

# **Water Efficiency Grant Application**

## **For Preparation of Water Conservation Plan Update**

### **East Larimer County Water District**

#### **Introduction**

This water efficiency grant application has been prepared for the consideration of the Colorado Water Conservation Board (CWCB) and the Office of Water Conservation and Drought Planning by the East Larimer County Water District (hereafter the “ELCO” or the “District”). For the purposes of this grant application and in the advent of award, the execution of the proposed project, ELCO is the lead organization. Noteworthy is that ELCO, which by the State’s definition is a covered entity<sup>1</sup>, will be conducting the Water Conservation Plan update of the District’s 2007 Approved Water Conservation Plan to both:

- make current it’s existing plan with regarding to the water conservation and water use efficiency efforts that have been implemented locally by ELCO in the past 7 years; and
- expand the assessment and evaluation of best management practices (BMPs) related to water loss management, water rates, and overall water conservation and drought planning.

#### **Organizational Background and Overview of Water Supply**

ELCO provides drinking water to homes and businesses within a 53 square mile service area located north and east of Fort Collins, Colorado. The District was created by court decree in 1962 after voters in Larimer and Weld Counties approved formation of the District. ELCO Water District is a political subdivision of the State of Colorado. It is governed and operated in accordance with the Colorado Special Districts Act by a directly elected five-member Board.

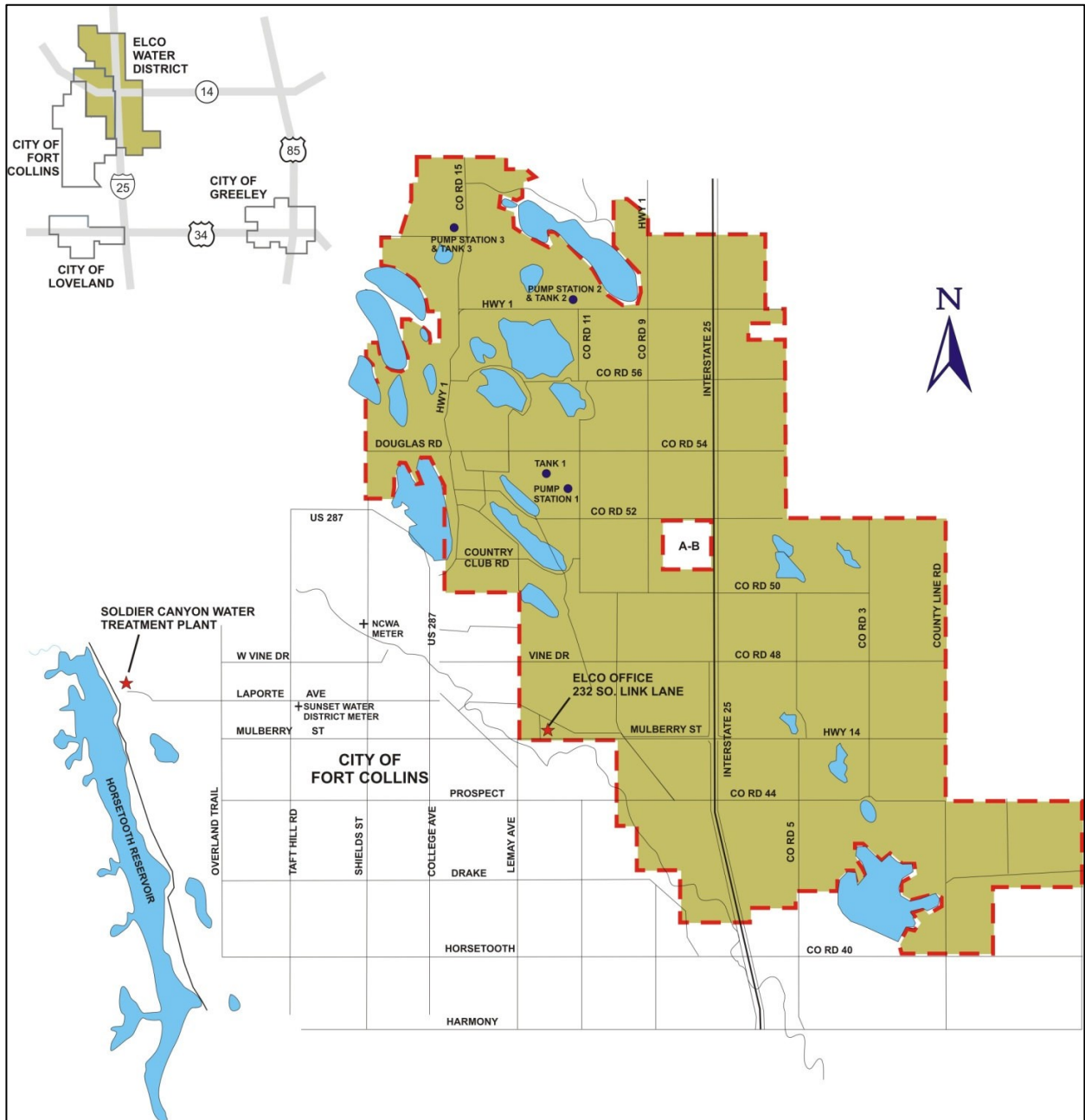
Figure 1 shows ECLO’s service area, the location of the Solder Canyon Water Treatment Plant (SCFP) and location of the District’s pump stations and treated water storage reservoirs.

Until the mid 1990’s, ELCO served primarily low-density rural subdivisions, dairies, farmsteads, mobile home parks, motels, rural residential acreages, industrial parks, and two small wholesale water suppliers. Originally, ELCO customers were in subdivisions approved by Larimer County and located primarily along the Colorado Highway 14 corridor between I-25 and the Fort Collins District limits. Since about 1995, most of ELCO’s new customers have been located in developments approved by the District rather than Larimer County.

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<sup>1</sup> A covered entity is defined by the State as a municipality, agency, utility, including any privately owned utility, or other publicly owned entity with a legal obligation to supply, distribute, or otherwise provide water at retail to domestic, commercial, industrial, or public facility customers, and that has an annual total demand for such customers of two thousand acre-feet or more.

Figure 1 – Location of ELCO Service Area



Standards adopted by the District of Fort Collins create very different types of developments from those traditionally served by ELCO. In recent years, ELCO has issued water taps to Home Depot, Wal-Mart, and new homes in several large District-approved high-density residential developments. The minimum density currently allowed in new residential developments within the District of Fort Collins is an average of five dwelling units per acre.

At this time, approximately 40% of the 53 square miles served by the District are within the corporate boundaries of Fort Collins or within the District's Greater Metro Area (GMA). The GMA was established by agreement between Larimer County and the City of Fort Collins in 1980. The two entities entered into an intergovernmental agreement that required all land within the GMA to be annexed into the District before development or, if not eligible for annexation, developed under the District's density and service level standards and annexed as soon as it became eligible. Larimer County has also entered into intergovernmental agreements with the towns of Wellington and Timnath, both of which plan to eventually annex lands which are within the service area of ELCO.

ELCO is one of three water districts that share ownership of the SCFP, a regional water treatment facility. SCFP provides treated water to ELCO, North Weld County (NWCWD) and Fort Collins-Loveland Water Districts (FCLWD).

SCFP operates under an Amended Intergovernmental Agreement between the three Districts that own the plant. Executed in December, 1995, the Agreement establishes SCFP as a separate governmental entity created under the provisions of C.R.S. §29-1-203. The Agreement confirms an undivided one-third ownership in the facility by each District and establishes the method of payment for capital improvements and treated water. A Steering Committee consisting of two members from each District governs operations at the SCFP.

Through connections with the three Districts that own SCFP, water is also supplied through wholesale agreements to the Towns of Windsor, Timnath, Severance, Eaton, Ault, and Nunn. ELCO operates two wholesale connections – one each with Northern Colorado Water Association (NCWA) and Sunset Water District.

## **Customer Characteristics and Water Use**

ELCO has five customer category accounts: 1) Single Family, 2) Multi-Family, 3) Mobile Home Parks, 4) Non-residential, and 5) Wholesale. The Non-Residential customer category includes commercial users as well as irrigation-only taps for parks and open space areas. The two Wholesale accounts are NCWA and Sunset Water District. Note that the Anheuser-Busch brewery is located within the service area of the District, but it does not receive water from ELCO. The City of Fort Collins provides water service to the brewery.

Table 1 presents the annual water use breakdown for ELCO from 2009 through 2014, including the volume of water delivered to ELCO from SCFP, the amount of water billed to each customer category, and the total water billed. In addition, this table shows the calculated non-revenue water, and the number of water customer connections for each of the years of interest.

**Table 1**  
**Summary of ELCO Water Production and Water Sold Data 2009-2014**  
(volumes in thousands of gallons)

		Water Sold									
	Production	Residential	Multi Family	Non- Residential	Mobile Homes	Wholesale	Total	Non-Revenue Water	Number of Connections	% Change in Number of Connections	Billed Per Connection (g/day)
2009	1,118,565	557,936	28,998	155,738	65,154	150,846	958,672	159,893	5,802		453
2010	1,224,734	663,756	33,396	174,459	66,073	113,582	1,051,266	173,468	5,888	1.48%	489
2011	1,121,357	635,096	31,934	177,910	63,719	114,742	1,023,401	97,956	6,006	2.00%	467
2012	1,408,260	757,600	35,432	189,782	55,323	133,369	1,171,506	236,754	6,199	3.21%	518
2013	1,440,467	645,703	32,648	171,494	56,353	115,189	1,021,387	419,080	6,620	6.79%	423
2014	1,312,657	615,999	31,848	179,113	82,308	134,839	1,044,107	268,550	6,792	2.60%	421

As can be seen from the data presented in Table 1, growth in the ELCO service area has been substantial in the last 6 years, increasing by about 17% from early 2009 to the end of 2014, which is driven almost entirely by an increase in single family residential connections. Although per connection use has decreased in the most recent years, total water production has trended upward, as has non-revenue water. In 2014, non-revenue water was about 20% of water production, which is an increase over previous years when this same metric was about 14% of total production.

Another important characteristic of the ELCO water use data is per connection use. Table 2 illustrates the average annual per connection water use for single family residential customers prior to the 2007 water conservation plan and prior to this update. Average per connection water use has dropped by 17% over this time which is indicative of a substantial reduction in residential water use.

**Table 2**  
**Comparison of Residential Per Connection Water Use since 2001**

	Number of Residential Connections	Residential Use (AF)	Per Connection use (gallons/day)
2014	6,065	1,890	278
2013	5,763	1,982	307
2012	5,441	2,325	382
2011	5,293	1,949	329
		Average 2011-2014	324
2006	4,864	2,314	425
2005	4,765	1,925	361
2004	4,564	1,662	325
2003	4,414	1,758	356
2002	4,132	1,883	407
2001	3,727	1,991	477
		Average 2001-2006	392

This observed reduction in per connection water use is likely a result of a combination of factors, including, but perhaps not limited to passive water use reductions<sup>2</sup>, alternative construction techniques (e.g., higher density housing), increased use of non-potable supplies (see below), improved customer water use efficiencies, etc.

Based on the observed increase in non-revenue water volumes and reduction in residential per connection water use, the District will likely focus its future water conservation measures and programs on improving water loss management and reducing non-revenue water.

### Non-potable Irrigation

ELCO encourages installation of non-potable irrigation systems through its development fees and raw water dedication requirements. New developments that install a non-potable irrigation system designed by a registered professional engineer receive significant reductions in the raw water dedication requirements and plant investment fees (PIFs).

A number of homeowner's associations (HOAs) and individuals in ELCO's service area currently utilize a raw water source for landscape irrigation. A customer survey performed during the fall of 2004 asked customers what type of water they use to irrigate their landscaping. Of the 900 surveys mailed to customers, 582 were completed and returned (a response rate of 65%). Of the customers returning the survey, 12.9% indicated they obtained irrigation water from a well. Another 7.4% indicated they obtained irrigation water from a ditch, canal or lake.

The relatively high percentage of customers (20.3%) using raw water for irrigation in the past is a reflection of the rural nature of development within ELCO's service area. Many individual lot owners in areas of high ground water have drilled their own wells. Large estate lots served by ELCO were usually created by subdividing farms that were irrigated with shares in the North Poudre Irrigation Company (NPIC) or irrigation wells. It was standard practice in the past to transfer those water rights to individuals or an HOA to provide raw water for turf irrigation.

## **Population Served and Per Capita Water Use**

The District has seen a consistent growth in population served since the turn of the century. Based on the number of residential customer connections, from 2001 to 2014, the District's population increased by over 60%. As shown in Table 3, population has averaged increased by about 17% since 2009, from about 16,140 to nearly 18,700.

Per capita water use varied from 153 to 187 gpcd, corresponding roughly to the relative evapotranspiration (ET) associated with each of the last six years (as shown in Table 3). For example, the driest year, 2012, had both the highest ET and the largest per capita water use. Although the correlation between ET and per capita water use is not perfect, there is clearly a relationship

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<sup>2</sup> Passive water savings relate to reductions in per person water use associated with the installation and use of high efficiency toilets, showerheads, dishwashers and washing machines. These savings occur organically and are not the result of active water conservation programs being implemented by the District, nor are they associated with a behavior change in how water is used by the customer.

between hotter drier years and increased per person water use. Future tracking of ET versus per capita and per connection water use will be valuable in identifying areas where water use efficiencies may be valuable and in characterizing customer behaviors that impact water sales.

<b>Table 3 Current and Projected Future Population</b>			
Year	Population	ET (inches/year) <sup>3</sup>	Per Capita Water use (System Wide) (gallons/day)
2009	16,148	60.36	163
2010	16,368	62.08	176
2011	16,667	63.35	168
2012	17,154	70.98	187
2013	18,243	61.80	153
2014	18,687	61.44	153
2015	18,950	-	-
2016	19,405	-	-
2017	19,870	-	-
2018	20,347	-	-
2019	20,836	-	-
2020	21,336	-	-
2021	21,848	-	-

Future changes in population in the area are predicted to continue at a rate of 2.4% per year, based on estimates developed by the County and the Fort Collins GMA. Therefore, water conservation measures and programs will need to utilize metrics that normalize water use to a per capita or per connection basis such that trends in time can be evaluated and understood.

## **SWSI Water Planning Nexus**

ELCO is located in the South Platte River Basin in Colorado. The District shares in the water supply gap that is identified for the South Platte River in SWSI. Although the District has been able to reduce per customer demands within its service area by a substantial amount in the last 10 years, currently identified projects and processes will be needed to fulfill all of the District's future water supply needs.

## **Approach to Water Conservation Planning and Implementation**

Water conservation planning and implementation by ELCO has progressed through a number of stages in recent years. This occurred in part due the preparation and implementation of the District's

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<sup>3</sup> Based on data obtained from [www.northernwater.org/waterconservation/weatherandetdata.aspx](http://www.northernwater.org/waterconservation/weatherandetdata.aspx)

2007 Water Conservation Plan, which helped to focus the local water conservation programs on customer demand management and more efficient facility uses, including water loss management. Since then, the District has focused on implementing various customer wise water use incentives that have evolved based on customer interest, funding availability and effectiveness of the program.

The District currently funds the following programs:

#### Leak Detection and Repair

The District has diligently conducted leak detection since 2003 through a private contracting company. It has resulted in gradually lowering the distribution system loss. The on-going program consists of surveying 20% of the system each year to provide a survey of the complete system every five years. The survey and repair of leaks is accomplished through a combination of District staff and equipment and contract work.

#### Meter Testing and Replacement

The District is currently replacing meters installed in the District that are 10+ years or older. This conversion will be an on-going program to evaluate and replace, as appropriate, meters that are not sized correctly or are malfunctioning.

#### Temporary Irrigation Taps for Native Landscaping

This program encourages installation of native landscaping that will not require irrigation after it is established. The tap is available for 5 years at a monthly base and water rate charge. No water dedication or PIF is necessary with this temporary tap.

#### Conservation Charge in Rate Structure

The District imposes a conservation charge for water use over the annual water allotment for a given property or tap size of \$2.75 per 1,000 gallons in addition to the regular water rate. Customers that exceed their annual allotment pay \$5.77 for every 1,000 gallons used in excess of their allotment. ELCO's water rate philosophy emphasizes its customers' responsibility to budget their annual allocation according to their individual needs.

#### Public Education Program – New Customer Packets & Newsletters

The District provides new customers and renter packets with water conservation tips during their first billing month. In addition, newsletters are sent out with water bills when there is "newsworthy" information to convey.

#### Sprinkler System Audits

The District contracted with the District of Fort Collins to provide sprinkler audits for District customers and HOA's. A sprinkler audit includes a visual inspection of each zone to identify

problems, provides a custom watering schedule and provides feedback on improvements that could be completed on the irrigation system.

Given these recent occurrences, updating the District's water conservation plan will hinge on continued improvements to its data collection and organization efforts, improvements to its water loss control and leak mitigation programs, and its management of customer water use, to the extent practical. In addition, the District will evaluate future impacts of water conservation and droughts on District cash flow and customer water use such that appropriate drought and water conservation planning can be conducted.

The water conservation plan will be prepared using the State's Water Efficiency Plan Guidance Document and the related Water Conservation Plan Template, to the extent that these references are relevant to the District given its size, nature of its service population (i.e., economic status of the District's service area), and geography. Finally, the updated water conservation plan is anticipated to be a living document that is used to guide and direct the real time allocation of resources related to the improvements of local water use efficiency for the management of District infrastructure and customer demands.

The specific components of the proposed scope of work for updating ELCO's water conservation plan will include the following:

- Updating the profile of the existing water supply system
- Updating the characterization of current and future water demands including the characterization of non-revenue water and real water loss
- Developing water conservation goals that are consistent with the needs of the District and the available resources
- Integrating updated planning and water efficiency benefits and goals with future water supply needs
- Identifying, evaluating and selecting new and/or continued water conservation programs including assessing current programs for effectiveness and customer interest
- Developing the implementation and monitoring plan to support tracking costs and benefits related to selected water conservation and water efficiency programs

A detailed scope of work, described task by task, as well as the proposed project budget and schedule are provided in Attachment A.



## Contact Information

The official contact information for the team is as follows:

### East Larimer County Water

Ms. Melissa Tremelling  
Administrative Manager  
East Larimer County Water District  
232 S. Link Lane  
Fort Collins, CO. 80524

Email: [melissat@elcower.org](mailto:melissat@elcower.org)

Ph: (970) 493-2044

## Roles and Responsibilities

*Mr. Mike Scheid, Mr. Scheid is the District Manager and will serve as the Project Manager for the Project. Mr. Scheid has been an employee with the District for approximately 15 years and has been involved with all aspects of the District's water conservation, public engagement and outreach programs, as well as all components of District operations and management. He will utilize his team which includes Melissa Tremelling – Administrative Manager and Brigitte Plotner– Senior Billing Specialist.*

Ms. Beorn Courtney, Ms. Courtney is a licensed professional engineer with experience in a broad range of water resources planning and policy topics, including integrated water resources planning, water conservation and demand management planning, water rights investigations, hydrologic and hydraulic analyses, consumptive use and river basin modeling, environmental permitting, and the nexus between water and land use planning. She is skilled at developing and maintaining client relationships, providing technical services and oversight, engaging stakeholders, and providing program management including large multi-disciplined team coordination. Beorn has served as project manager for a variety of state, municipal, and private clients. She has provided expert witness testimony in water court and briefings to the Colorado legislature regarding innovative water demand management and supply strategies.

Mr. Matthew J. Welsh, Mr. Welsh is a certified professional hydrologist that has been working in the water resources field since 2001, with a focus on projects in Colorado and surrounding states since 2005. He has extensive experience with surface and ground water rights in Colorado, Nebraska, Wyoming, and Oregon. Surface water expertise includes availability analyses, historical consumptive use evaluations for change of use applications, and quantifying exchange potential. Groundwater expertise includes modeling of lagged depletions from well pumping and aquifer evaluations including groundwater recharge and aquifer storage and recovery projects. Mr. Welsh also has extensive experience with water

conservation and efficiency planning, with project scales ranging from regional integrated plans to smaller land development.

## **Water Conservation Goals**

In the District's 2007 Water Conservation Plan, it set forth a goal of reducing District water demand by about 324 AF by 2016 plus reducing non-revenue water by another 240 AF within that same time period. Fortunately, the District has seen more water demand reductions than expected since 2007, with net water use reductions in the range of 1,300 AF. However, water loss measured as non-revenue water has substantially increased, from 10-12% to over 20%, which corresponds to an increase in the range of 500AF.

The District remains committed to realizing about a 10% reduction in water production over the next ten year period through water use demand reductions and improvements in water loss management. This would constitute a reduction of about 400 and 500 AF in water production by 2025. More specifically, the District is focused on reducing non-revenue water by approximately 33 percent from the recent average of about 950 AF per year during the upcoming planning horizon. This would result in a reduction in water production of more than 300 AF. The remaining water use demand reductions will be realized through customer education, incentives and water pricing programs integrated with other District water planning efforts.

## **Water Efficiency Grant Request**

The District is requesting \$21,120 in CWCB Water Efficiency Grant funds to fund the proposed project. The District will contribute \$ 7,500 in cash and in-kind services<sup>4</sup> (in the form of staff hours and expenses) to match the Grant funding to complete the scope of work. The total cost to complete the proposed project is \$ 28,620, with a total match proposed as 26% of the project. A detailed description of the scope of work, and proposed project budget and schedule is presented in Attachment A.

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<sup>4</sup> Estimated to be \$1,650 in cash and \$5,850 in in-kind contributions.

# **Attachment A**

## **Detailed Scope of Work, and Proposed Project Budget and Schedule**

### **Detailed Scope of Work**

The scope of work presented below involves the development of one updated water conservation plan for the ELCO. The detailed description of the tasks proposed to be performed to develop the updated water conservation plan is provided below.

#### **1.0 Draft Local Water Conservation Plan**

##### **Purpose**

This task relates to the drafting of one individual local water conservation plan for the District. Generally, the plan will follow the water conservation planning methodologies recommended by both the CWCB and state statute; however, due to the size and nature of the operations of the participating entities, the updated water conservation plan will also evaluate and assess the District's role and management of regional water supply efficiencies as a subset of the water conservation programs that would typically be included in a plan developed for a covered entity.

In general, the scope will focus on explaining the framework for the water conservation plan (e.g., the plan will present current water production and demand data, identify future demands, characterize current and future infrastructure improvements, etc.), defining the water conservation goals, and selecting water conservation measures and programs that will attempt to achieve the goals stated for the District. The plan will also present the implementation tasks that the District will conduct to move the water conservation programs forward, including listing data collection, monitoring, and verification efforts.

##### **Tasks**

1.1 Data Collection and Assessment – collect information from the District to update and supplement the data that has already been provided to the State as part of this application, including information on water production, customer water use, meters, billing, non-revenue water, population served, and expected future water demand; infrastructure needs related to meter and water line replacement; water rates; and current water conservation activities. An assessment will be performed organizing and summarizing the data in conjunction with the guidelines provided by the CWCB for this task. Included in the assessment will be summaries and evaluations of:

- 1.1.1 Water supply system characteristics
- 1.1.2 Systematic data management related to tracking production, distribution and customer water use
- 1.1.3 Trends in water loss and non-revenue water– both real and apparent

- 1.1.4 Current trends in customer water use demand
- 1.1.5 Projected future customer demands by customer category and total water production
- 1.1.6 District's capital improvement program related to water system improvements

1.2 Framework for Conservation – a narrative will be developed to describe the ongoing organizational needs and opportunities related to water supply reliability and sustainability; and to identify how water conservation and water use efficiencies could benefit the planning entity. This portion of the water conservation planning effort will appraise the District's needs related to investing in and integrating ongoing operations with water conservation related program<sup>5</sup>. An assessment of local and regional water conservation programs and potential objectives will be included in this part of the water conservation plan, as appropriate.

1.3 Water Conservation Goals - identify water demand reductions that the District identifies as valuable and worthy of future investments related to planning for and implementing water conservation measures and programs.

1.4 Water Conservation Program Evaluations and Selection – based on the water conservation goals of the District, candidate water conservation programs will be evaluated for applicability and effectiveness. The evaluations will assess the costs and potential benefits of implementing any specific program and/or practice to:

- Reduce system and/or customer water demands,
- Improve data collection and management to help inform future conservation efforts,
- Adjust and set water rates,
- Coordinate programs with other organizations with shared interests (especially with respect to educational and outreach programs and the Master Metering of the SCFP), and
- Integrate water conservation programs with other District business operations.

Candidate water conservation programs will be selected based on cost and benefit, as well as the interests of the District Council and staff, to the extent reasonable.

1.5 Implementation Plan – the implementation plan contained in the District's water conservation plan will include the following:

- 1.5.1 Implementation schedule - identify significant implementation actions, and challenges that may impact the implementation of the selected conservation measures.
- 1.5.2 Customer engagement - Describe how to involve and engage the District's customers in the implementation process, to the extent necessary.

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<sup>5</sup> Water Conservation related programs include all those contained within the Southeastern Colorado Water Conservancy District BMP Tool Box found online at [www.secwcd.org/BMPToolBox](http://www.secwcd.org/BMPToolBox). Relevant programs may include those that relate to system wide management of the water supply system, water production and treatment, water distribution, customer water use metering, and/or customer water use and demand management.

- 1.5.3 Monitoring and evaluation processes - describe how water conservation will be measured and verified for effectiveness, and what the role of the District, as well as the District, will have during monitoring and reporting efforts.
- 1.5.4 Updating and revising the plan - describe when and how the Plan will be updated, in part, based on the state statute.
- 1.5.5 Funding strategy for the plan – identify potential funding needs and options related to the selected implementation efforts.

1.6 Draft Plan - compile and format information, data and other content into the Draft Plan for review and comment by District staff. Once staff comments have been received, produce adequate copies for public, District Council, state and other stakeholder review.

### **Deliverables**

The project team will develop the Draft Plan for the District.

## **2.0 Final Local Water Conservation Plan**

### **Purpose**

Conduct and coordinate public review, and revise the Draft Plan based on comments and finalize for District Council approval.

### **Tasks**

- 2.1 Support public noticing and state review – Provide guidance and support to the District as it advertizes for and receives public input during the required 60-day public comment period. Also coordinate the initial plan review by the CWCB.
- 2.2 Gather public and stakeholder comments and prepare a comment response – Gather and organize comments and develop comment responses for each comment.
- 2.3 Develop Final Plan – finalize the Plan based on comments received and the prepared comment responses, and produce for District Council approval.

### **Deliverables**

The project team will develop the Final Plan including a comment response document for Board approval.

## **3.0 Project Meetings and Administration**

### **Purpose**

These tasks involve meeting with the planning entities, developing progress reports for the CWCB and preparing project invoices.

## **Tasks**

3.1 Coordination meetings – conduct three (3) project coordination meetings with the District to: i) kick off the planning effort; ii) discuss plan develop, key assumptions, selection of candidate water conservation measures, and implementation strategies; and iii) review the proposed plan recommendations and implementation program prior to the completion of the Draft Plan.

3.2 Progress Reporting – prepare CWCB project progress reports at 50% and 75% complete to update the CWCB on project progress, successes, challenges and potential changes to scope, schedule and/or budget, as appropriate.

3.3 Project Invoicing – prepare project invoices on a monthly basis and support the grant project administrator in reporting and invoicing the CWCB as the project progresses.

## **Deliverables**

The project team will prepare for and attend meetings, prepare project progress reports and prepare project invoices.

## **Project Budget and Schedule**

The proposed project budget and schedule are attached.

**PROPOSAL  
WATER CONSERVATION PLAN UPDATE**

**February 15, 2016**

Element Water Consulting (ELEMENT) will provide water resources-related services as defined below to East Larimer County Water District (ELCO), referred to herein as “Client”.

**A. SCOPE OF SERVICES**

ELEMENT will provide technical water resources services to Client to support a Water Conservation Plan update. Client has obtained a Water Efficiency Grant from the Colorado Water Conservation Board (CWCB) to complete this work. ELEMENT will complete the following tasks which were outlined in the CWCB grant application:

**Task 1 – Draft Water Conservation Plan**

- 1.1 Data Collection and Assessment
- 1.2 Develop Framework for Plan
- 1.3 Develop Water Conservation Plan Goals
- 1.4 Evaluate and Select Water Conservation Programs
- 1.5 Develop Implementation Plan
- 1.6 Prepare Draft Plan

**Task 2 – Final Water Conservation Plan**

- 2.1 Support Public Comment Process
- 2.2 Gather Public Comments and Respond
- 2.3 Prepare Final Plan

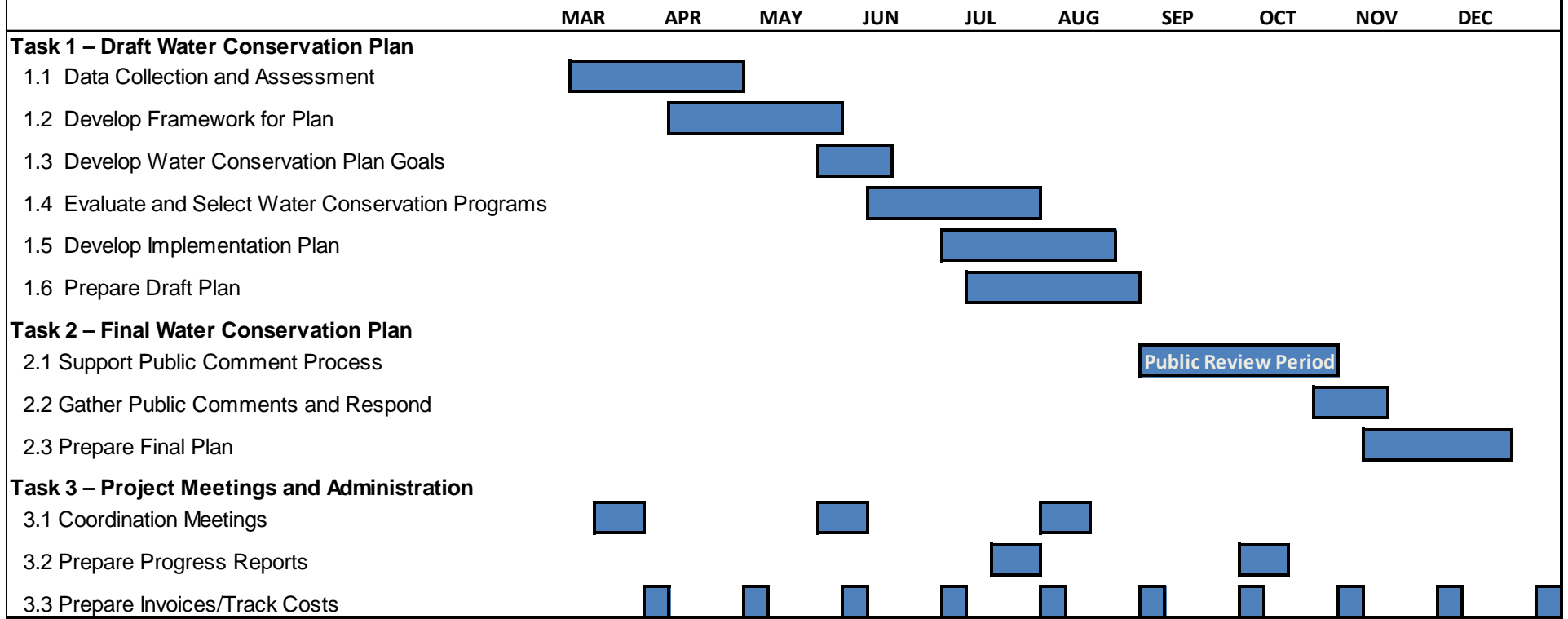
**Task 3 – Project Meetings and Administration**

- 3.1 Coordination Meetings
- 3.2 Prepare Progress Reports
- 3.3 Prepare Invoices/Track Costs

**B. DELIVERABLES AND SCHEDULE**

The primary deliverable for this scope of work will be the updated Water Conservation Plan and the supporting progress reports for submittal to the CWCB that are required under the grant. The proposed schedule in the grant application started in January and extended through end of October. We recommend shifting the schedule to March through December, as shown below:

**Proposed 2016 Project Schedule  
East Larimer County Water District  
Water Conservation Plan Update**





All deliverables, as well as participation in phone/conference calls and meetings and communication via email, will be provided in a timely manner to meet critical deadlines and mutually agreed upon schedules. We are available to begin working on this project upon acceptance of this scope.

### **C. FEE SCHEDULE AND PAYMENT**

Payments for our services are based on the actual time spent on Client's behalf and are measured by standard hourly rates. The 2016 rate for Ms. Courtney is \$165 per hour and the rate for Mr. Welsh is \$130 per hour based on work performed during the course of regular working hours (based upon a 40 hour work week). Overtime, rush, and holiday work necessitated by Client's directive is billed at an additional \$50 per hour. Sub-consultants to ELEMENT are billed at cost plus five percent.

The Tasks described in the Scope of Services section above represent the services required to support the Client in their update of the Water Conservation Plan under the CWCB grant. The associated budget estimate will not exceed \$22,770.

**Table A-1**  
**Proposed Project Budget**  
**East Larimer County Water District's Water Conservation Planning Grant Application**

Task	Hours	ELEMENT WATER CONSULT.			ELCO		Total Cost	CWCB	
		Cost	Expenses		Hours	Cost		Grant Request	
<b>Draft Water Conservation Plan</b>		\$120				\$75			
1.1 Data Collection and Assessment	32	\$ 3,840	\$ 800		16	\$ 1,200	\$ 5,840	\$ 3,840	
1.2 Develop Framework for Plan	24	\$ 2,880	\$ -		12	\$ 900	\$ 3,780	\$ 2,880	
1.3 Develop Water Conservation Goals	8	\$ 960	\$ -		2	\$ 150	\$ 1,110	\$ 960	
1.4 Evaluate and Select Water Conservation Programs	24	\$ 2,880	\$ -		2	\$ 150	\$ 3,030	\$ 2,880	
1.5 Develop Implementation Plan	18	\$ 2,160	\$ -		2	\$ 150	\$ 2,310	\$ 2,160	
1.6 Prepare Draft Plan	40	\$ 4,800	\$ 25		8	\$ 600	\$ 5,425	\$ 4,800	
	146	\$ 17,520	\$ 825		42	\$ 3,150	\$ 21,495	\$ 17,520	
<b>Final Water Conservation Plan</b>									
2.1 Support Public Comment Process	2	\$ 240	\$ -		8	\$ 600	\$ 840	\$ 240	
2.2 Gather Public Comments and Respond	4	\$ 480	\$ -		4	\$ 300	\$ 780	\$ 480	
2.3 Prepare Final Plan	6	\$ 720	\$ 25		4	\$ 300	\$ 1,045	\$ 720	
	12	\$ 1,440	\$ 25		16	\$ 1,200	\$ 2,665	\$ 1,440	
<b>Project Meetings and Administration</b>									
3.1 Coordination Meetings	10	\$ 1,200	\$ 800		12	\$ 900	\$ 2,900	\$ 1,200	
3.2 Prepare Progress Reports	4	\$ 480	\$ -		4	\$ 300	\$ 780	\$ 480	
3.3 Prepare Invoices/Track Costs	4	\$ 480	\$ -		4	\$ 300	\$ 780	\$ 480	
	18	\$ 2,160	\$ 800		20	\$ 1,500	\$ 4,460	\$ 2,160	
<b>Project Totals</b>	<b>176</b>	<b>\$ 21,120</b>	<b>\$ 1,650</b>		<b>78</b>	<b>\$ 5,850</b>			
			<b>\$ 22,770</b>			<b>\$ 5,850</b>	<b>\$ 28,620</b>	<b>\$ 21,120</b>	
					<b>cash</b>	<b>\$ 1,650</b>			
					<b>Match %</b>		<b>26.2%</b>		