EAGLE RIVER
WATER & SANITATION
DISTRICT

UPPER EAGLE REGIONAL
WATER AUTHORITY

February 3, 2017

Colorado Water Conservation Board
Attention: Kevin Reidy and Ben Wade
1313 Sherman Street, Room 718
Denver, Colorado 80203

RE: Water Efficiency Plan Grant Application

Dear Mr. Reidy and Mr. Wade,

Eagle River Water and Sanitation District (ERWSD or District herein) has prepared this Water Efficiency[1] Plan grant application for consideration by the Colorado Water Conservation Board (CWCB) Office of Water Conservation and Drought Planning. ERWSD meets the statutory definition of a covered entity[2] under §37-60-126 C.R.S. and has a Water Conservation Plan that was adopted in 2012. The District shares infrastructure and administrative resources with the Upper Eagle Regional Water Authority (UERWA or Authority herein) and is collaborating with the Authority to prepare a joint Water Efficiency Plan for both entities. The Authority is also a covered entity and adopted a Water Demand Management Plan in 2014; however, this will be its first Water Efficiency Plan completed in accordance with §37-60-126 C.R.S.

The following information has been compiled according to the Colorado Water Conservation Board's *Water Efficiency Grant Program Fund, Grant Guidelines for Water Conservation Planning Projects*.

1. Name and Contact Information

The contact for this project is Ms. Maureen Egan, the District's Water Demand Management Coordinator.

Eagle River Water and Sanitation District
Attn: Maureen Egan
846 Forest Road
Vail, Colorado 81657
970.477.5402; megan@erwsd.org

[1] The terms water efficiency and water conservation are used interchangeably in this document.
[2] 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.

2. Organizations Assisting with the Project

For the purposes of this grant application and the execution of the proposed project, ERWSD is the lead organization. However, the District and Authority are represented by the same staff people and the Board of Directors of each organization has resolved to develop a joint Water Efficiency Plan. ELEMENT Water Consulting will provide technical water resources services to the District and Authority to support the development of the Water Efficiency Plan. Following is an overview of the key individuals that will be involved with the project.

2.1 ERWSD & UERWA

The following staff members work for both the District and the Authority:

Maureen Egan. Ms. Egan is the Water Demand Management Coordinator and will serve as Project Manager. Ms. Egan is responsible for all aspects of the District's water conservation programs. She will coordinate participation of other staff members.

Elena Jones. Ms. Jones is the Utility Billing Accountant and will be an alternate point of contact in Ms. Egan's absence and will collect data in support of the plan.

Diane Johnson. Ms. Johnson is the Communications and Public Affairs Manager and will be involved in public engagement and outreach programs related to the plan.

2.2 ELEMENT Water Consulting

Beorn Courtney, P.E. Ms. Courtney will be responsible for overseeing the preparation of the Water Efficiency Plan, evaluating historical and potential demand management activities, analyzing potential water savings, and developing implementation plans. Beorn 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, and the nexus between water and land use planning.

Matthew Welsh, P.H. Mr. Welsh will be responsible for analyzing historical data, demand forecasting, quantifying water savings from existing and potential demand management programs, and integrating the plan document. Matthew is a certified professional hydrologist and has extensive experience with water conservation and efficiency planning, with project scales ranging from regional integrated plans to smaller land developments.

3. Retail Water Delivery and Water Sources

3.1 Retail Water Delivery

A summary of ERWSD and UERWA retail water consumption for the past six years is provided in Table 1 and Table 2, respectively. The retail consumption data are tabulated by customer class to characterize the types of use experienced by the District and the Authority. Total billed deliveries in

both service areas have varied since at least 2011 in response to economic conditions, which impact population growth and tourism. The District's total treated billed consumption ranged from 2,039 acre-feet/year (ac-ft/yr) to 2,209 ac-ft/yr over the last 6 years (Table 1) whereas the Authority's billed consumption has ranged from 3,835 ac-ft/yr to 4,171 ac-ft/yr over same period (Table 2). Due to the tourism and seasonal usage that is experienced by both water providers, population growth and water demand may not increase proportionally.

Table 1. ERWSD Billed Consumption from 2011 through 2016 (ac-ft/yr).

Year	Residential	Mixed Use	Commercial	Sprinkler/Irrigation	Total
2011	941	431	571	203	2,145
2012	980	439	622	168	2,209
2013	922	441	602	176	2,141
2014	921	460	564	188	2,133
2015	884	484	538	197	2,103
2016	909	460	521	149	2,039

Table 2. UERWA Billed Consumption from 2011 through 2016 (ac-ft/yr).

Year	Residential	Mixed Use	Commercial	Sprinkler/Irrigation	Total
2011	2,538	493	639	367	4,037
2012	2,671	484	625	392	4,171
2013	2,528	471	568	361	3,928
2014	2,530	473	609	352	3,964
2015	2,437	476	582	340	3,835
2016	2,558	488	591	359	3,996

3.2 Water Sources

Water sources used by the District and the Authority over the five-year period from 2011 – 2015 are summarized in Table 3 and Table 4, respectively. In order to reduce impacts of its diversions to stream flow in Gore Creek during the winter and to avoid releases from Black Lakes, the District supplements its water supply with water diverted at the Authority's sources of supply. The District's amount of supply supplemented by the Authority is indicated in the "Surface Water Uploaded" column. The Authority, in turn, utilizes groundwater diverted from the District's structures during the spring and summer, when water diverted at its own structures tends to have high turbidity and is expensive and difficult to treat. The Authority's amount of water supply supplemented by the District is indicated in the "Groundwater Downloaded" column. Additional information regarding the water sources is provided in Section 5 below. The District and Authority experience increased water demands during the winter tourism season. Peak water demand occurs during the irrigation season.

Table 3. ERWSD Water Sources for 2011 through 2015 (ac-ft/yr).

Year	Surface Water Produced (1)	Surface Water Uploaded (2)	Groundwater Produced (3)	Groundwater Downloaded (4)	Total for District Uses (5)*
2011	0	408	2,382	312	2,478
2012	0	351	2,617	406	2,563
2013	0	373	2,813	423	2,763
2014	0	372	2,712	240	2,844
2015	0	314	2,983	317	2,980

*Equal to Col (1) + Col (2) + Col (3) – Col (4).

Table 4. UERWA Water Sources for 2011 through 2015 (ac-ft/yr).

Year	Surface Water Produced (1)	Surface Water Uploaded (2)	Groundwater Produced (3)	Groundwater Downloaded (4)	Total for Authority Uses (5)*
2011	4,329	408	72	312	4,304
2012	3,851	351	524	406	4,430
2013	3,478	373	745	423	4,274
2014	3,453	372	953	240	4,274
2015	3,376	314	1,052	317	4,431

*Equal to Col (1) - Col (2) + Col (3) + Col (4).

4. Future Annual Retail Demand

The District and Authority expect to continue experiencing significant population growth and new development over the 20-year planning period to be evaluated as part of the Water Efficiency Plan. Additional information related to expected population growth is presented below in Section 5. Preliminary water demand forecasts have been developed using historical demand patterns and the projected population growth. This approach does not include the impact of any additional water demand reductions and assumes that recent historical demands are representative of future demands. All water demands (indoor and outdoor) were assumed to increase proportionally with the population at the current rate of usage (this assumption will be evaluated during the planning process to assess tourism's potential impact on demand). This is a standard approach to demand forecasting, but it does not take into consideration the expected impacts of demand management measures that will be evaluated as part of the Water Efficiency Plan. The results of the preliminary forecasting indicate that over the next 20 years the District's demand may increase to approximately 2,400 ac-ft/yr and the Authority's demand may increase to approximately 4,400 ac-ft/yr.

5. Background and Characterization of Systems

The District and Authority are both quasi-municipal corporations and political subdivisions of the State of Colorado. District Rules and Regulations have been specifically promulgated pursuant to and for the purposes of carrying out the objectives and purposes stated in the Special District Act and C.R.S. § 29-1- 204.2, respectively. The District's service area includes water service within the Vail Water Sub-District and the Wolcott area and wastewater service for all areas included within the District Boundaries. The Authority's service area includes Arrowhead Metropolitan District, Town of Avon, Bachelor Gulch Metropolitan District, Beaver Creek Metropolitan District, Berry Creek Metropolitan District, Cordillera Metropolitan District, Eagle-Vail Metropolitan District, Edwards Metropolitan District, and Traer Creek Metropolitan District (Village at Avon).

The District and Authority have two of the most complex public water systems in Colorado. Operations are complicated by being located in the Central Rocky Mountains, which poses many challenges to treating and distributing water to customers. Primary challenges include wide variations in seasonal water demands, limited space for facilities, and rugged topography.

The District's system consists of seven groundwater wells and one treatment facility – the Gore Valley Drinking Water Facility. The Authority's system consists of ten groundwater wells and two treatment facilities – the Avon Drinking Water Facility and the Edwards Drinking Water Facility. An interconnecting pipeline connects the District's and Authority's systems and allows for water transfer between Vail and the communities west of Vail.

Overview of Systems

To better understand water use among its different customers, the District and Authority use the following categories to classify its water service accounts:

- Residential
- Mixed Use
- Commercial
- Sprinkler/Irrigation

The District provides treated water service to approximately 3,118 customer accounts in its service area with an estimated 2015 population of 5,450 full-time residents. Historical and future population values are discussed further in Section 5.2. A breakdown of the District's customer connections in 2015 by water use sector is provided in Figure 1. Residential accounts are the most prevalent customer type in the service area, accounting for 89% of all service connections. Commercial customers account for about 6% of connections, followed by sprinkler/irrigation with 3%, with about 2% mixed use.

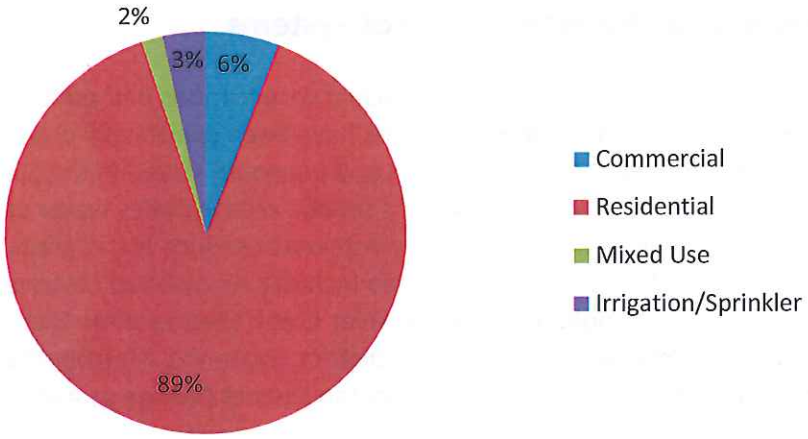

Figure 1. ERWSD Customer Accounts in 2015.

The Authority provides treated water service to approximately 6,583 customer accounts in its service area with an estimated 2015 population of 30,194 full time residents. Historical and future population values are discussed further in Section 5.2. A breakdown of the Authority's customer connections in 2015 by water use sector is provided in Figure 2. Residential accounts are the most prevalent customer type in the service area, accounting for 90% of all service connections. Commercial customers account for about 5% of connections followed by sprinkler/irrigation with 4%, with about 1% mixed use.

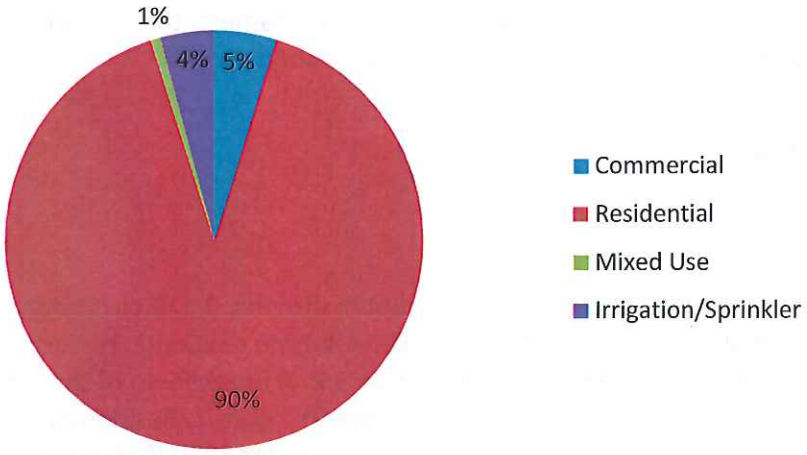

Figure 2. UERWA Customer Accounts in 2015.

Water Sources, Treatment, and Wastewater Treatment

For most of the year, surface water from the Eagle River is treated at the Avon treatment plant, which can produce 10 million gallons per day (MGD). A 5 MGD microfiltration treatment plant in Edwards also provides water to the area. The system is supplemented with four wells in the Eagle River Alluvial Aquifer in the Edwards area, which can produce 0.940, 0.720, 0.331, and 0.130 MGD. The Ranch (west) side of Cordillera also runs seven small wells which can produce approximately 0.65 MGD to supplement that area. A connection to the Vail well water system through Dowd Junction can supply up to 2.3 MGD to the UERWA.

Groundwater wells in the Gore Creek Alluvial Aquifer supply Vail water. Five wells in the area around the Vail Golf Course, each approximately 100 feet deep, can produce 7.5 MGD; two wells in the Matterhorn area of West Vail, each approximately 60 feet deep, can produce 0.749 MGD; and a surface water, microfiltration plant in East Vail can produce 1 MGD using Gore Creek as its supply. Also, a connection to the down valley surface water system through Dowd Junction can provide an additional 1.2 MGD of treated water from the Eagle River.

The District operates the following three wastewater treatment plants (WWTP) that have a total treatment capacity of 9.95 MGD:

- Vail WWTP – constructed in 1969, expanded in 1982; 2.7 MGD capacity.
- Avon WWTP – constructed in 1966, expanded in 1997; 4.3 MGD capacity.
- Edwards WWTP – constructed in 1981, expanded in 2001, upgraded in 2016; 2.95 MGD capacity.

Most of the wastewater from the Vail water supply service area is treated at the Vail WWTP. Wastewater from the western portion of Vail's service area is conveyed to the Avon WWTP. The average daily flow through the wastewater system is 5.5 MG with a maximum peak daily flow of 7.7 MG and a minimum daily flow of 3.7 MG.

5.1 Per Capita Water Use

System-wide and residential water use for the District and Authority are presented in Table 5. Total residential usage is being presented because neither provider has a separate customer class for single-family residential. We have used the measure of gallons per single-family equivalent (SFE) per day for the purposes of this grant application. Due to the resort nature of the community and the resulting population fluctuations, determining an appropriate and meaningful unit of measure is an important topic to be further evaluated in preparing the plan. The District's 2012 Water Conservation Plan estimated that the system-wide consumption was 157 gallons per capita per day (gpcd) based on an assessment of full-time residents and occupancy characteristics by overnight visitors and second homeowners; the previous methodology will be considered in preparing this Plan.

Table 5. Per Capita Water Use.

Provider	Total SFE (#)	System-Wide Consumption (gal/SFE/day)	Residential SFE (#)	Residential Consumption (gal/SFE/day)
ERWSD	10,259	177	6,302	129
UERWA	16,584	215	12,586	181

5.2 Population Planning Projections

The District and Authority populations for the past five years, current year, and 10-year projection are summarized in Table 6. The projected population for the District is based on a growth rate of 0.6%, which is the average rate of growth for Vail from 2010 – 2015. The Authority projection is based on 0.4% per year, which is based on the 2010 – 2016 averages for Avon and unincorporated areas of Eagle County. Historical population values were obtained from the Department of Local Affairs State Demography Office.[3] The historical and forecasted population numbers represent full-time residents and do not account for part-time residents or seasonal population changes due to tourism. Growth forecasts will be evaluated in greater detail as part of the Water Efficiency Plan.

Table 6. Historical and Forecasted Service Area Population.

Year	District		Authority		Source
	Population (#)	Growth Rate (%)	Population (#)	Growth Rate (%)	
2011	5,241	0.3%	29,357	0.3%	Historical
2012	5,252	0.2%	29,467	0.3%	
2013	5,299	0.8%	29,710	0.8%	
2014	5,329	0.6%	29,935	0.7%	
2015	5,450	2.2%	30,194	0.8%	
2016	5,612	2.9%	30,796	0.1%	
2017	5,646	0.6%	30,919	0.4%	Forecasted using average growth rate over past 5 years (Demographer)
2018	5,680	0.6%	31,043	0.4%	
2019	5,714	0.6%	31,167	0.4%	
2020	5,748	0.6%	31,292	0.4%	
2021	5,782	0.6%	31,417	0.4%	
2022	5,817	0.6%	31,543	0.4%	
2023	5,852	0.6%	31,669	0.4%	
2024	5,887	0.6%	31,795	0.4%	
2025	5,922	0.6%	31,923	0.4%	
2026	5,958	0.6%	32,050	0.4%	

[3] State Demography Office - https://demography.dola.colorado.gov/data/.

5.3 Water Efficiency Plan Goals and Savings

The District adopted its first Water Conservation Plan in 1990 and has periodically evaluated and modified it since that time, with the most recent update completed in 2012. The District's Water Conservation Plan has been used unofficially by the Authority since 2012; however, this will be its first Water Efficiency Plan completed in accordance with §37-60-126 C.R.S. The District and Authority each adopted more focused Water Demand Management Plans in 2014. Potential water efficiency programs and goals will be evaluated separately for each entity and then used to identify opportunities for collaboration. It is anticipated that there will be significant overlap in the approach and programs and therefore a high level of opportunity for collaboration is anticipated. Any differences in selected programs will be specified in the plan.

The District and Authority have developed reliable water supplies; however, many evolving factors can affect the future available water supply and demand and thus require an adaptive management approach. Factors such as development and redevelopment within and around the service areas are expected to impact future demand. The resort character of the District and Authority service areas also provides a challenge as the majority of occupants at certain times of the year are either second homeowners or vacationers, resulting in highly variable seasonal demands. As the District and Authority grow into their water rights, and recent droughts remind us that water supplied by nature is highly variable in this area, it is imperative that the District and Authority proactively manage water use within their service areas.

The District's 2012 Water Conservation Plan outlined the following programmatic water conservation goals:

- Continue to identify and reduce Non-Revenue Water.
- Increase emphasis on conservation efforts in the hotel/commercial water use sectors.
- Increase community education and regulation to reduce over-irrigation.
- Develop and implement a monitoring and accounting system that allows for effective measurement of water savings associated with conservation measures and programs.
- Continue existing water conservation activities that have proven effective and have been accepted by the community.
- Select and implement new conservation measures and programs based upon their water savings potential, cost effectiveness and consistency with community values.

The District and Authority have created Water Demand Management Plans with the objectives identified below. The intent of the Water Demand Management programs is to work with customers to use water more efficiently over time, in order to use the existing supply to serve an expanding population, while protecting water rights and the natural water resource. The District and Authority's 2014 Water Demand Management Plans list the following objectives:

- Target efforts appropriately to manage the legal water supply, reservoir storage and stream flows, during "normal" water years and droughts;

- Reduce the average water use per customer slowly and steadily over time, allowing use to grow into existing water rights, and continue to fit within the available water supply as the population increases;
- Recognize the relative impacts to the water supply of the consumptive use of indoor versus outdoor water uses;
- Focus efforts to reduce total use per customer on excessive and outdoor uses first;
- Ensure that District/Authority water management costs are covered by revenues from customers as demand varies;
- Increase the District's/Authority's understanding of the capacity it has to serve customers with its water rights, the natural water supply and reservoir storage, so that it can plan, prioritize and properly time water efficiency efforts;
- Properly assign responsibility of efforts to the District/Authority or to land use authorities.
- Use water pricing to communicate to customers the value of water; and
- Ensure development infrastructure is designed to be water efficient in order to minimize the reliance on customer behavior to manage water demand.

The District has made progress toward the goals and objectives identified in the 2012 plan. Additionally, the District and Authority have identified new objectives in the 2014 Water Demand Management Plans in response to identifying new opportunities for water demand management. Based on planning references such as the Statewide Water Supply Initiative (SWSI), the District estimates that implementation of the Water Efficiency Plan has the potential to reduce water demands by approximately 10% over the 20-year planning period as a result of passive and active programs. If 10% is determined to be an achievable target, this would equate to an average savings of about 240 ac-ft/yr for the District and 440 ac-ft/yr for the Authority. These goals will be updated as part of the planning process.

Summary of Current Programs

- Developed systems to closely monitor non-revenue water (NRW). A NRW committee comprised of District personnel has been formed and meets when NRW reaches a specific threshold.
- Developed and enforce water use rules to encourage customers to implement responsible irrigation practices. For instance, the rules prohibit outdoor watering between 10 a.m. and 4 p.m.
- Outreach and education of the public related to water conservation and efficiency measures through billing inserts, local radio interviews, and one-on-one interaction at Farmers' Markets.
- Coordination with land use authorities to incorporate water efficiency and conservation elements into their planning documents and regulatory requirements.
- Ongoing conversion to automated metering infrastructure. Development of online resource to allow customers to understand and manage their water use and encourage efficient use. Online access is expected to be available to customers by irrigation season 2017.

- Distribution of water saving fixtures such as low flow shower heads, toilet flappers, hose shut-offs, etc. at no cost to the customer.
- Created pilot projects, beginning in 2015, to work directly with a sampling of customers to help them achieve efficient outdoor water use. The 2017 pilot project will be designed to investigate the possibility of implementing water budgeting within the service areas.

5.4 Adequacy of Water System and Basin-wide Implications

The District and Authority regularly evaluate water supply needs as part of their ongoing water supply planning. These evaluations indicate that the District's supplies will be adequate to meet expected delivery obligations and augmentation needs; however, additional infrastructure, including storage, may be required to the extent Vail ski area increases its snowmaking demands and Minturn exercises its in-basin storage right. The Authority also expects to have sufficient water supply to meet its high-year demand conditions.

The District and Authority do not normally rely on reservoirs as a direct source of water for their customers, which differs from the standard operations of many Front Range water suppliers. Rather, reservoirs are used to augment out-of-priority depletions. Therefore, the physical supply available in streams is critical for providing a continuous, reliable water supply to customers. Low stream flows, such as those experienced during a drought, may necessitate operational changes and other strategies to ensure the physical availability of water for high priority uses like fire suppression and essential indoor uses.

The District and the Authority are located in the Colorado River Basin and share in the water supply shortages identified in the SWSI and Basin Implementation Plan (BIP). The Colorado River BIP listed conservation as one of the guiding principles for meeting future water needs and also identified a goal of expanding regional cooperation to improve efficiency, provide water supply flexibility, and enhance environmental and recreational amenities. The District and Authority intend to further reduce per capita water consumption through the development and implementation of the Water Efficiency Plan. The collaborative effort between entities will also facilitate the identification of opportunities to help meet regional goals.

6. SCOPE OF WORK

The District is seeking grant funds to assist with the preparation of a joint Water Efficiency Plan for the District and the Authority. The following sections provide a detailed description of the scope of work.

6.1 Purpose and Primary Features

The purpose of the project is to update the District's Water Efficiency Plan and develop a new plan for the Authority, as required under §37-60-126 C.R.S. The District and Authority share infrastructure and administrative resources and expect that many of the same water efficiency measures and programs will implemented across the combined service areas. It will be more effective and efficient to integrate many of the water efficiency planning efforts; however, certain

aspects of the planning process will require individual analyses for the District and the Authority. The Water Efficiency Plan will generally follow the water conservation planning methodologies recommended by both the CWCB and state statute. The plan will identify whether certain water efficiency programs do not make sense for either of the entities to pursue in the near term, and the demand forecasts and water savings goals will be adjusted accordingly.

In general, the scope will focus on explaining the framework for the Water Efficiency Plan. The plan will present current water production and demand data, identify future demands, characterize current and future infrastructure improvements, define water conservation goals, and select demand management measures and programs that will attempt to achieve the goals identified for the District and Authority. The plan will also present the implementation tasks that will be completed to advance the selected water efficiency programs, including listing data collection, monitoring, and verification efforts. A detailed description of the anticipated tasks to develop the Water Efficiency Plan is provided below.

6.2 Tasks

TASK 1 – DRAFT WATER EFFICIENCY PLAN

This Task will entail all work necessary to prepare the Draft Plan. Items expected to be evaluated individually for the District and Authority are indicated with "individual assessment" whereas items that overlap between entities are indicated with "combined assessment." Items requiring individual versus combined analyses will be reclassified after background information is compiled.

1.1. Data Collection and Assessment – individual assessment
Collect information from the District and Authority to update and supplement the data that has already been provided to CWCB as part of this application. This will include 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 efficiency activities. An assessment will be performed organizing and summarizing the data in conjunction with the guidelines provided by the CWCB for this task. The following summaries and evaluations will be completed under this task:

- Water supply system characteristics – combined assessment;
- Systematic data management related to tracking production, distribution and customer water use – combined assessment;
- Trends in water loss and non-revenue water, both real and apparent – individual assessment;
- Current trends in customer water use demand – individual assessment;
- Projected future customer demands by customer category and total water production – individual assessment;
- District's and Authority's capital improvement program related to water system improvements – combined assessment.

1.2. Develop Framework for Plan – combined assessment

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 efficiency planning effort will evaluate the District and Authority needs related to investing in and integrating ongoing operations with water conservation-related programs. An assessment of local and regional water conservation programs and potential objectives will be included in this part of the Water Efficiency Plan, as appropriate.

1.3. Develop Water Efficiency Plan Goals – combined assessment

Identify water demand reductions that the District and Authority identify as valuable and worthy of future investments related to planning for and implementing water efficiency measures and programs.

1.4. Evaluate and Select Water Efficiency Programs – combined and individual assessment

Based on the water efficiency goals of the District and Authority, candidate demand management programs will be evaluated for applicability and effectiveness. A combined assessment of the comprehensive list of potential programs will be completed initially followed by individual assessments for programs that are not applicable to both entities. The evaluations will assess the costs and potential benefits of implementing any specific program and/or practice with respect to the following:

- Reduce system and/or customer water demands;
- Improve data collection and management to help inform future efficiency efforts;
- Adjust and set water rates;
- Coordinate programs with other organizations with shared interests; and
- Integrate water efficiency programs with other District and Authority business operations.

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

1.5. Develop Implementation Plan

The implementation plan contained in the Water Efficiency Plan will include the items listed below. The majority of the implementation planning is expected to be a combined effort, although entity-specific plans will be developed as needed based on the selected programs.

- Implementation schedule – identify significant implementation actions, and challenges that may influence the implementation of the selected efficiency measures.
- Customer engagement – describe how to involve and engage the customers in the implementation process, to the extent necessary.

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

1.6. Prepare Draft Plan

Compile and format information, data and other content into the Draft Plan for review and comment by District and Authority staff. Once staff comments have been received, a draft will be prepared for review by the District and Authority Boards. Board comments will be incorporated into the Plan version distributed for public, state, and other stakeholder review.

TASK 2 – FINAL WATER EFFICIENCY PLAN

This Task will entail conducting the public and CWCB review processes, revising the Draft Plan based on comments received, and finalizing for approval by the District and Authority Boards.

1.1. Public Noticing and State Review Processes

This Task will entail coordinating the initial plan review by the CWCB and providing guidance and support to the District as it advertises for and receives public input during the 60-day public comment period.

1.2. Gather Public Comments and Respond

Gather and organize comments and develop responses for each comment.

1.3. Prepare Final Plan

Finalize the Plan based on comments received and the prepared comment responses, and produce for Board approval.

TASK 3 – PROJECT MEETINGS AND ADMINISTRATION

This Task will involve meeting with the planning entities, developing progress reports for the CWCB, and preparing project invoices.

1.1. Coordination Meetings, Board Meeting Support, Etc.

Conduct four (4) project coordination meetings with the District and Authority to: i) kick off the planning effort; ii) discuss plan development, key assumptions, selection of candidate water efficiency measures, and implementation strategies; iii) review the proposed plan recommendations and implementation program prior to the completion of the Draft Plan; and iv) participate in one meeting with District and Authority Board representatives. Telephone and/or web conferencing may be used to conduct meetings remotely.

1.2. Prepare Progress Reports

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.

1.3. Prepare Invoices/Track Costs

Prepare project invoices on a monthly basis and support the grant project manager in reporting and invoicing the CWCB as the project progresses.

6.3 Deliverables

The primary deliverable for this scope of work will be the completed Water Efficiency Plan. Additionally, 50% and 75% progress reports will be provided to CWCB. Participation in meetings with District and Authority staff will be provided as needed.

6.4 Timeline

The proposed project timeline, including estimated dates of key meetings and progress reporting, is provided in Table 7 (at end of document).

7. Proposed Budget and Funding

The District is requesting $49,990 in CWCB Water Efficiency Grant funds to fund the proposed project. The District will contribute $4,950 in cash in addition to in-kind services totaling $12,320 (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 $67,260 with a total match proposed as 26% of the project. A detailed breakdown of the proposed labor hours and project budget are provided in Table 8 (at end of document).

8. Authorized Representative

Eagle River Water and Sanitation District is committed to preparing a joint Water Efficiency Plan with the Upper Eagle Regional Water Authority. Thank you for your consideration of this grant request.

Linn Brooks
General Manager
Eagle River Water and Sanitation District
February 3, 2017

Table 7. Proposed Project Timeline.

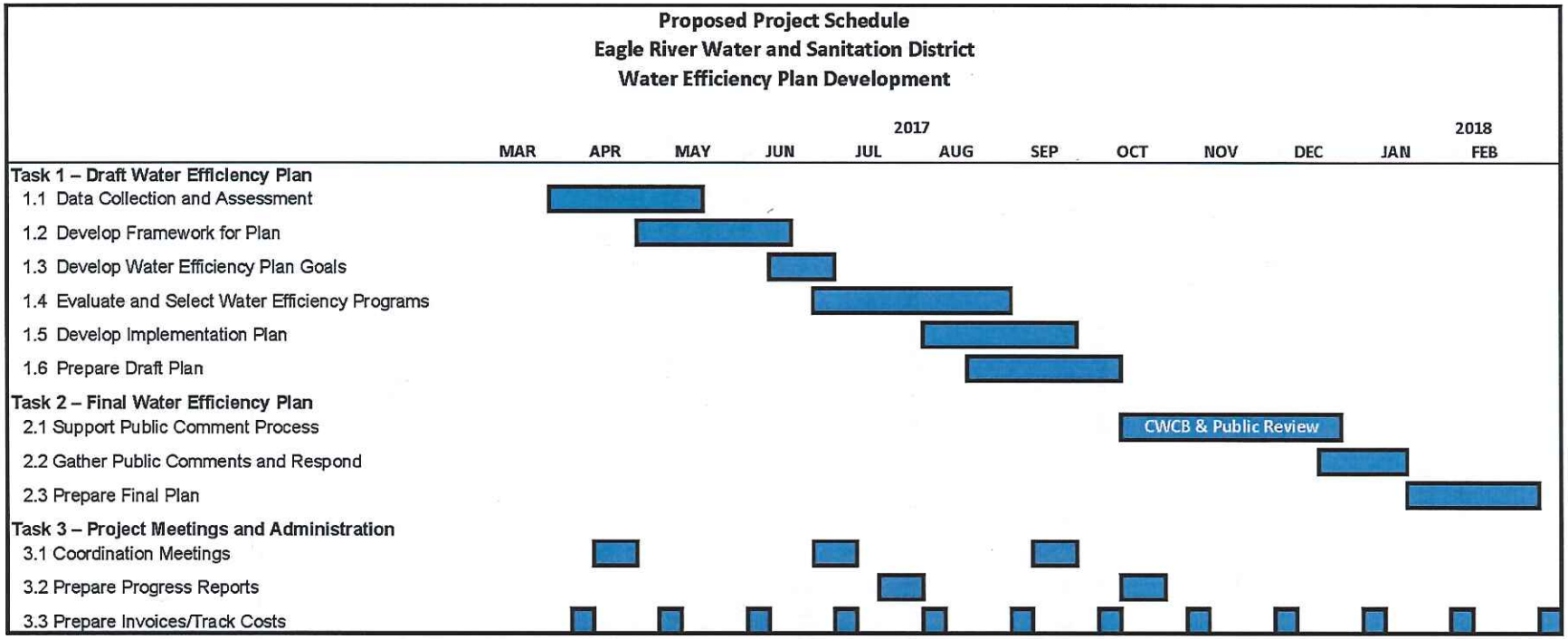

Table 8. Proposed Budget and Proposed Funding.

TASK	LABOR HOURS			BUDGET	PROJECT FUNDING		
	Maureen Egan/ Elena Jones / Diane Johnson [District/ Authority Staff @ $40/hour]	ELEMENT PM @ $170/hour	ELEMENT Hydrologist @ 135/hour	Total Project Labor	District In-Kind Labor	District Cash Contribution	CWCB Grant Request
	(hours)	(hours)	(hours)	($)	($)	($)	($)
TASK 1 - DRAFT WATER EFFICIENCY PLAN							
1.1 Data Collection and Assessment	80	12	40	$10,640.00	$3,200.00	$0.00	$7,440.00
1.2 Develop Framework for Plan	24	12	24	$6,240.00	$960.00	$0.00	$5,280.00
1.3 Develop Water Efficiency Plan Goals	24	14	12	$4,960.00	$960.00	$0.00	$4,000.00
1.4 Evaluate and Select Programs	32	22	32	$9,340.00	$1,280.00	$0.00	$8,060.00
1.5 Develop Implementation Plan	24	18	12	$5,640.00	$960.00	$0.00	$4,680.00
1.6 Prepare Draft Plan	24	16	32	$8,000.00	$960.00	$0.00	$7,040.00
TASK 2 - FINALIZE WATER EFFICIENCY PLAN							
2.1 Public Noticing and CWCB Review	8	4	8	$2,080.00	$320.00	$0.00	$1,760.00
2.1 Respond to Comments	8	4	4	$1,540.00	$320.00	$0.00	$1,220.00
2.3 Prepare Final Plan	8	4	12	$2,620.00	$320.00	$0.00	$2,300.00
TASK 3 - PROJECT MANAGEMENT AND ADMINISTRATION							
3.1 Coordination Meetings and Board Support	60	40	32	$13,520.00	$2,400.00	$4,950.00	$6,170.00
3.1 Progress Reporting	8	6	0	$1,340.00	$320.00	$0.00	$1,020.00
3.2 Invoicing and Cost Tracking	8	6	0	$1,340.00	$320.00	$0.00	$1,020.00
TOTAL HOURS	308	158	208				
TOTAL LABOR $	$12,320.00	$26,860.00	$28,080.00	$67,260.00	$12,320.00	$4,950.00	$49,990.00