TOWN OF ERIE
1874

April 23, 2012

Ben Wade
Colorado Water Conservation Board
1313 Sherman Street, Room 721
Denver, CO 80203

Re: Drought Mitigation Planning Grant for the Town of Erie

Dear Ben Wade,

Enclosed is an application for the development of a Drought Management Plan for the Town of Erie. The application was developed in accordance with CWCB's Grant Guidelines for Drought Mitigation Planning Projects. The application includes an overview of Erie's water supplies and water demands as well as a scope of work for developing the plan, project schedule, project cost estimate and a proposed allocation for funding.

The total cost for the Plan development is projected to be $49,731. Erie proposes to provide a monetary and in-kind match of 25.2% with a CWCB grant contribution of $37,202.

Please contact Russell Pennington at rpennington@erieco.gov or 303-926-2870 if you have any questions. Thank you for your consideration and we welcome the opportunity to work with you on this important project.

Sincerely,

Russell W. Pennington, P.E.
Deputy Director of Public Works
Town of Erie

Town of Erie
Application for Drought Management Plan
CWCB Grant Program

The Town of Erie (Erie) is located north of Denver in Weld and Boulder counties between Interstate I-25 and US Highway 287. The northern boundary extends north of Highway 52 with State Highway 7 serving as its southern boundary. Erie was incorporated in 1874. Attachment A provides a copy of Erie's Notice of Incorporation. Erie currently provides water and wastewater services to about 6,000 homes, in addition to commercial users and other municipal needs.

This document is an application for grant monies offered by the Colorado Water Conservation Board (CWCB) for the development of a Drought Management Plan (Plan). The application was developed in accordance with the CWCB's Grant Guidelines for Drought Mitigation Planning Projects. Erie has contracted with AMEC Environment and Infrastructure (AMEC) to develop this grant application. Contact information for both Erie and AMEC is provided below.

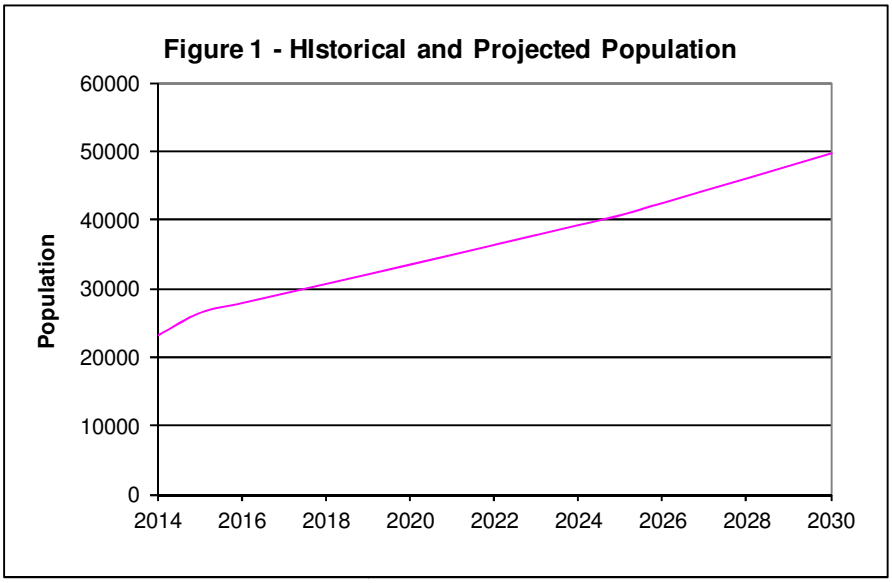
Applicant: Town of Erie
645 Holbrook Street
Erie Colorado 80516
Contact: Russell Pennington
Deputy Director of Public Works
303-926-2878
rpennington@erieco.gov

Contractor: AMEC, Environment and Infrastructure
1002 Walnut St. Suite 200
Boulder, CO 80302
Contact: Courtney Black, PE
Senior 1 Water Resources Engineer
303-443-7839
courtney.black@amec.com

Population and Expected Growth Rate

Erie's population has doubled within this decade and rapid development is anticipated for the next ten years. Approximately two thirds of Erie's planning area could ultimately be developed for residential and commercial uses with the remainder of the planning area consisting of open space and other regional facilities based on Erie's 2005 Comprehensive Master Plan which included goals, guiding principles and policies, and a proposed land use map addressing specific types of future land use development.

Erie has a current population of approximately 20,000 people. As shown in Figure 1, this population is expected to continue to increase as Erie develops and it is projected that Erie will serve over 49,600 people by 2030. The projected population at buildout is 68,820. Current and historical estimates are based on the number of Certificates of Occupancy issued by the Town of Erie while future population projections were recently developed in 2012 for Erie's updated Wastewater Utility Plan.



Historical Water Use Projected Water Demands

This section summarizes Erie's historical water use. Figure 2 and Figure 3 respectively show Erie's total annual and average daily per capita water uses for calendar years 2002 through 2012[1]. Erie's recent water accounting data were used to provide the water use information presented in Figure 2. Per capita use for the service area was estimated by dividing total system water use by the total residential population, as shown in the equation below. Total system water use includes non-potable supplies such as irrigation of Vista Ridge Golf Course and the Erie Commons development in addition to raw water transmission losses.

$$Per\ capita\ water\ use = \frac{Total\ water\ use\ (gal/day)}{Total\ \ population\ x\ 365\ days}$$

Erie's total annual water use has generally trended upward this decade reflecting Erie's increasing service area population[2]. However, Erie's per capita water use is significantly less than per capita water use during the 2002 drought and has generally declined over the past ten years. This may be attributed to the following:

- Long-term community response to regional drought awareness campaigns and Erie's mandatory water restrictions during the 2002 drought
- Larger proportion of new homes being constructed within the service area which tend to be more water efficient than older homes (i.e. homes within the Old Town portion of Erie)

[1] Erie began to provide untreated ditch water and reuse water for irrigation of the Vista Ridge Golf Course in 2002.
[2] Erie's water use exceeds the 2,000 AFY requirement to qualify as a covered entity for CWCB's Drought Mitigation Planning Grant. Annual water usage since 2001 has consistently been greater than 2,000 AFY.

- Increased water efficiency among customers in response to Erie's water conservation outreach efforts

Per capita use water trends will be further evaluated during development of the drought management plan

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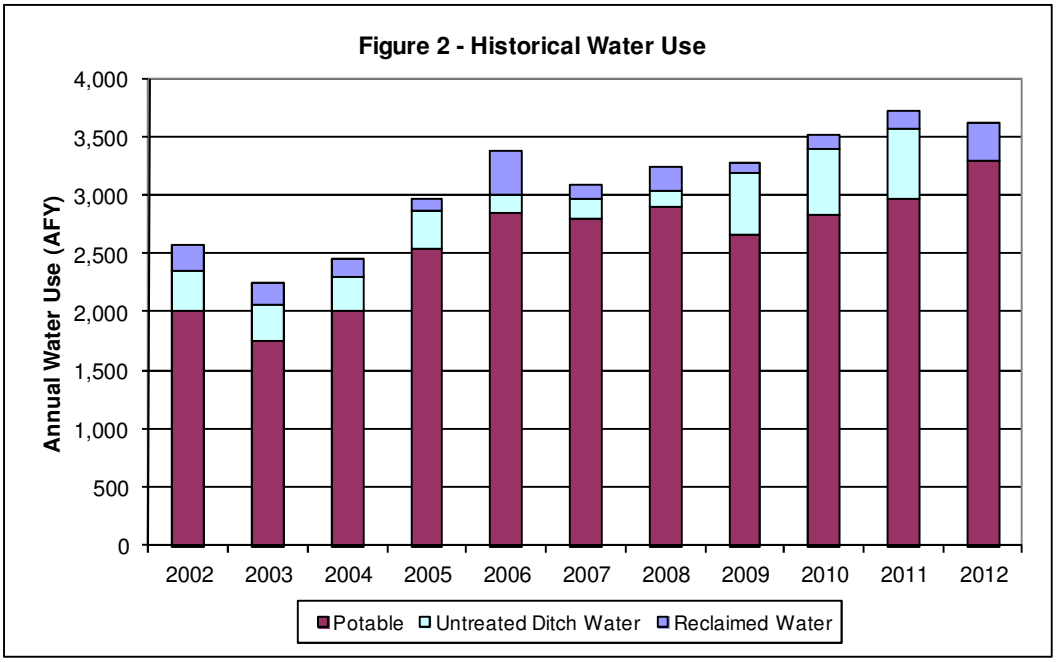


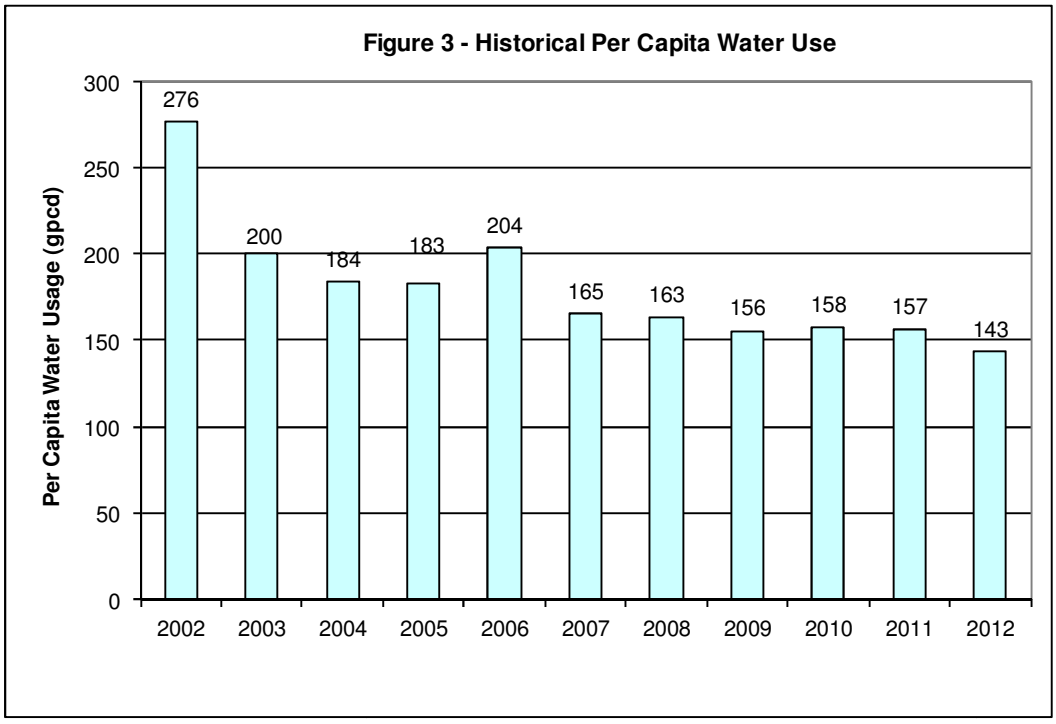


Table 1 shows the potable water use by customer sector from 2002 to 2012. These data indicate that residential use on average comprised 77 percent of Erie's total water consumption (metered end use) from 2002 to 20012. The residential sector includes both single-family and multi-family housing. The irrigation accounts in Table 1 were the next highest user for the years when irrigation account data are available (from 2009 to 2012). The irrigation accounts include outdoor watering on parks, open spaces and commercial parcels. The commercial sector in Table 1 includes schools, municipal property and commercial businesses while the construction sector entails potable water used for construction purposes.

Table 1: Potable Water Use by Customer Sector (AFY)

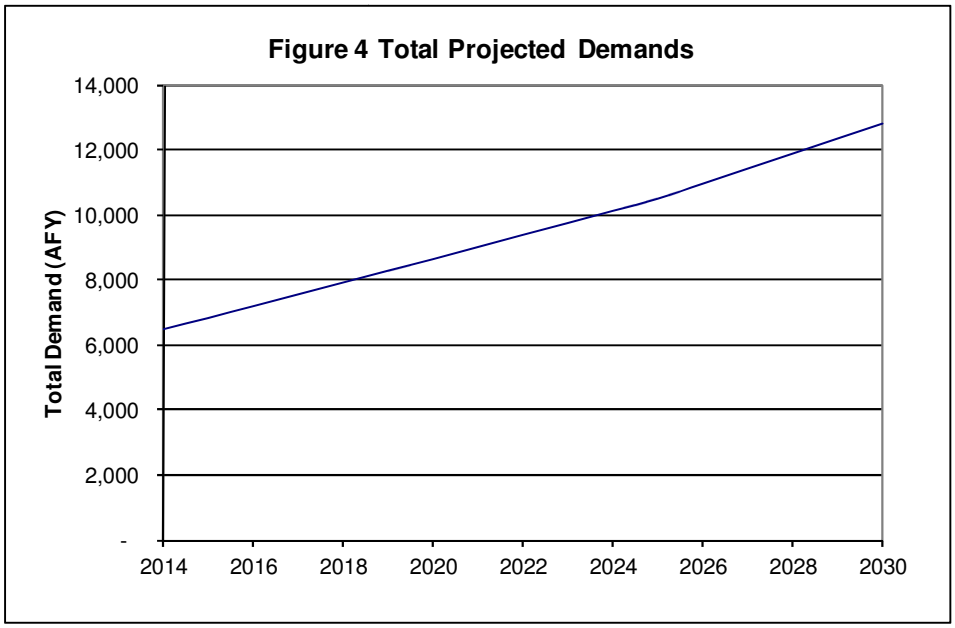
	Commercial	Irrigation	Residential	Construction	Total Metered End Use
2002	99	*	1,278	302	1,679
2003	229	*	1,209	56	1,494
2004	269	*	1,269	448	1,986
2005	401	*	1,788	76	2,265
2006	489	*	2,224	30	2,743
2007	458	*	2,167	80	2,705
2008	461	*	2,181	50	2,692
2009	113	372	1,589	139	2,213
2010	111	432	2,087	67	2,697
2011	342	293	2,139	109	2,883
2012	113	539	2,408	36	3,096
Average	280	409	1,849	127	2,405

*The finance department did not distinguish between irrigation and commercial accounts.
In 2008, the commercial use was modified to account for apparent errors.

Projected Water Demands

As Erie develops, its water demands will continue to increase. Demand projections in Figure 4 show Erie's projected total demands (including potable, reclaimed water, and raw water) presented in Erie's Water Conservation Plan. These demand projections were developed by multiplying the population projections shown in Figure 1 by a per capita water use of 230 gpcd.[3] This provides a reasonably conservative estimate of projected demands. The 230 gpcd is less than the 2002 per capita water usage (which was abnormally high), yet greater than the per capita water use from 2003 – 2012.

[3] The per capita value of 230 gpcd was used to develop projected demands for Erie's Water Conservation Plan. This value will be reassessed during the development of the Drought Management Plan along with Erie's current efforts in developing a Water Supply Master Plan. The projected demands may be updated as a result of these planning efforts.



4.0 Impacts During the 2002 Drought

During 2002, mandatory water restrictions were enforced limiting single and multi-family homes, schools, right-of-ways, parks, and HOAs to lawn watering once a week. Drip and hand irrigation were allowed twice a week. Customers were also required to use a bucket and automatic shutoff device for vehicle washing. These mandatory restrictions impacted customer behavior and likely injured some newly established and other drought vulnerable vegetation although no data is available.

5.0 Water Supplies

Erie's water supply consists of a variety of surface water sources. Sources include ditch shares, reservoir shares and Colorado Big Thompson (CBT) and Windy Gap supplies with a total average year yield of 8,268 AFY. Erie's current water supplies, shown in Table 2, provide an adequate amount of water to meet existing needs although additional water will be needed to meet future demands.

In order to meet its needs Erie is anticipating the acquisition of additional Windy Gap shares and is also a participant in the Windy Gap Firming Project. This project could firm Windy Gap supplies enabling Erie to receive its full Windy Gap allotment during dry years. Erie is also a participant in the Northern Integrated Water Supply Plan (NISP) and has requested 6,000 AFY of firm yield. If needed Erie could increase its NISP request to 6,500 AFY. Erie also plans to purchase additional CBT shares, ditch water rights, and further extend its supplies by using additional untreated ditch water and reclaimed water.

Table 2 Erie's Existing Water Supplies

Water Right	No. of Shares or Units Owned	Average Annual Yield (AF/share)	Average Annual Yield (AF)	Dry Year Annual Yield (AF/share)	Dry Year Annual Yield (AF)	Firm Annual Yield (AF/share)	Firm Annual Yield (AF)
Transbasin Sources							
CBT[1]	7,330	0.7	5,131	1	7,330	0.5	3,665
Windy Gap Project	14	100	1,400	0	0	0	0
Subtotal	**7,344**	100.7	**6,531**	n/a	**7,330**	n/a	**3,665**
Reservoir Storage							
Erie Reservoir	239	1	239	0.3	71.7	0	0[4]
Prince Reservoir	80	1	80	0.3	24	0	0[4]
Thomas Reservoir	148	1	148	0	0	0	0
Subtotal	**467**	n/a	**467**	n/a	**96**	n/a	**0**
Mutual Irrigation Company Ownership[2]							
Leyner Cottonwood Ditch	311.5	0.54	168.21	0.21	65.4	0.21	65.4[5]
South Boulder Canyon Ditch[3]	205	2.9	594.5	0	0	0	0
Erie Coal Creek Ditch and Reservoir Co.	98	4.9	480.2	0.56	54.9	0.56	54.9[5]
FRICO- Marshall Lake Div.	8.24	4	32.96	0.5	4.12	0.5	4.1[5]
Subtotal		n/a	**1,276**	n/a	**124**	n/a	**0**
Total		**n/a**	**8,274**	**n/a**	**7,550**	**n/a**	**3789[6]**

[1]This includes 2,639 Units under Lease/Purchase Agreement with Erie Finance Corporation

[2]Also includes a 1.9 cfs Coal Creek junior water right (adjudication pending)

[3] Two shares are owned by Town of Erie Renewal Authority

[4] Based on the 2012 Water Year

[5] These water rights are decreed for irrigation use, except 155 shares in the Leyner Cottonwood Ditch. However, that water needs to be diverted through the South Boulder Canon Ditch to be used for potable purposes, which is not possible in years when that ditch is not diverting under its own priorities

[6] Total potable supplies if 3,665 AF.

5.0 Work Plan

Erie anticipates that implementation of a drought response could achieve an average annual water savings of 15%. During the development of the Drought Plan, Erie will conduct an analysis to develop water saving targets for drought stages. This preliminary 15% average annual water savings is subject to changing following the analysis.

AMEC will be working closely with Erie to develop the Drought Management Plan. Erie will provide AMEC with the data/information necessary to develop the Plan and will coordinate efforts with a Drought Committee which will serve as a stakeholder steering committee during the development and implementation of the Plan.

The Plan will be developed in accordance to CWCB's Municipal Drought Management Plan Guidance Document and to the Scope of Work provided as Attachment B. Table 3 below lists the anticipated roles and contributions of each Erie staff member. The Scope of Work in Attachment B provides a more detailed description of the work plan.

Table 3 Role of Erie Staff Members in Development of Plan			
Staff Member	**Rate**	**Position**	**Role**
Gary Behlen	$65.84	Public Works Director	Facilitate data transfer to Amec Meetings/correspondence with Amec to discuss development of the Plan Review of all draft documents Selection of Drought Committee
Russell Pennington	$65.08	Deputy Director of Public Works	Facilitate data transfer to Amec Meetings/correspondence with Amec to discuss development of the Plan Review of all draft documents
Wendy Palmer	$50.40	Civil Engineer	Provide data and technical support to Amec
Deb Jenkins	$32.85	GIS/AutoCad Technician	Provide data and technical support to Amec
Kris McDaniel	$30.49	Public Works Administrative Assistant	Coordinate public review and stakeholder process including the following: Arrange open house meeting facility Advertise open house to the public
Bethany Peer	$20.11	Admin	Organize information for the plan development
Jody Lambert	$53.63	Operations & Maintenance Manager	Collect data for the plan development and provide feedback
Jon Mays	$48.47	Water & Wastewater Operations Manager	Review draft of plan and provide feedback

6.0 Project Schedule

The preliminary project schedule identifying key activities and milestones is presented in Table 4. These dates are contingent on receipt of the grant funds at the beginning of June.

Table 4 Project Schedule Erie Drought Management Plan

	2013							2014	
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
Task 1: Preparation and Facilitation of Drought Committee Meetings									
Drought Committee Workshop #1									
Drought Committee Workshop #2									
Task 2: Development of Plan									
Introduction, Stakeholders and Objectives									
Historical Drought and Impact Assessment									
Drought Vulnerability Assessment									
Drought Mitigation and Response Strategies									
Drought Stages, Trigger Points and Response Targets (includes meetings with Erie and NCWCD)									
Staged Drought Response Program									
Implementation and Monitoring									
Formal Plan Approval and Updates									
Task 3: Review Process									
First Draft for Erie Staff and Committee Review									
Second Draft for Public Review and Fact Sheet									
Third Draft for Erie Board Review, summary presentation and board meeting attendance									
Fourth Draft for CWCB Review									
Final Draft									
Task 4: Project Management and Grant Related Administration									
Monthly Invoices to Erie									
25%, 50% and 95% Progress Reports									

* Assumes the CWCB grant is approved at the beginning of June.

Drought Committee Workshop

NCWCD and Erie Staff Meetings

Board Meeting

7.0 Budget Cost Estimate

The budget cost estimate is provided in Table 5. This estimate provides information on consultant costs, Erie's in kind contributions (i.e. staff time), and anticipated allocation of costs based on anticipated grant funding from CWCB.

Table 5 Estimate of Costs and Cost-Sharing Allocation

Task	Description	Project Costs															Funding Sources			
		Amec Costs (Consultant)				Erie Staff Costs														
		Amec Hours	Total Labor	Other Direct Costs	Total	Public Works Director	Deputy Director of Public Works	Civil Engineer	GIS/AutoCad Technician	Public Works Administrative Assistant	Admin	Operations & Maintenance Manager	Water & Wastewater Operations Manager	Total Staff Hours	Staff Labor Costs	Total Project Cost	Erie Match (In-kind Services)	Erie Match (Cash Funds)	CWCB Grant	Total
	Hourly Rates	-	$134	-	-	$66	$65	$50	$33	$30	$20	$54	$48	-	-	-	-	-	-	-
Task 1: Preparation and Facilitation of Drought Committee Meetings																				
	Coordination and debrief on two workshops	16	$2,292	$66	$2,358	4	4	4	0	4	4	4	4	28	$1,336	$3,694	$1,336	$150	$2,208	$3,694
	Drought Committee Workshop #1	34	$4,980	$110	$5,090	2	4	2	0	1	1	2	2	14	$748	$5,838	$748	$150	$4,940	$5,838
	Drought Committee Workshop #2	34	$4,980	$110	$5,090	2	4	2	0	1	1	2	2	14	$748	$5,838	$748	$150	$4,940	$5,838
Task 2: Development of Plan																				
2.1	Introduction, Stakeholders and Objectives	9	$840	$0	$840	1	2	0	0	0	0	0	0	3	$196	$1,036	$196	$150	$690	$1,036
2.2	Historical Drought and Impact Assessment	4	$500	$0	$500	0	2	2	2	2	0	2	2	12	$562	$1,062	$562	$150	$350	$1,062
2.3	Drought Vulnerability Assessment	10	$1,250	$0	$1,250	0	2	2	2	2	0	2	2	12	$562	$1,812	$562	$150	$1,100	$1,812
2.4	Drought Mitigation and Response Strategies	12	$1,500	$0	$1,500	0	2	2	2	2	0	2	2	12	$562	$2,062	$562	$150	$1,350	$2,062
2.5	Drought Stages, Trigger Points and Response Targets (includes meetings with Erie and NCWCD)	34	$5,272	$66	$5,338	0	4	4	4	4	1	1	1	19	$837	$6,175	$837	$150	$5,188	$6,175
2.6	Staged Drought Response Program	16	$2,000	$0	$2,000	0	4	4	4	4	1	1	1	19	$837	$2,837	$837	$150	$1,850	$2,837
2.7	Implementation and Monitoring	6	$750	$0	$750	0	4	0	0	0	0	1	1	6	$362	$1,112	$362	$150	$600	$1,112
2.8	Formal Plan Approval and Updates	2	$250	$0	$250	1	1	0	0	0	0	0	0	2	$131	$381	$131	$150	$100	$381
Task 3: Review Process																				
	First Draft for Erie Staff and Committee Review	16	$2,584	$0	$2,584	2	3	3	0	1	1	2	2	14	$733	$3,317	$733	$150	$2,434	$3,317
	Second Draft for Public Review and Fact Sheet	27	$3,106	$33	$3,139	2	4	2	2	2	2	0	0	14	$660	$3,799	$660	$150	$2,989	$3,799
	Third Draft for Erie Board Review, summary presentation and board meeting attendance	22	$2,766	$33	$2,799	2	4	0	0	0	0	0	0	6	$392	$3,191	$392	$150	$2,649	$3,191
	Fourth Draft for CWCB Review	8	$1,000	$0	$1,000	1	2	0	0	0	0	0	0	3	$196	$1,196	$196	$150	$850	$1,196
	Final Draft	6	$750	$110	$860	1	2	0	0	0	0	0	0	3	$196	$1,056	$196	$150	$710	$1,056
Task 4: Project Management and Grant Related Administration																				
	Monthly Invoices to Erie	26	$2,908	$0	$2,908	0	6	0	0	0	6	0	0	12	$511	$3,419	$511	$150	$2,758	$3,419
	25%, 50% and 95% Progress Reports	14	$1,896	$0	$1,896	0	4	0	0	0	0	0	0	4	$260	$2,156	$260	$150	$1,746	$2,156
Total of Tasks		**296**	**$39,624**	**$528**	**$40,152**	**18**	**58**	**27**	**16**	**23**	**17**	**19**	**19**	**197**	**$9,829**	**$49,981**	**$9,829**	**$2,700**	**$37,452**	**$49,981**

Cost Share Allocation

Total Cost to Prepare Plan (Erie and Amec)	$49,981
Erie in-kind contribution	$9,829
Erie monetary expenditure (cash funds)	$2,700
Total Erie contribution as percent of total	25.1%
Total CWCB Grant contribution	$37,452

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Erie Drought Management Plan
Time and Cost Estimate
April 2013

		Rozaklis Professional Level 25	Black Professional Level 15	Chambers Technician Level 13	Pedrick Administrative Level 8	McAmis Administrative Level 8	Direct Expenses	Total
STAFFING HOURLY RATE		$198	$125	$68	$68	$68		
Task 1: Preparation and Facilitation of Drought Committee Meetings								
Coordination and debrief on two workshops		4	12	0	0	0	$66	$2,358
Drought Committee Workshop #1		10	24	0	0	0	$110	$5,090
Drought Committee Workshop #2		10	24	0	0	0	$110	$5,090
	Phase Total	24	60	0	0	0	$286	$12,538
Task 2: Development of Plan								
2.1	Introduction, Stakeholders and Objectives	0	4	5	0	0	$0	$840
2.2	Historical Drought and Impact Assessment	0	4	0	0	0	$0	$500
2.3	Drought Vulnerability Assessment	0	10	0	0	0	$0	$1,250
2.4	Drought Mitigation and Response Strategies	0	12	0	0	0	$0	$1,500
2.5	Targets (includes meetings with Erie and NCWCD)	14	20	0	0	0	$66	$5,338
2.6	Staged Drought Response Program	0	16	0	0	0	$0	$2,000
2.7	Implementation and Monitoring	0	6	0	0	0	$0	$750
2.8	Formal Plan Approval and Updates	0	2	0	0	0	$0	$250
	Phase Total	14	74	5	0	0	$66	$12,428
Task 3: Review Process								
	First Draft for Erie Staff and Committee Review	8	8	0	0	0	$0	$2,584
	Second Draft for Public Review, Fact Sheet and Attendance at Meeting	1	20	2	0	4	$33	$3,139
	Third Draft for Erie Board Review, summary presentation and board meeting attendance	1	20	1	0	0	$33	$2,799
	Fourth Draft for CWCB Review	0	8	0	0	0	$0	$1,000
	Final Draft	0	6	0	0	0	$110	$860
	Phase Total	10	62	3	0	4	$176	$10,382
Task 4: Project Management and Grant Related Administration								
	Monthly Invoices to Erie	0	20	0	6	0	$0	$2,908
	25%, 50% and 95% Progress Reports	2	12	0	0	0	$0	$1,896
	Phase Total	2	32	0	6	0	$0	$4,804
Total Hours		50	228	8	6	4		296
Total Cost		$9,900	$28,500	$544	$408	$272	$528	$40,152

Attachment A
Notice of Incorporation of the Town of Erie

VRANESH AND RAISCH, LLP
ATTORNEYS AT LAW

1720 14th Street, Suite 200
P.O. Box 871
Boulder, Colorado 80306-0871

Telephone 303/443-6151
Telecopier 303/443-9586

Jerry W. Raisch
Michael D. Shimmin
Eugene J. Riordan
Paul J. Zilis
Lisa Ledet

Stuart B. Corbridge

George Vranesh (1926 - 1997)

January 22, 2007

Gary Behlen, P.E.
Town of Erie
645 Holbrook
P.O. Box 750
Erie, CO 80516

Re: Erie Conservation Plan/Incorporation Documentation

Dear Gary:

Enclosed is the Notice of Incorporation of the Town of Erie which I am sending for the documentation required by CWCB for the Town's conservation plan. Please let me know if you need any additional documentation.

Sincerely,

VRANESH AND RAISCH, LLP

Paul J. Zilis

PJZ:kek
Enclosure

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Notice of Incorporation of the Town of Erie in County of Weld in Territory of Colorado

Territory of Colorado }
County of Weld } ss

11-16-1874

Be it Remembered, that on Monday the sixteenth day of November A.D. 1874 the Board of County Commissioners in and for the County of Weld in the Territory of Colorado, met pursuant to adjournment at Greeley the County seat of Weld County and Territory aforesaid.

Present

Hon S. J. Plumb chairman of the Board Mr J. L. Brush and Mr J. M. Woolaver members of the Board.

Hon F. B. A. Haynes County attorney and W. C. Sanders County Clerk

When the following business "among other things" was had and entered of Record, to wit:

The Petition to "incorporate the Town of Erie" under the name of "The Incorporation of the Town of Erie" said Town to be bounded as follows to wit:

The East half (½) of the North West quarter (¼) and the East half (½) of the South West quarter (¼) of Section Eighteen (18) Township One (1) North of Range Sixty Eight (68) West, was received: and on motion of Mr J. L. Brush, the Prayer of said Petition were ordered granted: and the Town of Erie as hereinbefore described be, and the same is hereby declared Incorporate according to Section One (1) Article One (1) Chapter Eighty Four (84) of the Revised Statutes of Colorado and the following named persons were and they are hereby appointed Trustees of said Town of Erie, to serve as such until the first Monday in April A.D. 1875, according to Section One (1) Article Two (2) of Chapter Eighty Four (84) of the Revised Statutes of Colorado viz:

John T. Williams, John A. Rowe, Joseph J. Wheaton R. J. Van Valkenberg, and George Mellor

Territory of Colorado }
County of Weld } ss

I, W. C. Sanders County Clerk in and for said County in the Territory aforesaid

do hereby certify the above and foregoing to be a true and correct statement of the proceedings of the Board of County Commissioners in and for said County of Weld and Territory of Colorado pertaining to the Incorporation of the Town of Erie

Given under my hand and official seal at Greeley this twenty third day of November A D 1874

(Seal)

signed W C Sanders

County Clerk

Territory of Colorado }
County of Weld } ss
Town of Erie }

I Samuel N Southard Town Clerk of said Town of Erie in the County and Territory aforesaid do hereby certify the above and foregoing to be a true and correct copy of the "Notice of Incorporation" to the above named Board of Trustees of the Town of Erie

Given under my hand and the corporate seal of said Town of Erie this third day of December A D 1874

Samuel N Southard

Town Clerk

Attachment B
Erie Drought Management Plan
Scope of Work

This scope of work outlines the work to be performed by the Town of Erie (Erie) and AMEC Environment and Infrastructure (AMEC) to develop a Drought Management Plan (Plan). AMEC plans to work closely with Erie in developing a Plan that provides an appropriate level of guidance for Erie to plan and manage water supplies during water short periods.

AMEC will approach this project according to the Project Tasks identified below. These tasks correspond with the Colorado Water Conservation Board (CWCB) *Municipal Drought Management Plan Guidance Document (Guidance Document).*

Task 1: Preparation and Facilitation of Drought Committee Workshops

Purpose: Two drought committee workshops will be held during the drought plan development process to obtain stakeholder feedback necessary to develop an effective plan. The workshops will provide an efficient mechanism for incorporating the diverse operational and managerial knowledge of Erie staff responsible for mitigating and responding to drought.

Approach: AMEC will work with Erie to organize and facilitate the following two Drought Committee workshops:

- Drought Committee Workshop #1: The first workshop will focus on the Drought Committee's role and obtaining feedback on the following key elements of the Plan; planning objectives, operating principles, and water use priorities; historical and current drought impacts; drought vulnerability; drought mitigation and response strategies; and preliminary feedback on drought stages and triggers.
- Drought Committee Workshop #2: The second workshop will focus on finalizing the drought stages, trigger points and response targets; developing the staged drought response program; a general framework for a public drought campaign; and developing a plan for the Plan implementation and drought monitoring.

This task also includes correspondence with one Erie staff member to coordinate the Drought Committee workshops and debrief on each meeting.

Assumptions:

- AMEC will develop the workshop materials and Powerpoint presentations, will present those materials at the workshops, and will act as a technical facilitator at the workshops.
- With input from AMEC, Erie will select potential Drought Committee members, invite those members to participate in the workshops, schedule the times and locations of the workshops and host the workshops.
- The Drought Committee will consist of employees within the Town of Erie who will be responsible for monitoring, mitigation and responding to drought. One or two decision makers (i.e. Erie Board members) may also be included on the Committee.

- The Drought Committee workshops will each be three to four hours
- Erie will be responsible for correspondence with CWCB in regards to grant monies

Deliverables:

- Agendas, Powerpoint presentations and handouts developed for the workshops

Task 2: Development of Draft Drought Management Plan

Purpose: AMEC will work closely with Erie staff and the Drought Committee to develop an effective Plan that will provide an appropriate level of guidance for Erie to plan and manage water supplies during water short periods.

Approach: The plan will be developed according to the template provided in CWCB's Guidance Document which provides a drought plan framework and content. The specific format of Erie's Plan and content items to be included are identified in the CWCB template checklist included as Attachment C.

Additionally AMEC will work with Erie staff and Northern Colorado Water Conservancy District (NCWCD) in developing the drought stages, triggers and response strategies. This will include a summary of NCWCD's allocation of CBT and Windy Gap supplies and a brief description of other factors that could influence supplies during dry periods (i.e. water quality factors). AMEC will facilitate a meeting with Erie staff to discuss Erie's water supply system and water supply reliability and drought planning and an additional meeting with NCWCD staff to discuss NCWCD's allocation of CBT and Windy Gap on an annual basis.

Assumptions:

- AMEC will work closely with Erie staff and the Drought Committee to weigh the advantages and disadvantages of incorporating drought triggers into the drought declaration process and to ultimately determine whether triggers are to be included in the drought plan.
- Drought stages and corresponding drought triggers and response targets will be developed using readily available information as opposed to rigorous technical modeling exercises which, for purposes of this planning document, is outside the Scope of Work.
- Three to five drought stages and corresponding response targets will be developed.
- The Drought Committee will select one spokesman to directly communicate with AMEC during Plan development.

Deliverables:

- Handouts necessary for the meetings with Erie staff and NCWCD
- First draft of the Plan for review by Erie staff and the Drought Committee

Task 3: Review Process

Purpose: Several draft reviews of the Plan are necessary for Erie to officially adopt a Final Plan and receive Plan approval from CWCB. This includes a 30-day public review period for the public to review and provide feedback on the draft Plan. This is required for all CWCB grant recipients

Approach: AMEC will develop a single page fact sheet in support of the public review process. The 30-day public review period will consist of advertisement of the Plan on Erie's website. The Plan and fact sheet will be posted on Erie's website and the public will be encouraged to provide comments.

Additionally AMEC will develop a brief Powerpoint presentation (approximately five slides) summarizing the Drought Management Plan for presentation to the Board and attend one Board meeting. Five drafts of the plan will be developed to address applicable comments from the following reviews:

- First Draft for Drought Committee and Erie Staff Review
- Second Draft for the Public Review
- Third Draft for the Erie Board Review
- Fourth Draft for the CWCB Review
- Final Report

Assumptions:

- AMEC will attend one Board meeting to answer questions during the Board review period and provide up to ten Powerpoint slides that may be used to present the Plan to the Board.
- Erie will be responsible for all coordination of the public review period include advertising, collection of public comments, and making the Plan publicly available.
- A single set of comments will be consolidated by Erie staff following each review and provided to AMEC for incorporation in the draft Plan document.
- Erie staff will be responsible for authoring and adopting all applicable ordinances and formal agreements with other entities to facilitate implementation of the Plan.
- Erie will be responsible for initiating and conducting the periodic Plan review and updates.

Deliverables:

- Draft Plan following the Drought Committee and Erie staff
- Electronic copy of one-page Fact Sheet for Erie's distribution during the public review period
- Draft Plan following the public review
- Short Powerpoint presentation (around 6 slides) for the Board Meeting
- Draft Plan following the Board review
- Final Plan following CWCB review electronically submitted to Erie and CWCB

Task 4: Project Management and Grant Related Administration

Purpose: AMEC will conduct project management activities and administrative support activities required under CWCB's Drought Management Plan grant program.

Approach: This task includes the following activities:

- AMEC will submit monthly invoices to Erie including brief progress reports and initiate start-up and close out activities.
- Progress reports at 25%, 50% and 95% completion are required by CWCB for Drought Management Plan recipients. These reports will be submitted electronically to CWCB and Erie, providing the status of each task in the Plan development.
- AMEC will communication regularly with the CWCB to ensure that the final Plan will meet CWCB approval.
- Development of the 25%, 50% and 95% progress reports will be limited to a single draft

Deliverables:

- Monthly invoices with brief progress reports.
- Submit electronic copies of the 25%, 50% and 95% progress reports to Erie and the CWCB.

Attachment C
CWCB Drought Management Plan Guidance Document Template

Essential	Beneficial	Public	Document	
	Δ	□		☒ Profile of service area – map or description of the service area and discussion of key water related infrastructure (e.g., water treatment plants, reservoirs, well fields, etc.)
	Δ	□		☒ Profile of existing supplies – general overview of the provider's water supplies, storage facilities, and other supply information applicable to drought planning.
	Δ	□	+	☐ Customer profile – average annual retail water delivered to customers (acre-feet), number of homes/customers within the service area, and profile of customer types (e.g., percentage of industrial, commercial, single residential, etc.)

Introduction

This section introduces the concept of drought management planning and provides a general background on service area and existing water supplies. Information on historical drought planning efforts and how they efforts differ from water conservation could also be addressed. While this information is not essential for planning, it provides useful background material.

Profile of Existing System

Objective: Provide an overview of the existing system and service area. This should be fairly general information and does not entail disclosure of "sensitive" information that could result in future public safety concerns.

Drought Mitigation and Response Planning

Objective: Provide a general description of drought mitigation and response planning. Background information on drought mitigation and response planning is provided in Sections 2.2 and 2.3 and also in the Drought Toolbox.

		□		☒ General description of a drought. See Section 2.1.
		□		☒ Explanation of how a drought affects the provider's water supplies.
		□		☒ Purpose and benefits of drought mitigation and response planning.
		□		☐ Introduce difference between drought mitigation and drought response planning.
	Δ			☐ Description of how the drought management plan is coordinated with the State Drought Plan and other local plans, including county or municipal level multi-hazard mitigation plans and emergency operation plans, to reduce redundancy and capitalize on joint efforts. County multi-hazard mitigation plans may be a source of information on drought history and vulnerability and often contain mitigation action strategies that may benefit or enhance local planning efforts.

Essential	Beneficial	Public	Document	
				Historical Drought Planning Efforts
				Objective: Describe historical drought planning efforts.
	Δ	□		☒ Overview of historical drought planning efforts.
	Δ	□		☐ Explanation of modifications made to the current drought planning effort and how this plan is an improvement to historical efforts.
				Drought Planning and Water Conservation
				Objective: Drought mitigation, response planning, and conservation planning are closely interrelated processes. Effective planning coordinates all three planning efforts. It is recommended that conservation measures included in a conservation plan, which also provide long-term drought mitigation benefits, also be incorporated as drought mitigation in the drought management plan. This section defines and explains the relationships between drought mitigation planning, drought response planning, and water conservation. Additional information on this may be found in Section 2.3.1.
		□		☒ Difference between drought and conservation planning. (Some providers may consider conservation as a means of drought mitigation. If this is the case, discuss how conservation is integral to drought mitigation.)
		□		☐ Brief summary of conservation efforts to date.
				1.0 Stakeholders, Objectives, and Principles
				This section introduces the stakeholder process and basic objectives of the drought management plan.
				1.1 Drought Planning Committee
				Objective: The members and size of the Drought Committee will vary among providers. Larger providers will likely have a more involved stakeholder process than smaller providers with limited drought planning resources and staff. This section provides an overview of the stakeholder process. See Section 4.1.1 for more information.
		□		☐ Importance of a stakeholder process.
♦			+	☒ Role of the Drought Committee in the development of the drought management plan.
		□		☐ Explanation of the Drought Committee selection process.
		□	+	☐ Drought Committee members including their job title and description of expertise.

Essential	Beneficial	Public	Document	
		□	+	☒ Summary of the Drought Committee planning meetings held during the drought management plan development process.
			+	☐ Appendix containing meeting materials (meeting agendas, minutes, presentations, etc.)

1.2 Objectives of the Drought Management Plan

Objective: Introduce the basic objectives and operating principles of the plan and describe how these objectives are integrated into the broader water management planning efforts. See Section 4.1.2 for more information.

Essential	Beneficial	Public	Document	
♦			+	☒ List of the objectives and operating principles.
	Δ	□		☒ Discussion of how the objectives and operating principles reflect water use priorities during periods of a drought.
	Δ	□		☒ List of water use priorities (i.e., a) essential water needs, b) social or economic impacts, and c) nonessential uses such as outdoor irrigation).
		□		☐ Discussion of how the operating principles were incorporated into the plan development and how these principles will be considered during implementation (i.e., "The operating principles are reflective of the community's values and will be reviewed prior to implementing mandatory water use reductions.")

2.0 Historical Drought and Impact Assessment

This section provides an overview of historical droughts and corresponding changes to supplies and demands. Drought related impacts and lessons learned from previous droughts are also included. While the availability of historical data will vary among providers, the main objective of this section is to consolidate available data to provide insight for projecting and planning for future drought conditions.

2.1 Historical Assessment of Drought, Available Supplies, and Demands

Objective: Assess historical water supplies and demands from previous droughts. Provide as much beneficial detail as possible based on available historical data and institutional memory. See Section 4.2.1 for additional information.

Essential	Beneficial	Public	Document	
♦				☒ Discussion of significant historical droughts and how they affected water supplies. This may include information on past reservoir levels, precipitation, streamflows, snowpack, groundwater levels, wholesale supplies, water quality issues, etc. Provide tables/figures that assist in describing historical conditions (i.e., hydrographs).

Essential	Beneficial	Public	Document	
		□		☒ Description of existing operational factors, concepts, and terms that are important when explaining drought planning to the public (e.g., drought reserves, firm yield/safe yield, water quality considerations, water rights, etc.)
	Δ			☒ Description of historical changes to water demands as a result of drought and/or drought response/mitigation measures. Provide applicable quantitative data if available. This may include total water demands, per capita water demands (gpcd), demands by customer type, indoor and outdoor usage, etc.
			+	☐ Lessons learned from previous drought(s) and recommendations for how implementation of drought mitigation/response measures should be altered to better respond to future drought.

2.2 Historical Drought Impact, Mitigation and Response Assessment

Objective: Review and discuss historical drought impacts and mitigation and response measures taken to reduce the impacts. Provide as much beneficial detail as possible based on available historical data and institutional memory. See Section 4.2.2 for additional information.

Essential	Beneficial	Public	Document	
♦				☒ Impacts experienced during historical droughts or current drought. ***Worksheet A*** provides a list of drought related impacts and a means to identify historical and current impacts.
	Δ			☐ Available drought-related economic loss data and any additional information useful for characterizing historical impacts. This may also be provided in a supplemental document as an appendix.
♦				☒ Mitigation measures historically implemented to minimize drought impacts. Demand- and supply-side historical mitigation measures may be identified using ***Worksheets B and C***, respectively.
♦				☒ Drought response measures implemented during previous drought(s) and overall effectiveness of these measures. Demand- and supply-side historical response measures may be identified using ***Worksheets B and C***, respectively.

3.0 Drought Vulnerability Assessment

This section provides an overview of water supply reliability and drought management planning and identifies potential future drought impacts. This information is useful for selecting the drought mitigation and response strategies described in Step 4.

3.1 Water Supply Reliability and Drought Management Planning

Objective: Present the approach used for the water supply reliability assessment. See Section 4.3.1 for additional information.

Essential	Beneficial	Public	Document		
	Δ	□	+	☐	Summary of water supply reliability planning efforts. For example, disclose raw water master planning studies, forecasting models, etc.
	Δ	□	+	☐	If not previously discussed, disclose key terminology used to define water supply reliability and how it is measured (e.g., firm yield, safe yield, etc.)
	Δ	□	+	☒	Description of how water supply reliability planning is related to drought planning (i.e., water supply reliability planning efforts target sufficient supplies to meet essential customer needs for a drought equivalent to the 2002 drought).
	Δ	□	+	☐	If applicable, address how climate change has been incorporated into water supply reliability planning.
	Δ	□	+	☒	Description of other factors that could influence either the quality or quantity of water supplies, or demands that are not directly incorporated into water supply reliability studies (e.g., water quality issues, severe cases of droughts in sequential years, Colorado River Compact call, etc.)

3.2 Drought Impact Assessment

Objective: Identify potential future drought impacts. See Section 4.3.2 for additional information.

♦				☒	Potential impacts that could occur during future droughts. ***Worksheet A*** may be used to identify potential impacts.
	Δ			☐	Discussion of the relative priorities assigned to the potential impacts. This information may be best represented as a table listing the potential impacts and corresponding priority with follow-up discussion. ***Worksheet A*** provides a means to record these priorities.

4.0 Drought Mitigation and Response Strategies

This section discusses the selected drought mitigation and response strategies.

4.1 Drought Mitigation Measures

Objective: Introduce existing and planned drought mitigation measures. These measures should be integrated into water supply management planning efforts and operations prior to a drought in order to reduce the severity of future droughts. See Section 4.4 for additional information.

♦				☒	List of drought mitigation measures.
	Δ			☒	***Worksheets B and C*** list potential mitigation actions and provide a means to select and screen measures. ***Worksheet A*** facilitates the development of new mitigation actions that specifically address preidentified potential impacts. These processes are described in greater detail in Section 4.4.2.

Essential	Beneficial	Public	Document	
	Δ			☐ Discussion of the criteria used to select the mitigation measures. Section 4.4.2 provides a list of suggested criteria.
♦				☒ If conservation is being considered as a component of drought mitigation, discussion of how the existing conservation measures provide drought mitigation. See Section 2.3.1 for additional discussion.

4.2 Supply-Side Response Strategies

Objective: Provide an overview of the supply-side response strategies. See Section 4.4 for additional information.

♦				☒ List of the selected supply-side response strategies. Supply-side strategies listed in ***Worksheet B*** may be used as an initial reference source for generating strategy ideas. Specific details related to each strategy should be included. For example, if the "lower reservoir intake strategy" is selected, information should also be provided on the specific reservoir(s) in which the intake will be lowered.
	Δ	□		☒ Discussion of the criteria used to select the supply-side strategies. Section 4.4.2 provides a list of suggested criteria.
		□		☐ Discussion of how the selection process is reflective of the Step 1 objectives and operating principles.

4.3 Demand-Side Response Strategies

Objective: Provide an overview of the demand-side response strategies taken when drought is imminent or occurring. See Section 4.4 for additional information.

♦				☒ List of the selected demand-side response strategies. Demand-side strategies listed in ***Worksheet C*** may be used as an initial reference source for identifying strategies. This worksheet is also useful for identifying whether the strategy is to be implemented on a voluntary, incentive, or mandatory basis. For example, strategies may be voluntary for a Stage 1 drought and elevated to mandatory under more drought severe conditions. Coordination with other entities may also be beneficial and can be noted in ***Worksheet C***. Similar to the supply-side strategies, details related to the future implementation of each strategy should be included.
	Δ			☒ Discussion of the criteria used to select the demand-side strategies. Section 4.4.2 provides a list of suggested criteria.
		□		☐ Discussion of how the selection process is reflective of the Step 1 objectives and operating principles.

Essential	Beneficial	Public	Document	
	Δ	□		☒ List of the public drought campaign goals.
	Δ	□		☒ Discussion of how the public drought campaign will be differentiated from the public conservation education program and how synergistic benefits can be developed between the two programs.
♦				☒ General components of the public drought campaign. This includes the types of audiences to be targeted, communication tools to be used to convey drought related information, specific key information to convey, and opportunities for future synergies. ***Worksheet D*** may be used as a means to develop this framework.
	Δ	□		☒ Prescripted messages targeted towards the public to be released through public information outlets during various drought stages. These could be detailed in an appendix.

4.4 Drought Public Information Campaign

Objective: Provide the drought public campaign framework. See Section 4.4.3 for additional information.

5.0 Drought Stages, Trigger Points, and Response Targets

This section presents the drought stages, trigger points, and response targets and how they are incorporated into a drought declaration and response effort. Information is also provided on how these drought stages, trigger points, and response targets were developed and challenges related to the unpredictable nature of drought.

5.1 Drought Stages, Trigger Points, and Response Targets

Objective: Present the drought stages, response targets and, if applicable, corresponding drought trigger points. This should also include an explanation of how drought indicators and/or drought trigger points are used to determine and declare drought stages to the public. See Section 4.5 for additional information. Information on drought indicators is provided in the Drought Toolbox.

♦				☒ Presentation of the drought stages and, if applicable, corresponding drought trigger points and response targets. The tables included in ***Worksheet E*** may be used to present the drought stages, trigger points, and response targets.

Essential	Beneficial	Public	Document	
		□		☒ Explanation of how the drought stage depends upon the severity of the drought and that the amount of water that must be saved increases with the severity of the drought. For example, Stage 1 may involve voluntary saving measures while Stage 3 may require significant mandatory reduction of outdoor lawn watering).
	Δ			☐ If applicable, approach used to develop the drought trigger points and response targets.

5.2 Drought Declaration and Predictability

Objective: Provide a brief discussion of the challenges involved in early detection of a drought, how drought indicator data help characterize a drought, and other factors that influence drought declaration. See Section 4.5.2 for additional information.

		□		☒ Discussion of how weather patterns in Colorado can be unpredictable and the overall challenges in early detection of drought. Example(s) of past unpredicted weather events may be beneficial.
♦				☒ List of selected drought indicators and description of how these indicators are reflective of water supply conditions.
	Δ		+	☐ If applicable, significance of the selected drought trigger(s). In other words, why were these trigger(s) selected as opposed to other drought indicators.
♦				☒ Discussion of how the drought indicators, triggers, and other pertinent data are incorporated into the decision making process of declaring a drought.
♦				☒ Summary of how drought indicators will be monitored and general frequency of monitoring. Address critical times of year when monitoring is particularly important for identifying drought conditions (i.e., reservoir storage near the end of runoff).
	Δ	□		☒ Advantages and disadvantages of declaring a drought early versus delaying declaration of a drought stage until later in the season. Address the balance between prematurely declaring a drought and waiting too long to respond.
	Δ	□		☐ Discussion of how droughts can behave differently and the necessity for flexibility in declaring a drought stage (i.e., a multi-year drought could result in water shortages greater than anticipated requiring drought stages, trigger points, and response targets to be adjusted accordingly).

Essential	Beneficial	Public	Document	
				6.0 Staged Drought Response Program
				This section outlines the drought response measures corresponding to each of the drought stages developed in Step 5. See Section 4.6 for additional information.
♦				☒ Supply- and demand-side response measures by drought stage. ***Worksheet F*** may be used to divide the strategies into individual measures according to drought stage. ***Worksheet G*** provides a template for presenting the supply- and demand-side measures.
♦	□			☒ Provide a summary table that highlights the drought stages, trigger points, response targets and a summary of drought response measures. ***Worksheet H*** provides a template that may be used to summarize the staged drought response program (for insert into an executive summary, fact sheet for public distribution, etc.)
	Δ			☐ Provide detailed staged public drought campaign plan if the provider chooses to include a detailed public drought campaign plan as a component of the staged drought response program. If appropriate, this may be an appendix or supplemental document. See Section 4.6.2 for additional information.
				7.0 Implementation and Monitoring
				This section addresses the coordination necessary to fully implement the drought management plan. This includes mitigation plan, drought indicator monitoring, drought declaration protocol, implementation and enforcement of the staged drought response program, revenue planning, and monitoring of the drought response effort and making appropriate changes when necessary.
				7.1 Mitigation Action Plan
				Objective: Present the schedule and procedures necessary to implement the drought mitigation. See Section 4.7.1 for additional information.
			+	☐ ***Worksheet I*** provides a means to summarize the majority of information listed below in a table.
♦				☒ List of the drought mitigation actions.
♦				☒ Steps necessary to implement each mitigation action.
♦				☒ Milestone deadlines.
♦				☒ Entities/staff responsible for administrating the mitigation action.
	Δ			☐ List of funding sources.

Essential	Beneficial	Public	Document	
				7.2 Monitoring of Drought Indicators
				Objective: Discuss the approach used to monitor drought indicators, including the schedule, monitoring methodology, and roles and responsibilities of the entities/staff responsible for monitoring the drought indicators. See Section 4.7.2 for additional information.
♦				☒ Drought data monitored on an annual and seasonal basis.
♦				☒ Frequency monitoring and general schedule. Address how intensity of monitoring effort may increase during drought periods.
	Δ			☐ If applicable, approach and/or resources used to forecast drought.
♦				☒ Entities/staff responsible for drought monitoring.
	Δ			☐ Protocol for recording and archiving monitoring data.
				7.3 Drought Declarations
				Objective: Describe the decision-making process necessary to publicly declare a drought and the corresponding drought stage and how this information is conveyed to the public. See Section 4.7.3 for additional information.
♦				☒ Summary of guidelines (e.g., trigger points and/or drought indicator data) used by staff to evaluate drought conditions.
♦				☒ Decision maker(s) responsible for declaring a drought and corresponding drought stages.
	Δ			☐ If applicable, protocol for conveying drought information and recommendations from staff to decision makers.
♦				☒ Discussion of importance in identifying and declaring drought in a timely manner. Address timing of when decision-makers are informed and, subsequently, when the public is informed of a drought declaration.
♦				☒ Staff or entity responsible for announcing drought declaration to the public.
				7.4 Implementation of the Staged Drought Response Program
				Objective: Describe the roles and responsibilities of implementing the staged drought response program. See Section 4.7.4 for additional information.
♦				☒ Entities/staff responsible for administering the staged drought response program.
	Δ			☐ If applicable, discuss additional staff that would need to be hired.
♦				☒ Staff responsible for administering the drought public campaign.

Essential	Beneficial	Public	Document	
♦				☒ Communication and coordination protocol among entities/staff.

7.5 Enforcement of the Staged Drought Response Program

Objective: Describe the policy, roles and responsibilities, and activities necessary to enforce the drought response plan. See Section 4.7.5 for additional information.

Essential	Beneficial	Public	Document	
♦				☒ Enforcement policies appropriate for each drought stage. ***Worksheets G*** and ***H*** provide options of how the specific enforcement policies and/or activities may be presented.
	Δ			☒ Identify the level of monitoring/patrolling necessary for each drought stage. Who will be responsible for patrolling the service area and issuing citations? Will additional temporary staff need to be hired? What training will be necessary?
	Δ			☒ Identify how information on the enforcement will be conveyed to the public.
	Δ			☒ Develop an appeals process and possible exemptions to enforcement procedures under certain circumstances.
	Δ			☐ Identify who is responsible for administration of the enforcement effort and approving exceptions to the enforcement policy.

7.6 Revenue Implications and Financial Budgeting Plan

Objective: Discuss the potential for revenue loss when customers reduce water use in response to drought and how this will be addressed. Quantitative estimates of revenue implications, water rate adjustments, or other budgetary modifications can be an involved and highly technical process that may be beyond the scope and financial resources for this effort. If the provider chooses to not pursue a detailed financial revenue analysis as a component of this Plan, this section should, at minimum, outline the steps and resources necessary to address this issue if revenues should be significantly impacted from future drought response efforts. See Section 4.7.6 for additional information.

Essential	Beneficial	Public	Document	
		□		☐ Introduction to how the reduction in water use can reduce revenue and financially stress providers.
	Δ			☐ Estimates and/or qualitative discussion of potential revenue reductions and how this would impact the average residential and business customer.
♦				☒ Financial resources necessary to implement the response programs, including the public drought campaign, stated drought response program, and any additional funds necessary to intensify drought monitoring efforts.
♦				☒ Describe the strategies for addressing revenue losses. Include the general timing of when these strategies would be implemented relative to the declaration of a drought.

Essential	Beneficial	Public	Document	
	Δ			☐ Detailed estimates of potential revenue loss and specific actions taken by the provider to mitigate these losses (i.e., create a special fund prior to the drought to offset revenue losses during the drought, drought surcharges or raise water rates). Provide the assumptions and details of the financial analysis in an appendix or supplemental document.
	Δ			☒ Discuss how the drought surcharges and/or water rate increases would be conveyed to the public.

7.7 Monitoring of Plan Effectiveness

Objective: Describe the data collection and assessment activities in place to monitor the overall effectiveness of the plan. See Section 4.7.7 for additional information.

Essential	Beneficial	Public	Document	
	Δ			☐ Schedule an exercise to test the implementation of the Plan.
♦				☒ Data to be collected. This should include demand data, lessons learned, conditions of the water supply system during the drought (e.g., storage amounts), public perceptions and general response to the drought, and administrative staged drought response program data (e.g., number of citations delivered).
♦				☒ Staff/entities responsible for the data collection, evaluation, and recommendations on Plan improvements.

8.0 Formal Plan Approval and Updates

This section addresses the public review and formal adoption process for the necessary ordinance(s) and agreement(s) of the Plan. Information is also provided on the maintenance and anticipated update of the Plan.

8.1 Public Review Process

Objective: This section summarizes the public's role in development of the Plan. See Section 4.8.1 for additional information.

Essential	Beneficial	Public	Document	
	Δ			☒ A public review process is necessary to ensure that the public has had an opportunity to review and comment on the Plan. Providers should follow the appropriate rules, codes, or ordinances to make the draft Plan available for public review and comment. If there are no rules, codes, or ordinances governing the entity's public planning process, each provider should publish a draft Plan, give public notice of the Plan, make such plan publicly available, and solicit comments from the public for a period of not less than sixty days after the date on which the draft Plan is made publicly available. Reference shall be made in the public notice to the elements of a Plan that have already been implemented.

Essential	Beneficial	Public	Document		
	Δ			☐	If members from the general public are on the Drought Committee, describe their involvement.
♦				☒	Description of the public review process and how the public may access the Plan.
			+	☐	Summary of public comments and meetings held during the Plan development process.
			+	☐	Appendix of the public meeting minutes and public comments and how those comments were addressed within the Plan.

8.2 Adoption of Ordinances and Official Agreements

Objective: Summarize the ordinances and official agreements adopted to implement the Plan. See Section 4.8.2 for additional information.

♦				☒	Summary of the ordinance(s) and policy necessary to implement the Plan. This may include policy changes to: facilitate the formal declaration of a drought; implement and enforce the staged drought response program and drought public campaign; and adopt revenue changes, etc.
♦				☒	Official agreement(s) needed with other entities for drought-related coordination purposes.
			+	☐	Official copies of the ordinance(s) and/or official agreement(s) may be included in an appendix.
			+	☐	Challenges encountered to develop and approve the ordinance(s) and/or official agreement(s).

8.3 Drought Management Plan Approval

Objective: Briefly summarize the formal process for Plan adoption. Note: For some water suppliers, formal approval of its Plan may not be desirable. See Section 4.8.3 for additional information.

♦				☒	Government body that either approved or officially adopted the Plan.
♦				☒	Date of approval/adoption.
	Δ			☐	Potential conflicts/issues with the approval/adoption.
			+	☐	Copy of the official approval/adoption document in appendix.

8.4 Periodic Review and Update

Objective: Summarize the anticipated timing of Plan updates and the processes that will occur to facilitate the update. See Section 4.8.4 for additional information.

♦				☒	Frequency of when the Plan will be updated. Recommend every five years.

Essential	Beneficial	Public	Document	
♦				☒ Anticipated date of the next update.
	Δ			☐ Staff responsible for taking the lead in initiating the Plan update and collecting appropriate data.
	Δ			☐ Process of how the recommendations for Plan improvements will be incorporated into updated plans.

9.0 Suggested Appendices

This section provides a list of appendices that may be applicable to include with the Plan.

			+	☐ Drought Committee meeting materials (e.g., meeting agendas, minutes, presentations, etc.)
			+	☐ Public drought campaign prescripted messages.
			+	☐ Supplemental technical information and data. This may include studies on demand reduction and revenue impacts, historical drought impact studies/reports, or supplemental data/information on the water supply vulnerability assessment, etc.
			+	☐ Public meeting minutes and comments.
			+	☐ Official copies of the adopted ordinance(s) and/or official agreement(s).
			+	☐ Copy of the Plan approval document.