

October 5, 2010

Mr. Kevin Reidy Colorado Water Conservation Board 1313 Sherman Street, 7th Floor⁻ Denver, CO 80203

RE: City of Dacono Water Conservation Planning Grant Application

Dear Mr. Reidy:

The City of Dacono is interested in developing a Water Conservation Plan to guide the effective and responsible use of their water resources. Dacono is a Northern Integrated Supply Project participant and believes a water conservation plan is paramount to this process. We are also interested in the possibilities of receiving financial assistance from the Colorado Water Conservation Board and/or the Colorado Water Resources and Power Development Authority in the future. In order to receive this type of financial assistance, we need to have an approved water conservation plan according to HB04-1365.

In addition to our interest in financial assistance, Dacono is ready to make this first step towards conserving water and communicating its importance to our constituents. As you will see in the attached planning grant application, the City of Dacono is committed to implementing effective long-term water savings measures and programs. As City Administrator, I will authorize funds and staff time to dedicate towards developing this Water Conservation Plan. Once the Water Conservation Plan is in place, I will authorize funds as they become available to implement the water conservation programs that we have selected.

Clear Water Solutions, Inc. has prepared the attached planning grant application for a Water Conservation Plan. The total cost to complete the plan is \$53,162. The City proposes to match \$8,856 with in-kind services and \$4,500 cash, which is 25% of the total project. Therefore, the City requests a grant for \$35,306 from CWCB to complete the plan. We respectfully submit this request for your consideration.

Respectfully, City of Dacono

Bill Efting, City Administrator

Enclosures

CWCB APPLICATION SUBMITTAL REQUIREMENTS

This grant application is for development of a water conservation plan for the City of Dacono, which is a growing Front Range community in Weld County, Colorado approximately 30 miles north of Denver. The City has a current population of approximately 4,255 people with an estimated build-out population of 56,600 within a 22 square-mile planning area. Dacono is a participant in the Northern Integrated Supply Project (NISP) and wants to have a water conservation plan in place prior to embarking on this project.

1. Contact information of entity seeking grant:

City of Dacono

Attn: Bill Efting, City Administrator 512 Cherry St Dacono, CO 80514 T: (303) 833-2317 F: (303) 833-5528

2. <u>Selected firm and individuals to assist in development of Water Conservation</u>

Plan:

Clear Water Solutions, Inc.

Attn: Kim Frick, P.G.

8010 South County Road 5, Suite 105

Windsor, CO 80528 T: (970) 223-3706 F: (970) 223-3763

Clear Water Solutions, Inc. (CWS) will complete the Water Conservation Plan for the City of Dacono. Individuals from CWS that will be involved in the project include Kim Frick, P.G. and Steve Nguyen, P.E.

Kim Frick has over nine years of experience in water resources planning and management. She serves on the board of Colorado Water Wise, which is an organization of water conservation professionals in Colorado. She will assist with the demand projections, analysis of water use, identification and quantification of conservation measures, associated water savings, and overall plan development. Kim will serve as the Project Manager for completion of the Water Conservation Plan.

Steve Nguyen is a Professional Engineer registered in the State of Colorado. He has over thirteen years of experience in the water rights and water planning arena. He has helped many clients manage their water resources including

water supply, water acquisition, water usage, and water conservation. Steve will serve as a Technical Advisor on all portions of the Water Conservation Plan.

City of Dacono

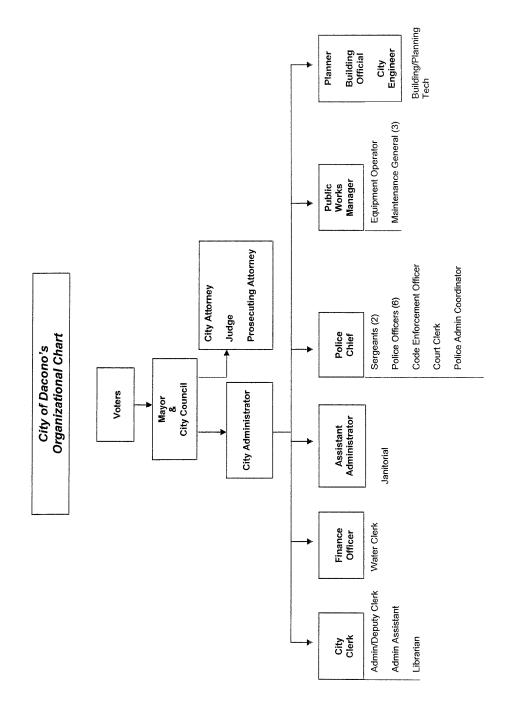
Bill Efting is the City Administrator for Dacono and will serve as the primary contact for the City on this project. He has twenty years of experience in this field and has been with Dacono for a year; prior to this he served as the City Administrator for the Town of Basalt. Bill will advise and provide general direction to CWS and Dacono staff on all aspects of the project. Bill will be paramount in the development of water-savings goals and conservation measures that the Dacono City Council will ultimately adopt and implement.

Jon Rabas is the Public Works Director. Jon has over five years of experience with the City and has extensive knowledge of the water distribution system, water sources and daily operation of the City. He works closely with Bill and with subcontractors on capital improvement projects. He will assist CWS with profiling the current system and proposed facilities along with other components of the Plan.

Kelly Stroh is the Finance Director. She has three years of experience with the City and will provide general direction on the financial aspects of the project. These aspects include potential rate revenue declines from water conservation and the cost of implementation of the proposed measures and programs. Kelly is also responsible for the water billing department and all of the administrative and financial duties of our water system.

Sue Trosper works in the billing department and has a good understanding of and access to customer information such as water use per customer category, billing and revenues. She will also assist in developing past and current history of water use, sales and associated revenue, and non-payment and associated fines.

The organizational chart for the City of Dacono is shown on the following page.



10/08/09

3. Identification of retail water delivery of the covered entity for past five years:

Table 1: Annual Water Delivery (in acre-feet)

| | Commercial | City | Residential | Hydrant Meters | TOTAL |
|---------|------------|------|-------------|-------------------|-------|
| 2005 | 50 | 14 | 327 | 25 | 416 |
| 2006 | 68 | 22 | 359 | 16 | 466 |
| 2007 | 64 | 16 | 386 | 13 | 479 |
| 2008 | 80 | 21 | 388 | 13 | 502 |
| 2009 | 74 | 16 | 374 | 4 | 468 |
| Average | 67 | 18 | 367 | 14 | 466 |

The City of Dacono has two main customer categories for billing its water deliveries: Commercial and Residential. The other categories of water use that are tracked in the City's billing system are: City, which is water used by the City and not billed and Hydrant, which consists of water used by both the City and outside contractors doing work for the City. Hydrant use is sometimes billed to the contractors, but the City's portion is not billed. The average delivery of their system over the past five years is approximately 466 acre-feet/year with the Residential use being the highest water use category, comprising 79% of the total.

Dacono receives its treated water from Central Weld County Water District (CWCWD). The City's water source is solely Colorado Big Thompson (CBT) units, which it owns and transfers to CWCWD on an annual basis for treatment and delivery. CWCWD has a water treatment plant at the base of Carter Lake. Dacono and CWCWD entered into an agreement in 1987 for CWCWD to be the water provider for the City. The first term of the agreement is for 20 years with automatic ten-year renewals. CWCWD provides treated water to seven master meter locations surrounding Dacono, which it owns and operates. The City's distribution system begins once the water leaves the CWCWD master meter vaults.

4. Projections for next five years of demand

Based on population projections for the next five years, which will be discussed in more detail in paragraph 5b, we project 545 acre-feet of water demand in 2015 as shown on Table 2. The population data considered projections from the State Demography Office with adjustments for actual and estimated residential building permits from 2008 to 2010.

Table 2: Dacono Water Demands and Population Growth

| Year | Delivery per 1000 gallons | Demand (ac-ft) | GPCD | Population | Growth Rate |
|------|---------------------------------|-------------------|------|------------|----------------|
| 2005 | 135,485 | 416 | 101 | 3,680 | - |
| 2006 | 151,787 | 466 | 107 | 3,893 | 5.8% |
| 2007 | 156,068 | 479 | 104 | 4,127 | 6.0% |
| 2008 | 163,444 | 502 | 108 | 4,160 | 0.8% |
| 2009 | 152,432 | 468 | 99 | 4,217 | 1.4% |
| 2010 | 160,874 | 494 | 104 | 4,255 | 0.9% |
| 2011 | 164,092 | 504 | 104 | 4,340 | 2.0% |
| 2012 | 167,374 | 514 | 104 | 4,426 | 2.0% |
| 2013 | 170,721 | 524 | 104 | 4,515 | 2.0% |
| 2014 | 174,135 | 534 | 104 | 4,605 | 2.0% |
| 2015 | 179,360 | 550 | 104 | 4,743 | 3.0% |
| 2016 | 184,740 | 567 | 104 | 4,886 | 3.0% |
| 2017 | 190,283 | 584 | 104 | 5,032 | 3.0% |
| 2018 | 195,991 | 601 | 104 | 5,183 | 3.0% |
| 2019 | 201,871 | 620 | 104 | 5,339 | 3.0% |
| 2020 | 207,927 | 638 | 104 | 5,499 | 3.0% |

ac-ft savings with 10% conservation

- 5. <u>Background characterizing the water system, potential growth and any other pertinent issues that relate to the stated evaluation criteria.</u>
 - (a) Within the last five years, Dacono has a per capita water use that ranges from 99 to 107 gallons per capita per day (gpcd) with an average of 104 gpcd as shown in Table 2. This calculation was performed using the total billed usage and population estimates for the City. This per capita use includes water delivery for all customer categories.
 - (b) As stated above, population projections considered information from the State Demography Office. For 2008 through 2010, we adjusted the population projections based on the number of residential building permits issued and assumed 2.5 people per household. Table 2 shows an estimated population for the last five years, current year and the next ten years. Growth has slowed recently due to the economy, but we expect the rate to increase two to three percent over the next decade. The City is looking forward to the 2010 Census to provide a more accurate population for Dacono. The estimated population for Dacono at full build-out is significantly higher at 56,500 and yet another reason to start utilizing its water resources wisely.
 - (c) Estimated water savings from this water conservation planning effort will be to lower the total per capita water use by 10% over a ten-year planning

period. To reach this goal, Dacono will focus on the Residential category as it has the highest potential for water savings. For now, the City will target a 64 acre-feet reduction from their projected demand of 638 acrefeet in 2020 (Table 2). Because this water-savings goal is difficult to estimate prior to the development of the Water Conservation Plan, the City will revisit and revise this goal, if necessary, as it further analyzes and understands its system and high water use areas.

(d) The adequacy, stability and reliability of the water system are being addressed by the City. In 2005, Dacono began a three-year program to replace old AC pipe, service lines, water meters and pits. As mentioned previously, the City owns and operates the distribution water system once it leaves the CWCWD master meter vaults. The City has seven separate distribution systems with pipelines range in size from 14 inch lines to three inch laterals. The City also has a 1 MG storage tank that was constructed in 1989.

Potential issues related to the adequacy and reliability of Dacono's water system is its sole reliance on CBT water. The City's proposed NISP participation will help to diversify its water portfolio. NISP participants are strongly encouraged by Northern Water to have water conservation plans to demonstrate efficient water use of the participant's water supplies.

The City of Dacono is located in the South Platte River Basin where the Statewide Water Supply Initiative (SWSI), conducted by CWCB, identified a 22% gap or a 407,900 acre-feet shortage between water needs and water supplies in the Basin by 2025. Water conservation is one method the SWSI report identified for meeting this gap.

- 6. In this Water Conservation Plan, the City of Dacono will quantify its current water usage, develop water conservation programs and measures to implement, and determine the benefit-cost of the implementation. The plan will describe new conservation measures and goals the City will target. See Attachment A for the anticipated Scope of Work,
- 7. The City of Dacono will complete the project in accordance with the estimated Project Schedule shown in Attachment B. The City intends to use the grant money for completion of the Water Conservation Plan and will provide CWS all information, including billing and financial information, as well as staff time to successfully complete the Plan. See Attachment C for the breakdown of Project Fees including projected hours and rates.

8. "The Dacono City Council is committed to water resource sustainability and water conservation. The City intends to do its part to preserve water for future generations. Both Staff and Council understand the needs and benefits to implement long-term water conservation measures. We are committed to complete a Water Conservation Plan in its entirety to be approved by CWCB for the grant money requested."

Bill Efting, City Administrator

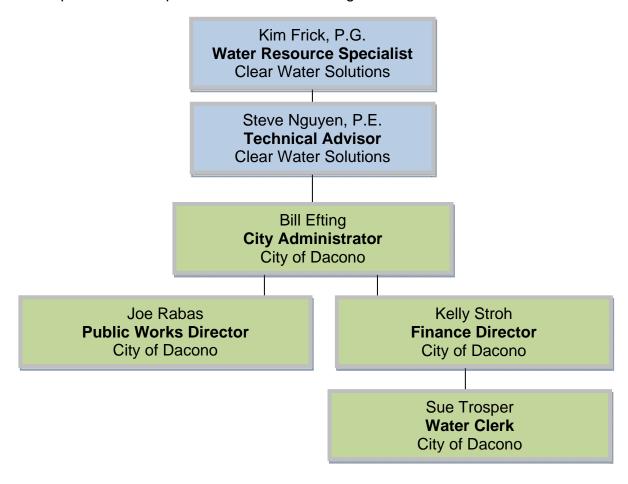
City of Dacono Water Conservation Plan Attachment A - Scope of Work

This Scope of Work describes the work to be performed by Clear Water Solutions, Inc. (CWS or Consultant) for the City of Dacono. The scope outlines the tasks required to successfully complete a Water Conservation Plan in accordance with CWCB's Water Conservation Plan guidelines and policies.

The scope includes the following tasks:

Task A – Develop Water Conservation Plan per CWCB Guidance Document **Task B** – Public-Review Process

The scope will be completed under the following structure:



TASK A - DEVELOP WATER CONSERVATION PLAN

Purpose

Water Conservation Plans are required under the Water Conservation Act of 2004 for covered entities that seek financial assistance from the CWCB or the Colorado Water Resources and Power Development Authority. The objective of this task for the City of Dacono is to develop a Plan that meets the CWCB requirements, makes beneficial and responsible use of the City's water supplies, and ultimately enables them to apply for state financial assistance for subsequent projects.

Approach

The Water Conservation Plan will be developed following CWCB's Water Conservation Plan Development Guidance Document. This document outlines the requirements needed for CWCB's approval. The Consultant will submit a draft Plan to the City for comments prior to a public-review period. Following the public-review process, the Consultant will incorporate public comments and submit the Plan to CWCB for final approval.

The development of the Plan is divided into subtasks similar to what is indicated in the CWCB Model Plan Template. These subtasks list the items that need to be included in the Water Conservation Plan for CWCB approval. Where appropriate, the Consultant will use previous studies completed for the City.

Step 1 – Profile the Existing Water System

Purpose

The activities described under this task will provide information on Dacono's existing water supply system.

Approach

- 1.1 Profile physical characteristics of the existing water supply system:

 CWS, with the help of City staff, will describe the physical characteristics of the water system using Worksheet 1-1 as a guide. Included in the summary will be key system characteristics, geographic area served, population and connections served, types of key water users, key existing facilities, and water demand.
- 1.2 Identify all water sources:

CWS will identify and describe all of the system's water supply sources including attributes, age, seniority, and conditions of its use. Estimates will be made for any missing information.

1.3 Identify system limitations:

CWS will describe the City's water system limitations using Worksheet 1-2 as a guide.

1.4 Characterize water costs and pricing structures:

In coordination with City staff, CWS will document past and current history of water sales.

1.5 Review current policies and planning initiatives:

In coordination with City staff, CWS will discuss major policies the City has in place that affect water use under normal and drought conditions. In addition, CWS will summarize major planning efforts to date.

1.6 Summarize current water conservation activities:

CWS will summarize current water conservation activities using Worksheet 1-3 as a guide.

Step 2 – Characterize Water Use and Demand Forecast

Purpose

The activities described under this task will provide information on Dacono's existing and projected water use.

Approach

2.1 Characterize current water use:

In coordination with City staff, CWS will review sales records, diversion records and billing records to summarize current water use. Included in the discussion will be quantifications of indoor vs. outdoor use and potable vs. non-potable use. CWS will also examine historical water use by tap size, identify top water purchasers, and quantify the amount of the water purchased.

2.2 Select forecasting method:

A demand forecasting method will be selected and described.

2.3 Prepare demand forecast:

CWS will work with the City to estimate future water demand by tap size or customer category according to the selected forecasting method. Worksheet 2-1 will be used as a guide along with current forecasting done for other planning efforts. For irrigation uses, a per-acre projection will be used.

Step 3 – Profile Proposed Facilities

Purpose

The activities described under this task will identify and describe planned improvements based on the results from step two and estimate the associated costs.

Approach

3.1 Estimate supply costs based on the demand forecast:

CWS will work with City staff to prepare incremental and total costs for water supplies that are appropriate for Dacono.

- 3.2 Identify and describe anticipated capital facility improvements and additions:
 With the help of staff and existing planning documents, CWS will
 summarize facility needs over a similar time horizon used for demand
 forecasting using Worksheet 3-1 as a guide.
- 3.3 Estimate total, annual and unit cost of the improvements:

CWS will work closely with staff to develop reasonable cost estimates of improvements. Worksheet 3-2 will be used as a guide.

3.4 Develop a water supply capacity forecast:

CWS will combine information gathered in this step to provide a summarized supply capacity forecast.

Step 4 – Identify Conservation Goals

Purpose

The activities described under this task will identify conservation goals for the City based on water use characteristics.

Approach

4.1 Develop water conservation goals:

CWS will develop water conservation goals in collaboration with City staff. Areas for water conservation will be identified by staff based on results from Steps 2 and 3. A specific water-savings target, as well as how the savings will be measured, will be identified.

4.2 Document the goal development process:

CWS will document the process used to develop the water conservation goals.

Step 5 – Identify Conservation Measures and Programs

Purpose

The activities described under this task will identify conservation measures and programs the City may implement to reach the conservation goals identified in Step 4.

Approach

5.1 Identify conservation measures and programs:

City staff and CWS will collectively develop water conservation measures using Worksheets 5-1 and 5-2 as a guide.

5.2 Develop and define screening criteria:

City staff and CWS will describe the screening criteria used to evaluate and eliminate some of the water conservation measures and programs.

5.3 Screen conservation measures and programs:

The screening criteria will be applied to the "universal" list of conservation measures and programs to determine which ones will be further evaluated in the planning process.

Step 6 – Evaluate and Select Conservation Measures and Programs

Purpose

The activities described under this task are intended to evaluate and select the optimal conservation measures and programs the City may implement.

Approach

6.1 Create combinations of measures and programs:

CWS will review all conservation measures and programs that passed the screening criteria and group them, so similar measures and associated water-savings are not double counted.

6.2 Estimate costs and water savings of conservation options:

Using Worksheet 6-1 as a guide, City staff and CWS will estimate the cost of each conservation measure/program and the associated water savings. A cost/benefit analysis will be included.

6.3 Compare benefits and costs:

CWS will summarize conservation measure costs and water savings, including a net benefit from all suggested measures using Worksheets 6-1 and 6-2 as a guide.

6.4 Define evaluation criteria:

City staff and CWS will develop criteria used to select the conservation measures/programs for implementation. Key criteria will be cost for implementation and potential water savings.

6.5 Select conservation measures and programs:

CWS will summarize the evaluation of each measure/program based on the evaluation criteria and indicate, with staff and Council input, which measures/programs will be implemented. The water savings from the implementation will be estimated using Worksheet 6-3 as a guide.

Step 7 – Integrate Resources and Modify Forecasts

Purpose

The activities described under this task will modify the supply and demand forecasts to account for water savings from the selected conservation measures and programs. The benefits of conservation as well as revenue effects will also be addressed.

Approach

7.1 Revise demand forecast:

CWS will revise the demand forecast prepared in Step 2 to account for the water savings of the measures/programs from Step 6. Worksheet 7-1 will be used as a guide.

7.2 Identify project-specific savings:

City staff and CWS will determine the effect of water savings from conservation on the timing and capacity of facility improvement projects and quantify savings.

7.3 Revise supply-capacity forecast:

CWS will revise the supply capacity forecast based on findings from Step 7.2.

7.4 Summarize forecast modifications and benefits of conservation:

CWS will develop a graph showing demand and supply with and without conservation.

7.5 Consider revenue effects:

CWS will quantify impacts to revenues from implementation of water conservation. Savings in capital improvement projects or delayed water acquisition will be presented against loss in sales revenue. Strategies to address this issue will be discussed.

Step 8 – Develop Implementation Plan

Purpose

The activities described under this task will present a strategy for implementing the selected conservation measures and describe methods for monitoring the success of the plan.

Approach

8.1 Develop implementation schedule:

CWS and City staff will discuss significant implementation actions and obstacles for implementing the selected conservation measures. CWS will develop a reasonable implementation schedule and timetable to follow.

8.2 Develop plan for public participation in implementation:

City staff and CWS will describe how to involve the public in the implementation process.

8.3 Develop plan for monitoring and evaluation progress:

CWS, with input from City staff, will determine and describe how the Water Conservation Plan will be measured for effectiveness.

8.4 Develop plan for updating and revising the plan:

City staff will describe when it intends to update the Water Conservation Plan.

8.5 Define plan adoption date/plan completed date/plan approved date:

A copy of the approval resolution adopting the final Water Conservation Plan will be included. CWS will develop a schedule for Dacono City Council approval and adoption.

Step 9 – Monitor, Evaluate and Revise Conservation Activities and the Conservation Plan

Purpose

Commit to monitor the performance of the plan including updating the plan as required.

Approach

9.1 Implement the plan:

The plan will be implemented and monitored based on the schedule developed from Step 8.

TASK B - PUBLIC REVIEW PROCESS

Purpose

City will seek public input on the plan through use of a 60-day public review period.

Approach

City staff, with help from CWS, will coordinate the following:

- Announcing the public-review period and making the plan publicly available.
- Advertising to the public that comments will be taken throughout the 60-day public review period.
- Collecting and organizing public comments. These comments will be provided to CWS following the public-review period.

CWS will incorporate and respond to public comments in the final draft of the Plan.

REQUIREMENTS

- 1. City Council and staff will review a final draft of the plan and provide comments.
- 2. CWS will incorporate the City's comments prior to the public-review process.
- 3. Public comments will be solicited and incorporated into the plan.
- 4. The City will formally adopt the final plan.
- 5. CWS will submit the final plan to CWCB.
- 6. CWCB will review final plan.

DELIVERABLES

CWS will submit the following:

- Monthly invoices to the City with brief progress reports.
- Submit 50% and 75% progress reports to CWCB.
- Provide draft plan to the City for comments prior to submission to CWCB.
- Final plan submitted electronically to CWCB with all comments, including public input.
- Ten hard copies of the final Water Conservation Plan submitted to the City after CWCB's final approval.

ATTACHMENT B

Project Schedule - Revised 10-28-10 City of Dacono Water Conservation Plan

| Task | Date | | | |
|--|------------------|--|--|--|
| Grant application submitted to CWCB | 3/3/2010 | | | |
| CWCB approves grant and PO issued | 11/12/2010 | | | |
| Meeting with Dacono staff for kick off meeting and overview of system | 11/30/2010 | | | |
| Meeting with Dacono staff for goal setting and review | 1/5/2011 | | | |
| Submit 50% progress report to CWCB | 1/31/2011 | | | |
| Submit 75% progress report to CWCB | 2/28/2011 | | | |
| Submit draft plan to staff for review and comment | 3/15/2011 | | | |
| Staff provides comment from review | 3/23/2011 | | | |
| Submit final draft to City Council for review | 3/28/2011 | | | |
| Collect City Council comments and discussion on final draft at meeting | 4/11/2011 | | | |
| Notify public of draft plan in paper or water bill | 4/15/2011 | | | |
| Public review period (60 days) | 4/16 - 6/15/2011 | | | |
| Dacono provides public input comments to CWS | 6/16/2011 | | | |
| CWS incorporates public comments | 6/22/2011 | | | |
| CWS submits final plan to CWCB | 6/23/2011 | | | |
| Dacono City Council formally adopts final draft | 6/27/2011 | | | |
| CWCB approves plan | up to 90 days | | | |

| | CWS | | cws | | | | City of Dacono Staff (In-Kind) | | | | | | | | | | CWCB |
|---|------------|---------------------------|--------|-------------------------|------------------|-----------------------|--------------------------------|----------------------|---------|-----------------------|---------------|----------------------|----------------------------|--|---------------------|---------------------------|---------------------------|
| | | Frick | | Nguyen | | II E. | | n R. | Ke | | St | | Labor | Expense | Cash | Grand | Grant |
| ITEMS OF WORK | HOURS | SUB | HOURS | SUB TOTAL | HOURS \$48.08 | SUB TOTAL | HOURS \$31.35 | SUB TOTAL | HOURS | SUB TOTAL | HOURS | SUB TOTAL | Total | Total | Contribution | Total | Request |
| TASK A - Develop Water Conservation Plan | \$110 | TOTAL | \$150 | TOTAL | \$48.08 | TOTAL | \$31.35 | TOTAL | \$32.93 | TOTAL | \$17.06 | TOTAL | | | | | |
| | | | | | | | | | | | | | | | | | |
| Step 1 - Profile of Existing Water System 1.1 Profile Existing Water System | 10 | \$1,320 | 1 | \$150 | 1 | \$48 | 4 | \$125 | | \$0 | | \$0 | \$1,643 | | \$500 | \$2,143 | \$970 |
| 1.2 Identify Sources of Water | 12 2 | \$1,320 \$220 | 1 | \$150 \$150 | 1 | \$48 \$48 | 4 | \$125 \$125 | | \$0 \$0 | | \$0 \$0 | \$1,643 \$543 | | \$500 | \$2,143 \$543 | \$970 \$370 |
| 1.3 Identify System Limitations | 4 | \$220 \$440 | 1 | \$150 \$150 | 1 | \$48 | 4 | \$125 | | \$0 \$0 | | \$0 | \$763 | | | \$763 | \$570 \$590 |
| 1 | 6 | | 1 | | 2 | | 1 | | 40 | | 40 | | | | | | \$810 |
| 1.4 Characterize Water Costs and Pricing | 4 | \$660 \$440 | 1 | \$150 \$450 | 2 | \$96 \$96 | 1 | \$31 \$31 | 12 5 | \$395 | 16 5 | \$273 \$85 | \$1,606 \$967 | | | \$1,606 \$967 | \$590 |
| Review Current Policies and Planning Initiatives Summarize Current Water Conservation Activities | 4 | \$440 \$440 | 1 | \$150 \$150 | 2 | \$96 \$96 | 1 | \$31 | 4 | \$165 \$132 | 4 | \$68 | \$967 \$886 | | | \$967 \$886 | \$590 \$590 |
| Sub-Total | 32 | \$440 \$3,520 | 6 | \$150 \$900 | 9 | \$96 \$433 | 14 | \$439 | 21 | \$132 \$692 | 25 | \$68 \$427 | \$6,410 | | \$500 | \$6,910 | \$3,920 |
| Step 2 - Characterize Water Use and Forecast Demand | 32 | \$3,520 | 0 | \$900 | 9 | \$433 | 14 | \$439 | 21 | \$092 | 20 | \$427 | \$0,410 | | \$500 | \$6,910 | \$3,920 |
| | 16 | \$1,760 | 1 | \$150 | 2 | \$96 | 1 | \$31 | 2 | \$66 | 8 | \$136 | \$2,240 | | \$500 | \$2,740 | \$1,410 |
| 2.1 Characterize Current Water Use 2.2 Select Forecasting Method | 2 | \$220 | ' | \$150 | 2 | \$96 \$96 | ' | \$0 | 1 | \$33 | 1 | \$17 | \$366 | | \$500 | \$366 | \$220 |
| 2.3 Prepare Demand Forecast | 12 | \$1,320 | 4 | \$600 | 2 | \$96 | 1 | \$31 | 2 | \$66 | 1 | \$17 | \$2,130 | | | \$2,130 | \$1,920 |
| Sub-Total | 30 | \$3,300 | 5 | \$750 | 6 | \$288 | 2 | \$63 | 5 | \$165 | 10 | \$171 | \$4,736 | | \$500 | \$5,236 | \$3,550 |
| Step 3 - Profile Proposed Facilities | 30 | φ3,300 | , | φ/30 | U | φ200 | | φ03 | J | \$100 | 10 | φινι | φ4,730 | | <i>\$300</i> | φJ,230 | φ3,330 |
| 1 . | | 0000 | 2 | #200 | 1 | ¢40 | 2 | \$63 | 4 | ¢422 | | \$0 | \$1,423 | | \$500 | ¢1 000 | \$680 |
| Identify and Cost Potential Facility Needs Prepare an Incremental Cost Analysis | 8 8 | \$880 \$880 | 2 | \$300 \$300 | 1 | \$48 \$48 | 2 | \$63 | 4 | \$132 \$132 | 4 | \$68 | \$1,423 \$1,491 | | φουυ | \$1,923 \$1,491 | \$1,180 |
| 3.2 Prepare an incremental Cost Analysis 3.3 Develop Preliminary Capacity and Costs Forecasts | 8 | \$880 \$880 | 2 | \$300 | 1 | \$48 \$48 | 2 | \$63 | 2 | \$132 \$66 | 4 | \$08 \$0 | \$1,491 | | | \$1,491 | \$1,180 |
| Sub-Total | 24 | \$880 \$2,640 | 6 | \$300 \$900 | 3 | \$48 \$144 | 6 | \$63 \$188 | 10 | \$329 | 4 | \$68 | \$1,357 \$4,270 | | \$500 | \$1,357 \$4,770 | \$1,180 \$3,040 |
| Step 4 - Identify Conservation Goals | 24 | φ 2 ,040 | U | φσυυ | 3 | φ144 | U | φ100 | 10 | φ323 | - | 900 | φ 4 ,210 | | <i>\$300</i> | φ4,110 | φ3,0 4 0 |
| 4.1 Develop Water Conservation Goals | 8 | \$880 | 4 | \$600 | 4 | \$192 | 1 | \$31 | 4 | \$132 | 4 | \$68 | \$1,904 | | \$500 | \$2,404 | \$980 |
| 4.1 Develop Water Conservation Goals 4.2 Document the Goal Development Process | 2 | \$880 \$220 | 4 | \$600 \$0 | 4 | \$192 | 1 | \$31 | 1 | \$132 | 1 | \$68 \$17 | \$1,904 | | φουυ | \$2,404 \$301 | \$980 \$220 |
| Sub-Total | 10 | \$1,100 | 4 | \$600 | 4 | \$1 92 | 2 | \$63 | 5 | \$1 65 | 5 | \$85 | \$2,205 | | \$500 | \$2,705 | \$1,200 |
| Step 5 - Identify Conservation Measures and Programs | 10 | φ1,100 | 4 | φυυυ | 4 | φ19Z | | 403 | J | φ100 | J | 9 80 | ⊅∠,∠ UO | | φουυ | ⊅∠,70 5 | φ1,200 |
| | 8 | \$880 | 4 | \$600 | 4 | \$192 | 1 | \$31 | 4 | \$132 | 4 | \$68 | \$1,904 | | \$500 | \$2,404 | \$980 |
| 5.1 Identify Conservation Measures and Programs 5.2 Develop and Define Screening Criteria | 4 | \$440 | 1 | \$150 | 2 | \$96 | 2 | \$63 | 2 | \$66 | 2 | \$34 | \$849 | | \$500 | \$2,404 \$849 | \$590 \$590 |
| 5.3 Screen Conservation Measures and Programs | 24 | \$2,640 | 1 | \$150 \$150 | 4 | \$192 | | \$03 \$0 | 4 | \$132 | 4 | \$68 | \$3,182 | | | \$3,182 | \$2,790 |
| Sub-Total | 36 | \$2,640 \$3,960 | 6 | \$900 | 10 | \$192 \$481 | 3 | \$94 | 10 | \$329 | 10 | \$171 | \$5,162 \$ 5,935 | | \$500 | \$6,435 | \$2,790 \$4,360 |
| Step 6 - Evaluate and Select Conservation Measures and Programs | 30 | φ3,900 | 0 | \$900 | 10 | ⊅40 1 | J | Ф94 | 10 | \$329 | 10 | φ1/1 | \$5,935 | | \$500 | Φ0,435 | \$4,300 |
| 6.1 Create Combinations of Measures and Programs | 8 | \$880 | 1 | \$150 | 1 | \$48 | | \$0 | 2 | \$66 | 2 | \$34 | \$1,178 | | \$500 | \$1,678 | \$530 |
| 6.2 Estimate Costs and Water Savings of Conservation Options | 28 | \$3,080 | 4 | \$600 | 1 | \$48 | | \$0 | 4 | \$132 | 4 | \$68 | \$3,928 | | \$300 | \$3,928 | \$3,680 |
| 6.3 Compare Benefits and Costs | 16 | \$1,760 | 1 | \$150 | 1 | \$48 | 1 | \$31 | 2 | \$66 | 4 | \$00 | \$2,055 | | | \$2,055 | \$1,910 |
| 6.4 Define Evaluation Criteria | 4 | \$440 | 1 | \$150 \$150 | 2 | \$46 \$96 | 2 | \$63 | 2 | \$66 | 2 | \$34 | \$849 | | | \$2,055 \$849 | \$590 |
| 6.5 Select Conservation Measures and Programs | 8 | \$880 | 1 | \$150 \$150 | 2 | \$96 \$96 | 2 | \$63 | 2 | \$66 | 2 | \$34 | \$1,289 | | | \$1,289 | \$1,030 |
| Sub-Total | 64 | \$7,040 | 8 | \$1,200 | 7 | \$337 | 5 | \$157 | 12 | \$395 | 10 | \$171 | \$9,299 | | \$500 | \$ 9,799 | \$7,740 |
| Step 7 - Integrate Resources and Modify Forecasts | 04 | φ1,040 | 0 | φ1,200 | | ψ337 | J | \$15 <i>1</i> | 12 | \$393 | 10 | φ1/1 | \$9,299 | | \$500 | <i>\$9,799</i> | \$1,740 |
| 7.1 Revise Demand Forecasts | 8 | \$880 | 1 | \$150 | 1 | \$48 | | \$0 | 2 | \$66 | | \$0 | \$1,144 | | \$500 | \$1,644 | \$530 |
| 7.2 Identify Project Specific Savings | 8 | \$880 | 1 | \$150 | 1 | \$48 | | \$0 | 4 | \$132 | | \$0 | \$1,144 | | \$300 | \$1,044 | \$1,030 |
| 7.3 Revise Supply-Capacity Forecasts | 8 | \$880 | 1 | \$150 | 1 | \$48 | | \$0 | 2 | \$66 | | \$0 | \$1,210 | | | \$1,210 | \$1,030 |
| 7.4 Summarize Forecast Modifications and Benefits of Conservation | 8 | \$880 | ' | \$150 | 1 | \$48 | | \$0 \$0 | 2 | \$66 | | \$0 | \$994 | | | \$994 | \$880 |
| 7.4 Summarize Forecast Modifications and Benefits of Conservation 7.5 Consider Revenue Effects | 8 | | 1 | \$0 \$150 | 2 | \$48 \$96 | | \$0 \$0 | 2 | \$66 | 2 | \$0 \$34 | | | | | \$1,030 |
| 7.5 Consider Revenue Effects Sub-Total | 40 | \$880 \$4.400 | 4 | \$150 \$600 | 6 | \$96 \$288 | o | \$0 \$0 | 2 12 | \$66 \$395 | 2 2 | \$34 \$34 | \$1,226 \$5,718 | | \$500 | \$1,226 \$6,218 | \$1,030 \$4,500 |
| Step 8 - Develop Implementation Plan | 40 | \$4,400 | * | φυυυ | U | φ∠00 | U | φυ | 12 | φυθυ | - | φ34 | φυ,/10 | | φυσου | φυ,210 | φ4,300 |
| 8.1 Develop Implementation Schedule | 8 | \$880 | 2 | \$300 | 2 | \$96 | 2 | \$63 | 2 | \$66 | 2 | \$34 | \$1,439 | | \$1,000 | \$2,439 | \$180 |
| 8.2 Develop Plan for Public Participation in Implementation | 1 | \$880 \$110 | | \$300 \$0 | 1 | \$96 \$48 | | \$63 \$0 | 2 | \$66 | 4 | \$34 \$68 | \$1,439 \$292 | | φ1,000 | \$2,439 \$292 | \$180 \$110 |
| 8.2 Develop Plan for Public Participation in Implementation 8.3 Develop Plan for Monitoring and Evaluation Processes | 4 | \$110 \$440 | | \$0 \$0 | 2 | \$48 \$96 | 2 | \$0 \$63 | 2 | \$66 | 2 | \$68 \$34 | \$292 \$699 | | | \$292 \$699 | \$110 \$440 |
| 8.4 Develop Plan for Updating and Revising the Conservation Plan | 1 | \$440 \$110 | | \$0 \$0 | 1 | \$96 \$48 | | \$63 \$0 | 1 | \$33 | | \$34 \$0 | \$699 \$191 | | | \$699 \$191 | \$440 \$110 |
| 8.4 Develop Plan for Opdating and Revising the Conservation Plan 8.5 Define Plan Adoption Date/Plan Completed Date/Plan Approved Date | | | | \$0 \$0 | 1 | \$48 \$48 | | \$0 \$0 | 1 | | | \$0 \$0 | | | | | |
| | | \$110 \$1.650 | 2 | \$0 \$300 | 7 | \$48 \$337 | 4 | \$0 \$125 | 8 | \$33 \$263 | 8 | | \$191 \$2.912 | | \$1,000 | \$191 \$2.812 | \$110 \$950 |
| Sub-Total Step 9 - Monitor, Evaluate, and Revise Conservation Activities | 15 | \$1,650 | 2 | φ3 <i>00</i> | | φ 33/ | 4 | φ120 | ď | ∌ ∠03 | σ | \$136 | \$2,812 | | \$1,000 | \$3,812 | φθου |
| 9.1 Implement the Plan | 1 | \$110 | 1 | \$150 | 1 | \$48 | 1 | \$31 | 1 | \$33 | 1 | \$17 | \$389 | | | \$389 | \$260 |
| Sub-Total | 1 | \$110 \$110 | 1 | \$150 \$150 | 1 | \$48 \$48 | 1 | \$31 \$31 | 1 | \$33 \$33 | 1 | \$17 \$17 | \$389 \$389 | | \$0 | \$389 \$389 | \$260 \$260 |
| TASK A TOTAL | 252 | \$27,720 | 42 | \$6,300 | 53 | \$48 \$2,548 | 37 | \$1,160 | 84 | \$2,766 | 75 | \$1,280 | \$389 \$41,774 | | \$4,500 | \$46,274 | \$29,520 |
| TASK B - Public Outreach | 232 | φ ∠ 1,1 ∠ U | 44 | φυ, 3 00 | JJ | φ ∠ ,340 | 31 | φ1,10U | 04 | φ∠,100 | 13 | φ1,200 | φ+1,//4 | | φ 4 ,300 | φ40,274 | φ∠ϑ,3∠U |
| Meeting w/Board to discuss potential measures/programs | 8 | \$880 | 4 | \$600 | 4 | \$192 | 4 | \$125 | 4 | \$132 | 4 | \$68 | \$1,998 | | | \$1,998 | \$1,480 |
| Public Meeting to solicit feedback | 8 | | - | | | | 4 | | 4 | | | - | | | | | \$1,480 \$1,480 |
| TASK B TOTAL | 16 | \$880 \$1,760 | 4 8 | \$600 \$1,200 | 4 8 | \$192 \$385 | 4 | \$0 \$125 | 8 | \$132 \$263 | 4 8 | \$68 \$136 | \$1,872 \$3,870 | | \$0 | \$1,872 \$3,870 | \$1,480 \$2,960 |
| General Project Expenses | 10 | φ1,700 | 9 | φ1,200 | U | φυσυ | * | φιΖθ | 9 | φ 2 03 | - U | φ130 | φ3,010 | | φυ | φ3,070 | φ 2 ,900 |
| Reproduction of Reports - 10 copies x \$80/copy + 3 hours x \$65/hr | | | | | | | | | | | | | | \$995 | | \$995 | \$995 |
| | | | | | | | | | | | | | | \$995 \$211 | | | \$995 \$211 |
| Travel - 5 meetings x \$0.585/mi x 72 mi Phone conf. with CWCB after final review and incorporate comments | 12 | \$1,320 | 2 | \$300 | 4 | \$192 | | \$0 | | \$0 | | \$0 | \$1,812 | ا ا ∠چ | | \$211 \$1,812 | \$211 \$1,620 |
| GENERAL PROJECT EXPENSES TOTAL | 12 12 | \$1,320 \$1,320 | 2 | \$300 \$300 | 4 | \$192 \$192 | 0 | \$0 \$0 | 0 | \$0 \$0 | 0 | \$0 \$0 | \$1,812 \$1,812 | \$1 206 | | \$1,812 \$3,018 | \$1,620 \$2,826 |
| TOTAL FEE | 280 | | 52 | | 65 | \$3,125 | 41 | \$1,285 | 92 | \$3,030 | 83 | \$1,416 | | \$1,206 \$1,206 | \$4 F00 | \$53,162 | |
| TOTAL FEE | 20U | \$30,800 | 52 | \$7,800 | ชอ | ⊅ 3,125 | 41 | ⊅1,∠ 83 | 92 | გა,სპს | 63 | Φ1,410 | \$47,456 | \$1,206 | \$4,500 | ⊅ 23,10∠ | \$35,306 |