,440 acre-feet, respectively. Once the Carson River flows into Nevada there are several small tributaries that only reach the Carson River during storm events. The exception to this is Clear Creek, which does flow year-round except during very dry years. The average yearly flow at the Carson City gage and at the Fort Churchill gage are 289,433 acre-feet and 272,258 acre-feet, respectively. Irrigation diversions account for the reduction in flows as the water moves down through the Watershed. A summary of minimum, maximum, and average flows and the period of continuous records are shown on Table 2.1 which are based on analysis of the USGS gage data.

Table 2.1 Summary of Water Flows in the Carson River

Gage	Period of Record	Maximum		Minimum		Average Flow
		Year	Amount	Year	Amount	
Gardnerville East Fork	1940-2017	2017	751,608	1977	66,280	264,062
Woodfords West Fork	1940-2017	2017	191,010	1977	18,885	74,440
Carson City	1940-2017	2017	933,728	1977	42,329	289,433
Fort Churchill [1/]	1940-2017	2017	917,829	1977	26,266	272,258

[1/] The Buckland Ditch is located just upstream of the Ft. Churchill gage and diverts water around the gage which causes a skew in the Ft. Churchill gage readings depending on actual diversion at any one time.

2.7 Water Users: Municipal and Industrial

In the Carson River Watershed, there are 13 major water purveyors who serve approximately 116,690 users (2018 Water Rate Report). Current water demand is approximately 25,390 acre-feet. Most of this supply comes from groundwater resources.

Table 2.2 lists the 13 water purveyors. Several of the water purveyors get 100 percent of their water from groundwater resources and have identified enough water to meet their future water demands while others could be facing growth moratoriums due to lack of water. Over the past 20 years, CWSD has been working with the various water purveyors on regional infrastructure that enables water to move from one water purveyor to another in the most cost-effective manner.

Table 2.2: Water Purveyor in the Carson River Watershed.

County	Water Purveyor		County	Water Purveyor
Alpine County	Markleeville Water Company		Douglas County	Indian Hills General Improvement District
Carson City County	Carson City Public Works		Douglas County	Town of Minden
Churchill County	Churchill County		Lyon County	Lyon County Utilities
Churchill County	City of Fallon		Lyon County	Silver Springs Mutual Water Company
Douglas County	Douglas County Public Works		Lyon County	Stagecoach General Improvement District
Douglas County	Gardnerville Ranchos General Improvement District		Storey County	Storey County Public Works
Douglas County	Gardnerville Water Company			

Citation: 2018 Water Rate Report; http://www.cwsd.org/wp-content/uploads/2018/04/2018-3-21BdApprovedFinalCompiledWaterSewerRateswithAppsA_B.pdf

2.8 Water Users: Environmental

In the development of the Alpine Decree no water was reserved for environmental purposes. However, over the years some water has been purchased for environmental purposes. One example is the US Fish and Wildlife which manages Stillwater National Wildlife Refuge east of Fallon. They have purchased water rights to ensure the habitat for migratory birds is robust and healthy. Also, CWSD utilizes its water in Lost Lakes and Mud Lake to enhance instream flows. In addition to these environmental uses, the Carson River is becoming a hub for people who want to recreate in and around the river. Therefore, a healthy watershed environment contributes to the value of its communities.

2.9 Reclaimed Water for Municipal and Industrial Use

Reclaimed water, or effluent, developed from the multiple regional wastewater facilities along the Carson River can play an important role as a viable water source to help reduce the consumption of surface or ground water. The Carson River basin also benefits from the effluent imported from the Tahoe Basin. Incline Village GID, Douglas County Sewer Improvement District, and South Tahoe Public Utility District all export their effluent via pipelines to discharge locations within the Carson River basin. The effluent is utilized for irrigation of agriculture fields and golf courses.

Currently, there are no direct discharges to the Carson River as there are no wastewater facilities in the river corridor that treat to a high enough level to discharge to the river. However, Carson City does have a discharge permit for water that leaks out of the Brunswick Reclaimed Water Storage Reservoir. As development continues and more areas along the river are shifted from septic systems to municipal waste treatment facilities, more effluent will become available to meet irrigation needs for parks, schools, irrigation, golf courses, and other facilities.

2.10 Water Leasing

The concept of water leasing has been utilized to a limited extent within the Carson River System. Upstream water storage has been leased historically, including water rights held by CWSD. Carson City, for example, has leased water rights owned by CWSD in Lost Lakes Reservoirs and Mud Lake. Among ranchers and irrigators Alpine Reservoir shares are frequently bought and sold as well as leased within the Carson Valley area. Generally, these types of leases and exchanges are able to be done on a year-to-year basis without major administrative issues because the Carson River Decree allow flexibility in the distribution of storage waters and the Water Master has a long history of coordinating and facilitating such exchanges among water users.

A more formal leasing of surface water would be useful in providing flexibility for users to react to dry water years, extended but not permanent periods of non-irrigation use, or partial use for lands held by individuals or groups of farmers or ranchers. Such exchanges would require formal changes with regard to decreed or ground water rights, but there is potential for leasing to be a very useful mechanism to help maintain irrigation and the associated benefits of open space, visual beauty, and important recharge to the groundwater basin through existing ditch systems.

2.11 Water Banking

Water banking is a process by which water is transferred to another party who uses the water or holds it for future use. Typically, this is done with municipal water purveyors who often have a better ability to hold and maintain a water right in good standing. One approach is for the water purveyor to allow a water right holder to relocate the holder's right to a municipal well of the purveyor for future use within the purveyor's service area. Under the Nevada Revised Statutes, water purveyors have some advantages for being granted Extensions of Time to place water to beneficial use. With the potential for improved economic activity and increasing needs for municipal and industrial water in the basin, water banking is a valuable tool to support effective resource management. Water banking might also be a consideration for surface waters, particularly in areas such as the Lahontan Reservoir where a structure is in place that could be utilized to create a banking program. In other areas of the Carson River Basin a banking program for surface waters might be more difficult than a leasing approach.

2.11 Past Reclamation Projects

Between 1999 – 2007, CWSD managed a water buyout program to reduce conflict between the Pyramid Lake Paiute Tribe, Reclamation, State of Nevada, Truckee Carson Irrigation District, City of Fallon, and Churchill County. This program was partially funded by Reclamation.

In 2010, CWSD received a grant from Reclamation's Water Conservation Field Services program to develop the Comprehensive Regional Water System Plan (Plan). The water system plan provides a foundation of future water demands and supply for each water purveyor in the Carson River Watershed and identified a need for a water marketing program.

In 2013, CWSD and Reclamation entered into a Memorandum of Agreement to perform a Carson River Basin Study Plan. This study was placed on hold when the Water for the Seasons study was proposed.

3.0 Project Description

The goal of a Water Marketing Program is to meet the future water demands while addressing the water conflicts on both the Carson and Truckee Rivers. CWSD consistently utilizes science to identify best practices to manage land and water resources and adapt to changes in the environment to the benefit of all users in the Watershed. This Water Market Program will identify multiple ways to use water. CWSD is prepared to proceed in developing and implementing the Carson River Market Program once the financial assistance agreement and final work plan are executed with Reclamation. CWSD will also identify opportunities to resolve conflicts between users upstream and downstream of Lahontan Reservoir. Finally, an added value outcome of this Program will be to further identify ways to enhance instream flows to enhance fishing habitat.

CWSD is applying for Funding Group 1 money to develop a Water Marketing (Exchange/ Transfer) Program for the Carson River Watershed. Since the Watershed has limited upstream storage, a consistent water supply which meets all the demands of diverse users has always been a challenge. With all groundwater and surface water fully allocated in the Carson River Watershed, any future municipal water demands will have to come from existing water rights. The purpose of the study is to evaluate future water demands and how these new water demands

can be met by minimizing the impact on the environment and agriculture by evaluating available water rights by river segment. The Program will also explore how changes to runoff patterns and flows in the Carson River may impact the current water supply picture and possible impacts on future supplies by utilizing information acquired from the Water for the Seasons Study. In addition, all of the groundwater basins are over-allocated, and some are facing possible pumping curtailment by the Nevada Division of Water Resources. Users downstream of Lahontan Reservoir (Newlands Project) are concerned about increased groundwater pumping in the upper and middle portions of the watershed which may potentially reduce flows into Lahontan Reservoir, Over the past 20-plus years the runoff pattern has been shifting where spring runoff has been coming earlier in the spring and there is less flow in the summer time. Recent work done by the USGS shows that this trend will most likely continue in the future. This earlier runoff will impact agricultural users and municipalities who will need surface water to meet future demands and the environmental uses of the river. By developing a Water Marketing Plan for the Watershed, CWSD will address the instability of the water supply, including legal and physical constraints, and identify and rank possible off-stream storage locations in the system.

CWSD will utilize the CRC stakeholder process to ensure that all entities in the Watershed have an opportunity to provide information and feedback to a Water Market Program.

4.0 Evaluation Criteria

Element 4.1: Water Marketing Benefits

4.1.1: Explain whether the water market/activity will address a specific water supply shortfall and describe the extent of benefits to different sectors, including agricultural, municipal/industrial, tribal and environmental sectors.

With all groundwater and surface water fully allocated in the Carson River Watershed, any future municipal water demands will have to come from existing water rights. With limited upstream storage, all users are subject to the all-or-nothing water scenario which frequently occurs in the watershed. This scenario exposes users to even more dire water losses during droughts. Enhancing water reliability for the entire Carson River Watershed is critical to avoid conflict between agricultural, municipal and industrial, and environmental users, as well as conflict between upstream and downstream users. With limited upstream storage, future growth potential, fully appropriated surface and groundwater basins, and runoff pattern changes, a Water Marketing Strategy Plan for the entire Carson River Watershed would build a framework for the users to work together rather than compete for this limited resource.

4.1.2: Will the water marketing strategy address a specific water supply shortfall?

Yes, this water marketing strategy will address water supply shortfall as a result of lack of upstream storage, earlier spring runoff, and prolonged droughts.

4.1.3: What is the nature and severity of the shortfall and which sectors are affected? Please provide support for your response.

Based on hydrologic basin data collected by the Division of Water Resources, a couple of water purveyors in Lyon County have been told by the State Engineer they have little or no more available water for new growth Therefore, the State engineer issued a letter stating water for new development must be proven to Division of Water Resources before

development can occur. Any new growth to the area will require the importation of water. Water for this new growth will have to be purchased from an existing user. The availability and amount of water depend on where the existing water right is located.

4.1.4: How and to what extent will the water market/water marketing activities, once implemented, address the shortfall? Please describe the expected benefits (e.g., how water users will benefit) and provide support for your response.

The Water Marketing (Exchange/Transfer) Program will identify what water rights are available, where they are located, how much water is available, and what constraints may hinder the water transfer. Having a defined water market will assist developers and water purveyors in finding "wet water" and knowing when the water will be available and how the water purveyor can access the resource.

During the 2003 to 2008 housing boom, water purveyors and counties were inundated with water proposals. Several developments were approved only later to find out that the actual amount of water was not physically available, or the time of the water was limited to a three- or four-month period and typically not when the water was needed.

4.1.5: Will the water market/water marketing activities benefit multiple sectors (e.g., agricultural, municipal, tribal and environmental) and/or types of water uses (e.g., hydropower generation, municipal, recreation, irrigation)? If so, to what extent and which sectors and water uses will benefit? Provide support for your response.

The location of the water right and location of storage sites can provide multiple benefits for multiple users. These water marketing activities will benefit agricultural users by identifying available existing surface water rights that water purveyors and counties already own that could be consolidated to meet future water demands thus minimizing the need to purchase additional agricultural water rights in the future. Municipals water users will benefit from water market activities because a stable new supply of water would become available to water purveyors whose groundwater is limited. Environmental and recreational users would benefit from water stored in the spring time that could be released later in the summer. This additional water in the river will enhance habitat in the area, improve water quality in the river, and provide a late summer water supply for downstream users. This additional water in the river will enhance habitat in the area, improve water quality in the river, and provide a late summer water supply for downstream users.

4.1.6: Explain how and to what extent the proposed water market or water marketing activities will improve water supply reliability in general in the area upon implementation of the strategy (address all that apply):

4.1.6a: Reducing the likelihood of conflicts over water

This Water Market Program would reduce water conflicts in the Watershed by identifying a process to address concerns of existing water rights holders to ensure they won't be adversely impacted. Conflicts on the Carson River (also the name of a book) have been occurring since the late 1800's. With a limited supply of water that can vary dramatically, conflicts between types of water uses and between upstream and downstream users has been consistent. The adjudication of the Alpine Decree, which took 56 years, helped reduce some of the conflict. The reason for

the creation of CWSD by the Nevada Legislature in 1989 was to further reduce conflict. In the past CWSD managed a Reclamation funded water buyout program referred to as AB380 to reduce conflict between the Pyramid Lake Paiute Tribe, Reclamation, State of Nevada, Truckee Carson Irrigation District, City of Fallon, and Churchill County. More recently, CWSD has helped facilitate several regional pipelines to move water between various water purveyors. CWSD also coordinates meetings between upstream and downstream users.

4.1.6 b: Increasing resiliency to drought

Because the runoff of the Carson River is dominated by snow melt, typically by mid-summer the flow in the Carson River is reduced so that only the most senior water right owners can get their water. By late June many of the junior water right owners can no longer irrigate their fields or pump groundwater. This process has been going on for over a hundred years and the farmers have adapted to this process. As water purveyors look to surface water supply to meet their growth they will have to have an active Conjunctive Use Program and Water Market Program. CWSD also plans to utilize the information generated from a study of the Truckee and Carson River watersheds. This "Water for the Seasons" study evaluates sustainable water resources in relation to climate change and drought. This four-year study is sponsored by the National Science Foundation and U.S. Department of Agriculture and will be completed in early 2019.

4.1.6c: Sustaining agricultural communities

Many of the counties in the watershed have programs to promote agriculture in their communities through the use of conservation easements and the transfer of development rights. Part of the Water Marketing Plan is to identify water rights that can be transferred without disruption of the agricultural producers. In the past, there has been water right purchases that disrupted the water distribution to other farms in the area and impacted their profit and operations. A Water Marketing Plan will need to address these concerns.

4.1.6d: Demonstrating a water marketing approach that is innovative and which may be applied by others

The innovative CRC process is a transparent way to develop this water marketing plan by including all water rights holders and addressing their concerns within the legal frameworks established by the Alpine Decree and Nevada Water Law. This process could be duplicated and utilized by other watershed entities. It serves as a model to engage all stakeholders and by doing so, create similar plans that acknowledge and reduce conflict. A well-developed Water Market Plan can be used in the other Nevada watersheds.

4.1.6e: Providing instream flows for species, recreation or water quality objectives

For years CWSD has utilized its various storage water resources for multiple benefits. An example is the Lost Lakes Reservoirs. This resource is located in Alpine County, CA. Water is collected in the winter time and stored all summer for recreational use. In the fall, the water is released to enhance instream flows for the West Fork of the Carson River. This water is then used by Carson City for municipal use. Part of this

Water Marketing Program will include identifying storage sites and how they will provide multiple benefits for the local communities and the watershed.

4.1.7: Explain the extent to which the water market/activity will be ready to proceed upon completion of the strategy, addressing each of the following:

4.1.7a: Describe your plans and timeline for implementing the strategy upon its completion.

The Water Marketing Plan provides CWSD with a strategy to identify possible storage sites, water resources that can be stored, and how the water will benefit water purveyors and counties. Implementation and timeline will depend on growth in the counties.

4.1.7b: Are there complex issues, including issues of law or policy, that would need to be resolved before the strategy could be implemented?

Water marketing is not prohibited but, due to the complexity of Nevada Water Law and the federal Alpine Decree, there is not a Water Market Program in the Carson River Watershed. Both the Nevada State Engineer and the Federal Water Master have indicated that they will be willing to participate in the process to ensure that an implementable program is identified.

4.1.7c: Explain whether previous planning, outreach and/or water marketing activities have been completed, including work on any of the required Project elements (1), (2), and (3). Note that links to existing work that will contribute to the strategy are requested in Section D.2.2.8. Existing Analysis Contributing to the Water Marketing Strategy (if applicable).

In 2013, CWSD completed a Comprehensive Regional Water System Plan (Plan) which evaluated the future water needs of all the water purveyors and where the potential water sources would come from to meet those demands. The Plan identifies additional work needed:

- Develop a water balance for the watershed to determine which areas of the watershed need water and which areas have excess water;
- Create a process for exchanging or transferring water rights within the legal framework of the Alpine Decree and Nevada Water Law along the Carson River as part of overall Watershed management;
- Identify and rank off-stream storage and infrastructure opportunities to develop a plan to manage water between segments of the Carson River; and
- Develop a plan to deal with the impacts of climate change and continue to educate water users on changing water supply patterns.

CWSD plans to utilize findings from a four-year study titled “Water for the Seasons” sponsored by the National Science Foundation and U.S. Department of Agriculture. This study is being conducted by USGS and University of Nevada’s Desert Research Institute. The study is evaluating possible runoff patterns and supplies on the Carson and Truckee Rivers due to climate change and/or drought.

Element 4.2: Level of Stakeholder Support and Involvement

4.2.1: Identify stakeholders in the planning area who have committed to be involved in the planning process.

4.2.1a: Describe their commitment, e.g., will they contribute funding or in- kind services or otherwise engage in the planning process? Please explain whether the project is supported by a diverse set of stakeholders (if appropriate given the types of interested stakeholders within the watershed and the scale, type and complexity of the proposed strategy). For example, is the project supported by entities representing environmental, agricultural, municipal, tribal, or recreation uses?

CWSD receives property tax from all private parcels in the watershed and, therefore, will provide the cash match for the study. CWSD will also be the lead agency in this study and will provide most of the in-kind match. All other entities will provide in-kind match by attending meetings and reviewing and commenting on the Plan. CWSD has received support for this project from a large, diverse stakeholder group throughout the watershed including the Nevada State Engineer, water purveyors, irrigation districts, conservation districts, and private companies (see Appendix B for Letters of Support).

4.2.1 b: Is there opposition to the proposed strategy? If so, describe the opposition and explain how it will be addressed. Opposition will not necessarily result in fewer points.

CWSD is not aware of any entity opposed to this study. There are some concerns raised by the Town of Minden and Nevada Farm Bureau (NFB). The Town of Minden is concerns their water rights will be exported from the Carson Valley basin while Farmers and Ranchers from NFB are skeptical there will be any benefit to the agricultural users. These entities refrained from submitting a letter of support but have indicated that they will participate in the CRC meeting and provide their input. The Alpine Decree precludes the Federal Water Master from sending letter of support for duties outside the scope of their authority, but his office has indicated that they will participate in the study.

4.2.1c: Do any separate planning efforts express support for the proposed water market/ transaction? Or, will the proposed water marketing strategy complement other ongoing or recent planning efforts within the area?

This proposed strategy builds upon a recommendation from the 2013 Comprehensive Regional Water System Plan, which identified the need to create a process for exchanging or transferring water rights within the legal framework of the Alpine Decree and Nevada Water Law along the Carson River.

4.2.2: Please describe any relevant planning efforts, including who is undertaking these efforts and whether they support or are complemented by the proposed water marketing strategy. Explain how the proposed water marketing strategy will avoid duplication or complication of other ongoing planning efforts.

Each of the counties have multi-hazard mitigation plans which consider water supply in relation to drought. The State Engineer has urged water purveyors in the Watershed to create a drought management plan to ensure they have an adequate water supply during droughts.. This Water Marketing Program plan will utilize this information. This Water

Marketing Program plan will also utilize CWSD's 2013 Comprehensive Regional Water System Plan and the Water for the Seasons study. This holistic approach and communication between all the water rights holders in the watershed will avoid duplication of efforts.

4.2.3: Describe what efforts that you will undertake to ensure participation by a diverse array of stakeholders in developing the water marketing strategy.

CWSD staff has been in communication with all the water purveyors in the Watershed regarding this study. CWSD will also utilize the Carson River Coalition (CRC) stakeholder process to include members from federal, state, and local governments, as well as private, tribal, agricultural, and non-profit entities. CWSD's general manager has met to explain this project with water purveyor staff members and/or formally requesting letters of support from their boards. He has also discussed this project with the Nevada State Engineer and Federal Water Master staffs. In addition, CWSD will engage with surface water rights owners in the watershed and invite them to participate in this project. Table 4.2.1 lists entities who have sent a letter of support. There are other water purveyors and interested parties who will also participate in the Water Purveyor Working Group meetings. Those committed to participate will attend meetings, provide data and feedback, and track and report their time for non-Federal in-kind match. Once this project is complete, CWSD staff will present findings to the water purveyors' and counties' elected boards.

Table 4.2.1

Committed To Participate
✓
✓
✓
✓
✓

Entity	Letter of Project Support	Committed To Participate	Entity	Letter of Project Support	Committed To Participate
Alpine County	✓	✓	Lyon County Utilities	✓	✓
Carson City Public Works	✓	✓	Nevada Farm Bureau		✓
Douglas County Public Works	✓	✓	Stagecoach General Improvement District	✓	✓
DWR: State Water Engineer	✓	✓	State Water Engineer	✓	✓
Federal Water Master		✓	Town of Minden		✓
Gardnerville Ranchos General Improvement District	✓	✓	Truckee Carson Irrigation District	✓	✓
Gardnerville Water Company	✓	✓	U.S. Geologic Survey		✓
Indian Hills General Improvement District	✓	✓	Vidler Water Company	✓	✓
Lahontan Conservation District	✓	✓			

Element 4.3 Ability to Meet Program Requirements

4.3.1: Describe how the three elements of a water marketing strategy will be addressed within the required timeframe. Please include an estimated project schedule that shows the stages and duration of the proposed work including major tasks, milestones, and dates.

Table 4.3.1 identifies the major subtasks and deliverables associated with each task and outlines the approximate schedule.

Table 4.3.1: Key Tasks, Deliverables, and Milestones

Task	Subtask	Deliverable	Start Date	End Date
1. Project Administration				
	Execute Agreement with Reclamation	Funding Agreement	Sept. 2018	Dec. 2018
	Ececute Final Work Project with Reclamation	Project Work Plan	Sept. 2018	Dec. 2018
	Develop Communications & Outreach Plan	Communications Plan	Sept. 2018	Dec. 2018
	Hire Consultant	Consultant Contract	Oct. 2018	Jan. 2019
	Invoices & Reporting	Required Reports	Sept. 2018	Sept. 2020
2. Communication and Outreach				
	Plan and Host Meeting with Water Purveyors Working Group	Provide Agenda & Meeting Notes	Feb. 2019	Apr. 2019
	Plan and Host CRC outreach meeting - gather input regarding legal, institutional, and environmental issues	Provide Agenda & Meeting Notes	Apr. 2019	Jan. 2020
	Plan and Host CRC outreach meeting - gather surface water right availability and needs	Provide Agenda & Meeting Notes	Apr. 2019	Jan. 2020
	Plan and Host CRC outreach meeting - Review preliminary findings	Provide Agenda & Meeting Notes	Jan. 2020	Feb. 2020
	Plan and Host Report Meetings - Provide Feedback on Draft and Final Reports	Provide Agenda & Meeting Notes	Feb. 2020	Mar. 2020
3. Evaluate Existing Water Supply by River Segment				
	Hydrologic Analysis	Provide Write-Up	Jan. 2019	Jan. 2020
	Legal, Institutional, and Environmental Analysis	Provide Write-Up	Jan. 2019	Jan. 2020
	Climate Change Analysis	Provide Write-Up	Jan. 2019	Jan. 2020
4. Identify Surface and Groundwater Storage		Provide Scoring Matrix	Feb. 2019	Dec. 2019
5. Water Marketing Analysis by River Segment		Provide Write-Up	Feb. 2019	Apr. 2019
	Develop Water Marketing / Transfer / Exchange opportunities by river segment	Provide Write-Up	Apr. 2019	Jan. 2020
6. Water Market Report		Provide Write-Up	Jan. 2019	Dec. 2019
	Draft Report	Provide Draft Report	Jan. 2020	Mar. 2020
	Present Findings to Elected Boards	Provide List of Presentations	Apr. 2020	Jul. 2020
	Final Report	Provide Final Report	Apr. 2020	Sept. 2020

4.3.2: Describe the availability and quality of existing data and models applicable to the proposed water marketing strategy. CWSD will utilize information from multiple sources, and include:

- 2013 Comprehensive Regional System;
- Water purveyors water supply and demand data;
- Local and regional infrastructure;
- Water rights data collected by the State and Federal entities;
- USGS surface and groundwater data;
- USGS Groundwater Models of the Upper and Middle Carson River;

4.3.3: Identify staff with appropriate technical expertise and describe their qualifications. Describe any plans to request additional technical assistance from Reclamation, or by contract.

CWSD is prepared to proceed in developing and implementing the Carson River Market Program once the financial assistance agreement and final work plan are executed with Reclamation, estimated to occur in September 2018 and December 2018, respectively. Staff technical expertise and qualifications include:

The General Manager's has over thirty-six years of water resource planning and includes working for the Denver Water Department negotiating and purchasing water rights, Chino Basin Municipal Water District responsible for imported water deliveries from Metropolitan Water District and managing the Chino Groundwater Basin, and General Manager for the Jurupa Community Service District providing water and sewer for a community of 50,000 people. Since August 1998, has been General Manager for the Carson Water Subconservancy District over seeing regional water supply, flood studies, and providing funds to several entities dealing with watershed issues and projects. The General Manager has a B.S. in Soil and Water Science from University of California Davis, a M.S. in Civil Engineering from University of Colorado Boulder, and an MBA from University of Phoenix.

The Carson River Watershed Program Manager has over twenty years of environmental employment experience with non-profits, and local and regional governmental organizations in both the US and Australia. Over the span of her career, the Watershed Program Manager has worked to unite stakeholders from public entities and private businesses by focusing on their common interests rather than their differences. She applies this experience as she coordinates the Carson River Coalition stakeholder process and updates planning documents used to guide the integrated watershed management strategy utilized by CWSD and oversees stakeholder communications. The Carson River Watershed Program Manager earned her B.S. in Natural Resources from the University of Wisconsin-Madison and a M.A. in Environmental Science from Monash University located near Melbourne, Victoria, Australia.

The Watershed Program Specialist has over 17 years of field experience gained working for the federal government and non-profits. As a physical scientist in the National Park Service he administered large restoration projects along with the monitoring of air, water, and geologic resources. Working for a non-profit in Alpine County, California, he led monitoring and restoration efforts in Carson River's upper watershed. His ability to present technical

information to a variety of stakeholders in a non-threatening manner increases understanding and cooperation. The Watershed Program Specialist has a Bachelor of Science in Geography and Minor in Geology from Western Kentucky University.

The Water Resource Specialist performs field work, such as gathering stream flow and ground water measurements, surveying, photo monitoring and conducting residential water audits. She manages federal and regional grants, conducts outreach and education, and works with elected boards, local staff, and other stakeholders to support regional projects. She also assists in updating planning documents and creating annual reports such as the Regional Water Rate Report. The Water Resource Specialist has a BSBA degree in Marketing Management and her certifications include floodplain manager, CompTIA Project + project management, and AWWA Water Use Efficiency Practitioner I.

CWSD plans to hire a consultant to collect and analyze the technical information needed for this study. CWSD staff will provide oversight, technical assistance, and communication and outreach (see budget narrative for details).

4.3.4: Work Plan and Schedule

Table 4.3.1 identifies the major subtasks and deliverables associated with each task and outlines the approximate schedule. Note the tasks and schedules will be further elaborated on in the Project Work Plan to be completed under Task 1 and submitted to Reclamation for review as required by the grant. CWSD plans to hire a consultant to collect and analyze the technical information needed for this study. CWSD staff will provide oversight, technical assistance, and communication and outreach (see budget narrative for details).

Element 4.4 Department of Interior Priorities

This project meets the following Interior priorities.

4.4.1 Creating a conservation stewardship legacy second only to Teddy Roosevelt

The largest water user on the Carson River is the Reclamation's Newlands Project. The Newlands Project includes the largest reservoir on the Carson River and a canal that brings water from the Truckee River to the Carson River. By developing a Water Marketing Program CWSD will address the future water needs. This will reduce conflict with the water users on the Truckee River, as well as upstream water users on the Carson River.

CWSD consistently utilizes science to identify best practices to manage land and water resources and adapt to changes in the environment to the benefit of all users in the Watershed. By developing this Water Market Program, ways to use water multiple times will be identified. CWSD will also identify opportunities to resolve conflicts between users upstream and downstream of Lahontan Reservoir. This Water Market Program will also identify methods to enhance fishing habitat with instream flows.

4.4.2 Restoring trust with local communities

Through its coordination of the CRC, CWSD fosters relationships with organizations to balance water use for multiple purposes. Participating in the CRC provides opportunities

to improve dialogue and relationships between Reclamation and water users upstream and downstream of Lahontan Reservoir.

5.0 Environmental and cultural resources compliance

This project is a planning study and no environmental impact will occur. However, any project identified in this study will need to comply with environmental and cultural compliance .

6.0 Required permits or approvals

This project is a planning study and no environmental impact will occur. However, any project identified in this study may need to address environmental and cultural compliance permits and approvals.

7.0 Project budget

7.1: Funding plan and letters of commitment:

CWSD is requesting $100,000 funds from Funding Group I for the proposed Project. The total Project cost is estimated at $211,469. The non-federal costs for this Project will be obtained from a cash contribution by CWSD, and in-kind services provided by CWSD and the various stakeholders in the watershed. The non-federal contribution will be over 52 percent of the total Project cost.

Carson Water Subconservancy District (CWSD) Contribution:

CWSD is proposing to provide $50,000 in cash match. The funding source for this cash will come from a portion of the property taxes that CWSD collects every year. These funds are available and is currently earmarked for this Project.

The In-Kind match will be CWSD staff's participation in the Project. The match will consist of CWSD staff salaries, fringe benefits, indirect costs, supplies, copying, and travel totaling $58,722.

7.2 Budget proposal:

Below is a summary of proposed budget, broken out by task and shown on Table 7.2.

Table 7.2: Summary of Non Federal and Federal Funding Sources	
FUNDING SOURCES	Amount
Non-Federal Entities	
CWSD Cash Contribution	$ 50,000
CWSD In-Kind Match	$ 58,722
Stakeholders In-Kind Match	$ 2,747
Non-Federal Subtotal	$ 111,469
Federal Entities	
REQUESTED RECLAMATION FUNDING	$ 100,000
Other Federal Funding	$ -
Federal Subtotal	$ 100,000
Total Project Funding	$ 211,469

Task 1: General Administration

Under this task CWSD will prepare and submit semi-annual SF 425 federal forms and process report, review and pay invoices, and submit billing requests. This includes development of Project work plan, development of Communication & Outreach Plan, development of Request for Qualifications (RFQ), advertisement of RFQ, review of submitted applications, the selection of the consulting firm, semi-annual reports and invoicing.

Description of CWSD Staff Hours Involvement and Tasks:

General Manager: General Manager will develop, advertise, and select the consultant to conduct the study. General Manager will develop the Project Work and Communication Plans. General Manager will review invoices and semi-annual reports. Estimated 55 hours on this task.

Water Resource Specialist II: Water Resource Specialist II will help in the development, advertisement, and selection of the consultant to the study . Water Resource Specialist II will help with develop the Project Work and Communication Plans. Water Resource Specialist II will prepare the semi-annual reports, federal forms, and billing. Estimated 110 hours on this task.

Administrative Assistant: The Administrative Assistant will help with the advertising for consultant, review Project Work and Communication Plans, and process invoices and billing. Estimated 15 hours on this project.

Watershed Program Manager: The Watershed Program Manager will help develop the Project's Work Plan and Communication Plans. It is estimated the Watershed Program Manager will spend 12 hours on this task.

Watershed Program Specialist: The Watershed Program Specialist will help develop the Project's Work Plan and Communication Plans. It is estimated the Watershed Program Specialist will spend 12 hours on this task.

Task 2. Communication and Outreach

Under this task CWSD will work with Reclamation, water purveyors, counties, federal water master, state engineer, and the CRC members to provide and gather information on how water marketing would work in their segment of the Carson River. The goal is to get the communities buy-in to the program.

Description of CWSD Staff Hours Involvement and Tasks:

General Manager: General Manager will meet with the Nevada State Engineer and the Federal Water Master for the Alpine Decree to discuss the legal and institutional constraints regarding Water Marketing in the Carson River Watershed, conduct various meetings with water purveyors, counties, and other stakeholders in the watershed. Estimated 60 hours on this task.

Water Resource Specialist II: The Water Resource Specialist II will assist with the meetings with the Nevada State Engineer and the Federal Water Master, water purveyors, counties, and other stakeholders in the watershed. Estimated 60 hours on this task.

Administrative Assistant: Administrative Assistant will attend the meetings and take meeting notes. Estimated 40 hours on this project.

Watershed Program Manager: Watershed Program Manager will coordinate and attend the CRC stakeholder meetings. Estimated 206 hours on this task.

Watershed Program Specialist: Watershed Program Specialist will assist coordinating and attending the CRC stakeholder meetings. Estimated 20 hours on this task.

Task 3 Evaluate existing water supplies by river segment

CWSD will work with the Federal Watermaster and consultant to identify possible water rights available by segment.

Description of CWSD Staff Hours Involvement and Tasks:

General Manager: General Manager will work with the consultant to review available surface water rights that are available by river segment. Estimated 20 hours on this task.

Task 4.0 Identify Surface and Groundwater Storage Sites

CWSD will work with the consultant to develop a matrix for evaluating storage sites and analyzing site potentials.

Description of CWSD Staff Hours Involvement and Tasks:

General Manager: General Manager will work with the consultant to develop a matrix for evaluating storage sites and analyzing site potentials. Estimated 30 hours on this task.

Water Resource Specialist II: Water Resource Specialist II will assist with working with the consultant to develop a matrix for evaluating storage sites and analyzing site potentials. Estimated 10 hours on this task.

Watershed Program Manager: Watershed Program Manager will review and provide comments on the development of the storage matrix . Estimated 4 hours on this task.

Watershed Program Specialist: Watershed Program Specialist will review and provide comments on the development of the storage matrix. Estimated 4 hours on this task.

Task 5 Water Market Analysis

CWSD will work with consultant on developing a Water Market Program.

Description of CWSD Staff Hours Involvement and Tasks:

General Manager: General Manager will work with the consultant to develop and review a water market program by river segment. Estimated 60 hours on this task.

Water Resource Specialist II: Water Resource Specialist II will assist with the consultant and General Manager to review water marketing and coordinate feedback from the water purveyors and counties. Estimated 30 hours on this task.

Watershed Program Manager: Watershed Program Manager will review and provide comments on the water market proposal and coordinate feedback from the CRC members. Estimated 10 hours on this task.

Watershed Program Specialist: Watershed Program Specialist will review and provide comments on the water marketing proposal and help compile feedback from CRC members. Estimated 10 hours on this task.

Task 6 Develop the Water Marketing Report and present Finding to Elected Boards

CWSD will review and make comments on the draft and final reports. CWSD will also present the findings to the various water purveyors and elected county boards.

Description of CWSD Staff Hours Involvement and Tasks:

General Manager: General Manager will review and make comments to the draft and final Water Marketing Report. The General Manager will present the findings to the various water purveyors and counties elected Boards. Estimated 80 hours on this task.

Water Resource Specialist II: The Water Resource Specialist II will review and make comments to the draft and final Water Marketing Report. Water Resource Specialist II will gather comments from the various water purveyors and counties regarding the draft and final Water Marketing Reports. Estimated 20 hours on this task.

Administrative Assistant: Administrative Assistant will review and make comments to the draft and final Water Marketing Report. Estimated 10 hours on this project.

Watershed Program Manager: Watershed Program Manager will review and make comments to the draft and final Water Marketing Report. The Watershed Program Manager will coordinate comments from CRC members on the draft and finals Water Marking Reports. Estimated 10 hours on this task.

Watershed Program Specialist: Watershed Program Specialist will review and make comments to the draft and final Water Marketing Report. The Watershed Program Specials will assist with coordinating comments from CRC members on the draft and finals Water Marking Reports. Estimated 10 hours on this task.

7.3: Budget Narrative

The hours and salary cost allocation for the WaterSMART grant is broken out by tasks on Table 7.1. The budget for CWSD staff salaries is based on estimated average salaries for FY 2018-19 and FY 2019-20. The invoicing will be based on actual salary rates. The fringe benefits are calculated based on the 2016-17 audit figures and include vacation, sick, administrative leaves, and General Manager's car allowance. The fringe benefit rate is calculated to be 65.17 percent. For this grant application CWSD will use the Reclamation indirect rate of 10 percent.

Fringe Benefits: The fringe rate is 65.17 percent of the salary and is estimated to be $21,698.

Indirect Rate: The indirect rate is based on the grant allowable amount of 10 percent of CWSD salaries and is estimated to be $3,329.

Table 7.1: Summary of Staff Time per Task						
Hourly Rates for Staff Time	General Manager $ 66.35	Watershed Resource Specialist $ 30.35	Administrative Assistant $ 30.95	Watershed Program Manager $ 37.60	Watershed Program Specialist $ 35.00	Total Staff Time by Task
1. Project Administration	**55**	**110**	**15**	**12**	**12**	**204**
1.1 Execute Agreement, Work & Communication Plans	15	30	5	12	12	74
1,2 Hire Consultant	25	40	5	0	0	70
1.3 Invoices & Reporting	15	40	5	0	0	60
2. Communication and Outreach	**60**	**60**	**40**	**20**	**20**	**200**
2.1 Water Purveyors Meetings	40	40	20	8	8	116
2.2 Regulators & CRC Meetings	20	20	20	12	12	84
3. Evaluate Existing Water Supply by River Segment	**20**	**0**	**0**	**0**	**0**	**20**
4. Identify and rank storage and infrastructure opportunities	**30**	**10**	**0**	**4**	**4**	**48**
5. Water Marketing Analysis	**60**	**30**	**0**	**10**	**10**	**110**
6. Water Market Program Report Development	**80**	**20**	**10**	**10**	**10**	
6.1 Review Draft & Final Reports	20	20	10	10	10	70
6.2 Present Findings and Recommendations to Elective Boards	60	0	0	0	0	60
Total Staff Hours:	**305**	**230**	**65**	**56**	**56**	**712**
Total Staff Services by Personnel:	**$20,236.75**	**$6,980.50**	**$2,011.75**	**$2,105.60**	**$1,960.00**	**$ 33,294.60**
					Total Staff Services for Project:	**$ 33,294.60**

Stakeholders Contribution:

The various water purveyors and stakeholders will provide in-kind match in the form of their participation and feedback to the Project. CWSD anticipates holding at least four group meetings with the various stakeholders in the Watershed and meeting one-on-one with each water purveyor, as well as meeting with the Nevada State Engineer and the Federal Water Master. Their in-kind contribution will be based on their actual salary and fringe benefits. A conservative estimate is $2,750. This in-kind match does not include other who have agreed to volunteer their time to participate in the Program (i.e. Douglas County Farm Bureau members).

Equipment:

N/A

Materials & supplies:

Paper supplies and copying costs are based on CWSD costs sheets and is estimated to be $150.

Travel:

Mileage reimbursement based on the Federal Rate and estimated to be $250.

Contractual:

CWSD will hire an engineering firm who will evaluate the legal frame work needed to develop a Water Market (Exchange/Transfer) Program, identify possible storage sites throughout the Watershed, analyze available water, identify infrastructure needs to move water throughout the Watershed, evaluate impacts due to possible climate changes, and develop a draft and final report. Total estimated cost will be $150,000.

Appendix A: Existing Work Links

This study will build on the work of the 2013 Regional Comprehensive Water System Plan and with the Water Conservation Plan, included in this appendix.

Links are provided to the following documents which act as guides in the Integrated Watershed Management of the Carson River Watershed.

- 2007 Carson River Adaptive Stewardship Plan & 2018 Supplemental Update
- 2007 Regional Floodplain Plan & 2013 Supplemental Update

Appendix B: Letters of Support

Please see attached letters of support from:

Entity	Letter of Project Support	Committed To Participate
Alpine County	✓	✓
Carson City Public Works	✓	✓
Douglas County Public Works	✓	✓
DWR: State Water Engineer	✓	✓
Federal Water Master		✓
Gardnerville Ranchos General Improvement District	✓	✓
Gardnerville Water Company	✓	✓
Indian Hills General Improvement District	✓	✓
Lahontan Conservation District	✓	✓

Entity	Letter of Project Support	Committed To Participate
Lyon County Utilities	✓	✓
Nevada Farm Bureau		✓
Stagecoach General Improvement District	✓	✓
State Water Engineer	✓	✓
Town of Minden		✓
Truckee Carson Irrigation District	✓	✓
U.S. Geologic Survey		✓
Vidler Water Company	✓	✓

Appendix C: Official Resolution

Appendix D: Unique identifier and System for Award Management