

STATE OF COLORADO

Colorado Water Conservation Board

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TO: Colorado Water Conservation Board Members

FROM: Veva Deheza, Section Chief
Kevin Reidy, Water Conservation Technical Specialist
Office of Water Conservation & Drought Planning

DATE: September 6, 2011

SUBJECT: **Agenda Item #18, September 13-14, 2011 Board Meeting
Proposed Guidelines Regarding the Reporting of Water Use and
Conservation Data by Covered Entities – Implementation of HB10-1051**

Staff Recommendation

This is the first reading of the proposed *Guidelines Regarding the Reporting of Water Use and Conservation Data by Covered Entities*. The CWCB's process for adopting guidelines in the past, dictate that these Guidelines are presented to the Board twice prior to final adoption. The Board may adopt the Guidelines upon their second presentation. Feedback from this meeting, as well as from a proposed 45-day public comment period to commence on September 15, 2011, will be integrated into these Guidelines and presented to the Board again at the November 2011 CWCB Board meeting for potential final adoption.

Goals of HB10-1051

Data reported under HB10-1051 will further support statewide water supply planning efforts by improving the quantity and quality of data available and improving consistency in the data reporting. The goal of the effort currently underway between the WCTAG/1051 working group and the CWCB is to produce reporting Guidelines that result in data that is useful toward statewide water supply planning, while facilitating the reporting process and also limiting the level of effort required for the covered entities in the reporting process.

Background

In 2010, the Colorado General Assembly adopted HB10-1051, which requires covered entities to annually report water use and water conservation data to be used for statewide water supply planning. The Bill directs the Colorado Water Conservation Board (CWCB) to adopt guidelines regarding the reporting of water use and water conservation data by covered entities, and to report to the legislature regarding the Guidelines.

Since November, 2010, the Office of Water Conservation & Drought Planning has conducted 10 meetings with the CWCB's Water Conservation Technical Advisory (WCTAG)/1051 working group, and twice with the 1051 Stakeholder Advisory Group (SAG). There are a total of 40 members on the WCTAG and 34 members on the SAG.

The WCTAG has been meeting monthly (by phone or in person) and will continue to do so until the Board adopts the Guidelines. Draft Guidelines and supporting documents have been reviewed each month, requiring an estimated total of up to 10 hours per month for attending meetings and providing input on draft documents.

The SAG expands the perspective to provide recommendations focused on the practicality of implementing the Guidelines. The group has met twice (by phone or in person) and provided review and comment on at least two draft Guidelines through August 2011, requiring an estimated total of 10 hours. All covered entities were encouraged to participate.

In developing the Guidelines, the CWCB and advisory groups considered examples of categories of customers, uses, and measurements currently reported by covered entities under existing water conservation plans, data that is anticipated to be readily available to the majority of covered entities, and data that would improve statewide water planning.

In addition to working with the advisory groups, the CWCB has outreached to the IBCC Roundtables on this initiative, and recently presented to the Interim Water Resources Review Committee at their August 23, 2011 meeting in Steamboat Springs regarding the 1051 process and progress.

Attachments

Draft Guidelines Regarding the Reporting of Water Use and Conservation Data by Covered Entities

House Bill 10-1051 – *An Act Concerning Additional Information Regarding Covered Entities' Water Efficiency Plan*

Appendix B – Draft Reporting Data Definitions

Appendix C – The Draft Reporting Tool Template (spreadsheet for illustrative purposes only)



COLORADO WATER CONSERVATION BOARD

Guidelines Regarding the Reporting of Water Use and Conservation Data by Covered Entities

INTRODUCTION

The purpose of this document is to describe the Colorado Water Conservation Board (CWCB) process to implement the *Act Concerning Additional Information Regarding Covered Entities' Water Efficiency Plans*, as approved under House Bill (HB) 10-1051. The Act calls for the Board to establish Guidelines¹ regarding the reporting of water use and conservation data by covered entities. "Covered entity" means each 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 a total demand for such customers of two thousand acre-feet or more, per Section 37-60-126(1)(b) of the Colorado Revised Statutes (C.R.S.).

The CWCB developed these Guidelines through a public participation process that included outreach to stakeholders from water providers with geographic and demographic diversity, nongovernmental organizations, and water conservation professionals, per Section 37-60-126(4.5), C.R.S. A Technical Advisory Group was formed to provide recommendations and advise on the development of the specific data requirements and definitions in the Guidelines, focusing on technical issues, to ensure the usefulness of the data for statewide water supply planning. A Stakeholder Advisory Group expanded the perspective to provide recommendations focused on the practicality of implementing the Guidelines. Following development of the draft Guidelines with input from the advisory groups, the CWCB provided a full public review process with public comments incorporated in the final Guidelines. A briefing to the CWCB Board is provided as Attachment A.

In developing the Guidelines, the CWCB and advisory groups considered examples of categories of customers, uses, and measurements currently reported by covered entities under existing water conservation plans, data that is anticipated to be readily available to the majority of covered entities, and data that would improve statewide water planning. Descriptions of these data for the Guidelines were developed through the advisory groups and supplemented with terminology that is utilized within the water resources industry, as identified through published professional references.²

WATER USE AND CONSERVATION DATA REPORTING GOALS AND PURPOSE

The purpose of the data reporting, per Section 37-60-126(4.5)(a), C.R.S., is to provide water use and conservation data to be used for statewide water supply planning. The data collection process described in these Guidelines, developed as part of HB10-1051, is designed to provide better, more frequent, and more reliable data than that currently available. These Guidelines create standardized reporting in that each covered entity is required to report the same type of

information. However, this does not necessarily standardize the data collection process and does not require entities to change their data/billing systems to report in a particular format.

Specific reporting categories were identified to allow the data to be utilized for annual forecasting purposes and to predict how water demands for different customer categories may evolve over time, considering potential effects of water conservation. This information will be incorporated into existing statewide water supply planning efforts, specifically but not limited to the Statewide Water Supply Initiative (SWSI) process and the CWCB's role in supporting covered entities seeking to develop and update water conservation and drought mitigation and response plans. Additionally, data reporting will help the CWCB in developing more targeted technical outreach efforts aimed at providing better local water conservation planning tools to covered entities throughout Colorado.

Water demand and conservation savings forecasts developed under the statewide water supply planning process strive to employ consistency in data collection and forecast methodology across the state and to maximize available data. The statewide and basinwide planning efforts are not intended to replace water conservation and water resources planning and projections prepared by local entities for project-specific purposes.

The authorizing legislation for the reporting requirements is provided as **Appendix A**. Specific data collection and reporting needed to meet the goal of the reporting process are provided under the subsequent sections of this document. The following Guidelines have been developed pursuant to Section 37-60-126(4.5), C.R.S. and are adopted by the CWCB.

NOTE:

All water use and conservation data reporting under these Guidelines will become public record and will be available to the public through the CWCB website. The reporting under Section 37-60-126(4.5), C.R.S. does not take the place of local conservation planning or plans that must be submitted per Section 37-60-126(2), C.R.S. This data will be used for general statewide water supply planning per section Section 37-60-126(4.5(a), C.R.S. and is not intended to represent planning prepared by local entities for project-specific purposes. These Guidelines shall be reviewed and updated as necessary.

REPORTING REQUIREMENTS

HB10-1051 directs the Board to establish Guidelines that include clear descriptions of categories of customers, uses, and measurements. Recognizing that each covered entity is unique in its particular water supply portfolio, distribution system, and customer base, the CWCB utilized a public outreach process to establish reporting requirements that will enhance the consistency of the data that is collected, to increase the utility of data for statewide planning purposes, and to facilitate the reporting process. In developing these Guidelines, the CWCB and advisory groups recognized that it is not possible to create data reporting categories and descriptions that are universally applicable to all covered entities. The public participation process was utilized to develop reporting guidelines that relate to a broad group of covered entities. A reporting tool, as further described under the Reporting Process section below, will support the data reporting process.

To address the unique framework of each covered entity's water distribution system and customer characterization, certain water use and water conservation data will be reported by water distribution system type and customer class. Based on advisory committee input and review of the water conservation plans on file with the CWCB, the following water distribution system categories and customer classes are anticipated to represent the majority of systems:

Water Distribution Systems:

- Potable Water,
- Non-Potable Raw Water, and
- Non-Potable Reuse (or Reclaimed) Water.

Customer Categories:

- Residential (Single Family and Multi-Family),
- Utility/Municipal Facility
- Commercial, Industrial, and Institutional (CII), and
- Irrigation Only.

A list of the water use and conservation data categories for reporting is provided below. Additional descriptions and definitions are provided in **Appendix B** and a draft reporting tool template is provided as **Appendix C**. For those covered entities that have multiple water distribution systems, as described in Appendix B, certain data will be reported for each system.

Data Categories:

- 1) Contact and Submittal Information
 - a) Contact information
 - b) Reporting date
 - c) Applicable customer categories
- 2) Water Use Data by Customer Category for each Applicable Water Distribution System
 - a) Annual amount of distributed water (water produced and put into distribution system)
 - b) Frequency of billing
 - c) Monthly metered water use data
 - d) Normalizing data
 - i) Population served
 - ii) Monthly number of active service connections
 - iii) Average number of inactive accounts on an annual basis
 - e) Annual system water audit report
 - i) Billed unmetered water use

- ii)** Unbilled authorized water use
 - iii)** Apparent losses
 - iv)** Real losses
 - f)** Supplemental information (optional)
 - i)** Irrigated acreage by customer category
 - ii)** Average annual gross evapotranspiration rate for service area
 - iii)** Average annual total precipitation for service area
 - iv)** Typical irrigation application rate for service area
 - v)** Number of housing units for each residential water use category
 - vi)** Return flow information
- 3) Foundational Water Conservation Data**
- a)** Number of each type of meter reading system by customer category for each applicable water distribution system
 - i)** Manual Read
 - ii)** AMR
 - iii)** AMI
 - iv)** Unmetered
 - b)** Frequency of meter readings by customer category for each applicable water distribution system
 - i)** Monthly
 - ii)** Bi-monthly
 - iii)** Other (specify)
 - c)** Type of billing rate structure by customer category for each applicable water distribution system
 - i)** Declining block rates
 - ii)** Flat rates
 - iii)** Uniform rates
 - iv)** Inclining block rates
 - v)** Water budgets
 - vi)** Seasonal
 - vii)** No charge
 - viii)** Other
 - d)** Details of billing rate structures

- i)** Tiers (number or name)
 - ii)** Price per tier
 - iii)** Spread between tiers
 - iv)** Service charge/base rate
- e)** Conservation oriented tap fee information
- f)** Water loss characterization
 - i)** Meter age by customer category for each applicable water distribution system
 - ii)** Meter testing program characteristics
 - iii)** Percent of total meters replaced annually
 - iv)** Status of water loss characterization
 - v)** Annual percent of system inspected for leaks
 - vi)** Annual percent pipe replaced throughout system
- g)** Integrated water planning and staffing
 - i)** Integration of water conservation into other water planning activities
 - ii)** Water conservation program staffing levels
- 4)** Targeted Technical Assistance and Incentives
 - a)** Management of utility/municipal facility demands
 - b)** Management of largest water customer demands
 - c)** Management of remaining customer demands
- 5)** Ordinances and Enforcement Activities
 - a)** Water provider's land use authority
 - b)** Water waste ordinance information
 - c)** New construction regulations information
 - d)** Existing building stock/retrofit construction regulations information
- 6)** Education
 - a)** One-way educational programs information
 - b)** One-way with feedback educational programs information
 - c)** Two-way educational programs information
- 7)** Costs (staff time and other)
 - a)** Total annual cost of water conservation program incurred by the utility/district
 - b)** Cost for each water conservation program incurred by the utility/district (optional)
 - c)** Total annual customer costs (optional)

REPORTING PROCESS

HB10-1051 directs the Board to establish Guidelines and describe how the Guidelines will be implemented and how data will be reported to the Board. A reporting tool will be developed to support the reporting process and allow covered entities to describe any cases where certain definitions in these Guidelines are not directly applicable to data available from the particular entity. It will also provide a location for metadata to be entered to describe how the data were prepared. Through outreach and communication, the CWCB may obtain additional information that can be used to improve interpretation of the reported data and the statewide water supply planning process. The draft reporting tool template provided as Appendix C is for illustrative purposes only. While the draft reporting tool is comprehensive and captures the full breadth of the potential reporting, the final reporting tool will be refined to customize and condense the required data reporting fields based on actual reporting information. For example, if the entity reports that it serves solely residential customers, the tool will not prompt questions related to water use or water conservation programs applicable to other customer categories.

Section 37-60-126(4), C.R.S. establishes certain processes and obligations for covered entities as well as the CWCB, as further described in this section.

A. Covered Entities

- i. For each annual report, covered entities shall utilize the current version of the data reporting tool to report the data identified in these Guidelines. Covered entities shall download the most recent version of the data reporting tool from the CWCB website (<http://cwcb.state.co.us>) each January 1 for use in the previous calendar year reporting. Any updates or modifications to the data reporting tool will be completed and made available to the public by December 31 of each calendar year.
- ii. Covered entities shall submit information following the Reporting Requirements section described above for the previous calendar year to the CWCB annually by June 30, starting no later than June 30, 2014 and continuing through June 30, 2020, per Section 37-60-126(4.5)(a), C.R.S. This requirement pertains to entities meeting the covered entity definition under during Section 37-60-126(4.5)(b), C.R.S. Entities will be allowed a one year grace period once becoming a covered entity. As an example, an entity that first delivers over two thousand acre-feet in 2015 is not required to report until June 30, 2017, for the 2016 calendar year water use and water conservation data.
- iii. Additional language is being developed and will be added to the address the unique situation of and application of the Guidelines to Integrated Systems, a topic addressed in the CWCB *Guidelines for the Office to Review Water Conservation Plans*.
- iv. The statute repeals the reporting requirement as of July 1, 2020, per Section 37-60-126(4.5)(c)(II), C.R.S.

B. Colorado Water Conservation Board

- i. No later than February 1, 2012, the Board shall adopt Guidelines regarding the reporting of water use and conservation data by covered entities, per Section 37-60-126(4.5)(b), C.R.S. The Guidelines shall be adopted pursuant to the Board's public

- participation process and shall include outreach to stakeholders from water providers with geographic and demographic diversity, nongovernmental organizations, and water conservation professionals. The Guidelines shall include clear descriptions of categories of customers, uses, and measurements, how the Guidelines will be implemented, and how the data will be reported to the Board.
- ii. No later than February 1, 2012, the Board shall provide a report to the Senate Agriculture and Natural Resources Committee and the House of Representatives Agriculture, Livestock, and Natural Resources Committee, or their successor committees, regarding the guidelines, per Section 37-60-126(4.5)(b), C.R.S.
 - iii. The data reporting tool will be accessible through the CWCB website (<http://cwcb.state.co.us>) no later than December 31, 2013. Any updates or modifications to the data reporting tool will be completed and made available to the public by December 31 of each calendar year.
 - iv. Beginning June 30, 2014, the annual deadline for covered entities to report water use and conservation data will be June 30, through the year 2020. CWCB shall utilize the data in statewide water supply planning efforts, per Section 37-60-126(4.5)(a), C.R.S. Data reported under these Guidelines will support statewide water supply planning efforts by improving the quantity and quality of data available and improving consistency in the data reporting. Additionally, data reporting will help the CWCB in developing more targeted technical outreach efforts aimed at providing better local water conservation planning tools to covered entities throughout Colorado.
 - v. No later than February 1, 2019, the Board shall brief the Senate Agriculture and Natural Resources Committee and the House of Representatives Agriculture, Livestock, and Natural Resources Committee, or their successor committees, on the guidelines and data collected by the Board under the guidelines, per Section 37-60-126(4.5)(c)(I), C.R.S.

All water use and conservation data reporting under these Guidelines will become public record and will be available to the public through the CWCB website. The reporting under Section 37-60-126(4.5), C.R.S. does not take the place of local conservation planning or plans that must be submitted per Section 37-60-126(2), C.R.S. This data will be used for general statewide water supply planning per section Section 37-60-126(4.5)(a), C.R.S. and is not intended to represent planning prepared by local entities for project-specific purposes. These Guidelines shall be reviewed and updated as necessary.

¹ Per Section 37-60-126(4.5)(b), C.R.S., the board shall adopt guidelines regarding the reporting of water use and conservation data by covered entities and shall provide a report to the senate agriculture and natural resources committee and the house of representatives agriculture, livestock, and natural resources committee, or their successor committees, regarding the guidelines. These guidelines shall:

- (I) Be adopted pursuant to the board's public participation process and shall include outreach to stakeholders from water providers with geographic and demographic diversity, nongovernmental organizations, and water conservation professionals; and
- (II) Include clear descriptions of: Categories of customers, uses, and measurements; how guidelines will be implemented; and how data will be reported to the board.

² *Guidebook of Best Practices for Municipal Water conservation in Colorado*. Colorado WaterWise, 2010. Prepared by Aquacraft, Inc. with support from Colorado Water Conservation Board.

SWSI Conservation Levels Analysis. Colorado Water Conservation Board, 2010. Prepared by Great Western Institute.

USEPA WaterSense Partnership Program. www.epa.gov/WaterSense/

Utility Water Loss, A Review of Current Practices in Colorado, Requirements of Other States, and New Procedures and Tools. Colorado Water Conservation Board, 2009. Prepared by Aquacraft, Inc.

Water Audits and Loss Control Programs, American Water Works Association Manual M36, Third Edition, 2009.

Water Conservation Measurement Metrics Guidance Report. American Water Works Association, Water Conservation Division Subcommittee Report, 2009. Benedykt Dziegielewski and Jack C. Kiefer.

Water Conservation Programs – A Planning Manual, American Water Works Association manual M52, First Edition, 2006.

NOTE: This bill has been prepared for the signature of the appropriate legislative officers and the Governor. To determine whether the Governor has signed the bill or taken other action on it, please consult the legislative status sheet, the legislative history, or the Session Laws.



HOUSE BILL 10-1051

BY REPRESENTATIVE(S) Pommer, Fischer, Frangas, Hullinghorst,
Labuda, Looper, Pace;
also SENATOR(S) Whitehead, Carroll M., Foster, Tochtrop.

CONCERNING ADDITIONAL INFORMATION REGARDING COVERED ENTITIES'
WATER EFFICIENCY PLANS.

Be it enacted by the General Assembly of the State of Colorado:

SECTION 1. 37-60-126 (4) (a) (I) and (9) (a), Colorado Revised Statutes, are amended, and the said 37-60-126 is further amended BY THE ADDITION OF A NEW SUBSECTION, to read:

37-60-126. Water conservation and drought mitigation planning - programs - relationship to state assistance for water facilities - guidelines - water efficiency grant program - repeal. (4) A plan developed by a covered entity pursuant to subsection (2) of this section shall, at a minimum, include a full evaluation of the following plan elements:

(a) The water-saving measures and programs to be used by the covered entity for water conservation. In developing these measures and programs, each covered entity shall, at a minimum, consider the following:

Capital letters indicate new material added to existing statutes; dashes through words indicate deletions from existing statutes and such material not part of act.

(I) Water-efficient fixtures and appliances, including toilets, urinals, CLOTHES WASHERS, showerheads, and ~~faucets~~ FAUCET AERATORS;

(4.5) (a) ON AN ANNUAL BASIS STARTING NO LATER THAN JUNE 30, 2014, COVERED ENTITIES SHALL REPORT WATER USE AND CONSERVATION DATA, TO BE USED FOR STATEWIDE WATER SUPPLY PLANNING, FOLLOWING BOARD GUIDELINES PURSUANT TO PARAGRAPH (b) OF THIS SUBSECTION (4.5), TO THE BOARD BY THE END OF THE SECOND QUARTER OF EACH YEAR FOR THE PREVIOUS CALENDAR YEAR.

(b) NO LATER THAN FEBRUARY 1, 2012, THE BOARD SHALL ADOPT GUIDELINES REGARDING THE REPORTING OF WATER USE AND CONSERVATION DATA BY COVERED ENTITIES, AND SHALL PROVIDE A REPORT TO THE SENATE AGRICULTURE AND NATURAL RESOURCES COMMITTEE AND THE HOUSE OF REPRESENTATIVES AGRICULTURE, LIVESTOCK, AND NATURAL RESOURCES COMMITTEE, OR THEIR SUCCESSOR COMMITTEES, REGARDING THE GUIDELINES. THESE GUIDELINES SHALL:

(I) BE ADOPTED PURSUANT TO THE BOARD'S PUBLIC PARTICIPATION PROCESS AND SHALL INCLUDE OUTREACH TO STAKEHOLDERS FROM WATER PROVIDERS WITH GEOGRAPHIC AND DEMOGRAPHIC DIVERSITY, NONGOVERNMENTAL ORGANIZATIONS, AND WATER CONSERVATION PROFESSIONALS; AND

(II) INCLUDE CLEAR DESCRIPTIONS OF: CATEGORIES OF CUSTOMERS, USES, AND MEASUREMENTS; HOW GUIDELINES WILL BE IMPLEMENTED; AND HOW DATA WILL BE REPORTED TO THE BOARD.

(c) (I) NO LATER THAN FEBRUARY 1, 2019, THE BOARD SHALL REPORT TO THE SENATE AGRICULTURE AND NATURAL RESOURCES COMMITTEE AND THE HOUSE OF REPRESENTATIVES AGRICULTURE, LIVESTOCK, AND NATURAL RESOURCES COMMITTEE, OR THEIR SUCCESSOR COMMITTEES, ON THE GUIDELINES AND DATA COLLECTED BY THE BOARD UNDER THE GUIDELINES.

(II) THIS PARAGRAPH (c) IS REPEALED, EFFECTIVE JULY 1, 2020.

(9) (a) Neither the board nor the Colorado water resources and power development authority shall release grant or loan proceeds to a

covered entity unless ~~such~~ THE covered entity provides a copy of the water conservation plan adopted pursuant to this section; except that the board or the authority may release ~~such~~ THE grant or loan proceeds NOTWITHSTANDING A COVERED ENTITY'S FAILURE TO COMPLY WITH THE REPORTING REQUIREMENTS OF SUBSECTION (4.5) OF THIS SECTION OR if the board or the authority, as applicable, determines that an unforeseen emergency exists in relation to the covered entity's loan application, in which case the board or the authority, as applicable, may impose a grant or loan surcharge upon the covered entity that may be rebated or reduced if the covered entity submits and adopts a plan in compliance with this section in a timely manner as determined by the board or the authority, as applicable.

SECTION 2. Applicability. This act shall apply to conduct occurring on or after the effective date of this act.

SECTION 3. Safety clause. The general assembly hereby finds,

determines, and declares that this act is necessary for the immediate preservation of the public peace, health, and safety.

Terrance D. Carroll
SPEAKER OF THE HOUSE
OF REPRESENTATIVES

Brandon C. Shaffer
PRESIDENT OF
THE SENATE

Marilyn Eddins
CHIEF CLERK OF THE HOUSE
OF REPRESENTATIVES

Karen Goldman
SECRETARY OF
THE SENATE

APPROVED _____

Bill Ritter, Jr.
GOVERNOR OF THE STATE OF COLORADO

Guidelines Regarding the Reporting of Water Use and Conservation Data by Covered Entities

Appendix B Reporting Data Definitions

Descriptions of the data for the Guidelines were developed through the advisory groups and supplemented with terminology that is utilized within the water resources industry, as identified through published professional references.¹ The following definitions clarify specific terminology that could have multiple interpretations throughout the water industry but is not intended to be comprehensive to the extent of defining every term in the data reporting list.

- 1) Distributed Water.** The purpose of the distributed water information is to determine the total amount of water provided to end users (customers) through distribution system(s), based on water production records. This may also be referred to as “water production” data (i.e. amounts of water pumped into the distribution system). This may entail multiple types of distribution systems such as potable water delivered through a treated water system and/or non-potable water delivered as raw water or reuse. For example, surface water may be diverted from a stream, treated, and distributed as a potable water supply; ground water may be pumped from a well and distributed as a non-potable raw water supply, etc.

To avoid double counting, the amount of water provided at wholesale to other entities should be indicated, along with identification of such entities. For example, if Entity A provides wholesale water to Entity B, then Entity A should report the amount, Entity B identity, and whether the use of such water is being reported by Entity A or Entity B.

- a) Potable Water Into a Distribution System:** Volume of treated water entering the distribution system in million gallons per year. May include both surface and ground water supplies.
- b) Non-Potable Raw Water Into a Distribution System:** Volume of raw water entering the distribution system in million gallons per year. May include both surface and ground water supplies.

¹ *Guidebook of Best Practices for Municipal Water conservation in Colorado*. Colorado WaterWise, 2010. Prepared by Aquacraft, Inc. with support from Colorado Water Conservation Board.

SWSI Conservation Levels Analysis. Colorado Water Conservation Board, 2010. Prepared by Great Western Institute.

USEPA WaterSense Partnership Program. www.epa.gov/WaterSense/

Utility Water Loss, A Review of Current Practices in Colorado, Requirements of Other States, and New Procedures and Tools. Colorado Water Conservation Board, 2009. Prepared by Aquacraft, Inc.

Water Audits and Loss Control Programs, American Water Works Association Manual M36, Third Edition, 2009.

Water Conservation Measurement Metrics Guidance Report. American Water Works Association, Water Conservation Division Subcommittee Report, 2009. Benedykt Dziegielewski and Jack C. Kiefer.

Water Conservation Programs – A Planning Manual, American Water Works Association manual M52, First Edition, 2006.

- c) **Non-Potable Reuse (or Reclaimed) Water Into a Distribution System:** Volume of reuse or reclaimed water entering the distribution system in million gallons per year.
- 2) **Customer Categories.** Monthly metered water use data shall be reported for each distribution system. The following customer categories apply to Potable Water uses and some categories may also apply to Non-Potable Raw Water and Non-Potable Reuse (or Reclaimed) water uses. The reporting tool allows reporting for each customer category within each distribution system. Based on existing water conservation plans and input from the advisory committees, the following customer categories are relevant for the majority of reporting entities; exceptions shall be described as metadata by the reporting entities under the reporting tool.
- a) **Residential:** Residential water use will be differentiated by single family and multi-family uses if the covered entity tracks these customer uses separately; otherwise total residential water use may be reported.
- (i) **Single Family:** Includes all billed and metered water use by single-family residential customers for indoor and outdoor uses served by a distribution system. Single-family uses may include, but are not limited to, residential single family, large residential lots, small residential lots, owners, renters, individual mobile homes and standard Single Family Equivalent taps, $\frac{5}{8}$ inch taps, and/or $\frac{3}{4}$ inch taps that serve single family dwellings.
- (ii) **Multi-Family:** Includes all billed and metered water use by multi-family residential customers for indoor and outdoor uses in locations both inside and outside of the city/town limits. Multi-family uses may include, but are not limited to, attached residential units (e.g. duplexes, triplexes), master-metered mobile homes, apartments, condominiums, and town homes.
- b) **Commercial, Industrial, and Institutional (CII):** Includes all billed and metered water use by CII customers for indoor and combined indoor and outdoor uses (note that CII taps for outdoor-only uses should be reported under the Irrigation category) in locations both inside and outside the city/town limits. CII uses may include, but are not limited to, commercial businesses, industry, dairies, greenhouses, hotels, motels, restaurants, offices, breweries, military, hospitals, schools, assisted living and extended care facilities, churches, airports, fairgrounds, car washes, etc. City/Municipal/District uses may be reported separately or otherwise noted.
- c) **Utility/Municipal Facility:** Includes all billed and metered water use by the water utility, municipality, and/or the district that operates the water utility for indoor and combined indoor and outdoor uses (note that Utility/Municipal Facility taps for outdoor-only uses should be reported under the Irrigation category). Utility/Municipal Facility uses may include, but are not limited to, recreation centers, town hall, administrative buildings, hydrants, other government uses, etc. These uses may be aggregated under the CII category.
- d) **Irrigation Only:** Includes all billed and metered water use by customers for outdoor watering exclusively (note that Residential taps for outdoor-only uses should be reported under the appropriate Residential category). Irrigation Only may include, but is not

limited to, city and town parks, HOAs, open space, swim clubs, landscape uses, golf courses, etc.

- e) **Other:** Includes any other water use not captured in the above defined categories with the exception of non-revenue (a.k.a. unaccounted for) water (which will be reported separately). Other uses may include large short-term seasonal uses (e.g., snow making), one time construction water, bulk water, etc. Any single “other” use that is greater than 3% of the total metered water use for a particular distribution system should be explicitly specified, separate from the general “Other” category.

3) **Metered Water Use.** The purpose of the metered water use information is to determine the demand or total amount of water used by end users (customers) indoors and outdoors. Metered water use data are typically available through billing records, with entities using a variety of billing cycle periods. Individual billing records often include information regarding the type of account (i.e. customer category), meter size, meter readings, and dates of readings. The reporting tool allows metered water use data to be entered for each distribution system category of Potable Water, Non-Potable Raw Water, and Non-Potable Reuse (or Reclaimed) Water, such that outdoor and indoor uses can be determined.

- a) **Metered Water Use:** Metered water use for each customer category shall be provided monthly, or if monthly data are not available, an estimate of monthly use shall be provided from bi-monthly, quarterly, or other specified metered water use/billings.
- b) **Average Monthly Indoor Use:** Average monthly indoor metered water use estimated for each distribution system and Customer Category in millions of gallons per month. Average monthly indoor water use in Colorado is often projected using metered water use data for a subset of winter months, e.g. (January + February metered use) / 2. This methodology may not apply to all communities and billing cycles may affect the specific months used to estimate indoor uses. The reporting tool will allow reporting the average monthly indoor use or specification of the months in which metered water use data is most representative of indoor uses, from which CWCBC may estimate the average monthly indoor use.

4) **Normalizing Data (or Scaling Variables).** The purpose of the normalizing data is to allow water use to be evaluated on a common unit basis.

- a) **Population Served:** Permanent (total year-round) Residential population served should be reported along with metadata describing the source of information (e.g. census and state demographer data). Recognizing that entities are affected differently by transient populations associated with students, tourism, jobs, the reporting entity shall indicate whether the population is affected by these and provide an estimate if available, along with metadata describing the source of information.
- b) **Number of Active Service Connections:** Monthly number of active/billed customer accounts (service connections) by customer category.
- c) **Number of Inactive Service Connections:** Average annual number of inactive or zero consumption accounts by customer category.

- 5) **Annual Audit Report:** The purpose of the annual audit reporting data is to obtain information on water audit and loss control through real and apparent loss data. The American Water Works Association (AWWA) has developed a standard methodology for determining water loss for municipal water providers (2009 AWWA M36 Manual of Practice – *Water Audits and Loss Control Programs (3rd Edition)*). For systems in which the following data cannot be provided, the CWCW will estimate real losses as the total Distributed Water minus total Metered Water Use. The sum of total Metered Water Use, apparent losses (unauthorized consumption), and real losses should equate to the total Distributed Water. Data should be reported annually.
- a) **Billed Unmetered Water Use:** Any unmetered water use such as customers billed at a flat rate. May also be used to account for metered uses with meters known to be highly nonfunctional, highly inaccurate, or readings are unobtainable in which case, estimates of water use are used in place of measured water use.
 - b) **Unbilled Authorized Water Use:** Any kind of authorized water use which is unbilled (metered or unmetered) reported, along with metadata describing the source of information. May include, but is not limited to, fire fighting, flushing of mains and sewers, street cleaning, etc.
 - c) **Apparent Losses:** Any kind of unauthorized water use, customer metering inaccuracies, or systematic data handling errors, along with metadata describing the source of information. May include, but is not limited to, water illegally withdrawn from hydrants, illegal connections, meter equipment tampering, adjustments to metered water use for meter under- or over-registration, and billing adjustments.
 - d) **Real Losses:** Physical water losses from the distribution system up to the point of the customer's connection (meter). May include, but is not limited to, leakage on transmission and distribution mains, leakage and overflows at utility storage tanks, and leakage on service connections up to the point of customer metering.
- 6) **Supplemental (Optional) Information:** Recognizing that the following information may not be available for many covered entities, it is categorized as optional and requested to the extent that is readily available or can be estimated within reasonable levels of effort.
- a) **Irrigated Acres:** Best estimate of irrigated acres served by each customer category, along with metadata describing the source of information.
 - b) **Average Annual Gross Evapotranspiration Rate for Service Area:** Average local inches of gross evapotranspiration for service area, along with metadata describing the source of information and method used.
 - c) **Average Annual Total Precipitation for Service Area:** Average local total inches of precipitation for service area, along with metadata describing the source of information.
 - d) **Irrigation Application Rate:** Application rate of outdoor use in gallons per square foot of irrigated area, along with metadata describing the source of information.
 - e) **Number of Housing Units:** Total number of households for each residential customer category. Recognizing that data for the Multi-Family category may require audits and information on occupancy rates, an estimate should be provided if available along with metadata describing the source of information.

- 7) **Meter Types:** Specify the number of each type of meter reading system, by customer category, for each applicable water distribution system.
 - a) **Manual Read:** Manual meter reading with reading personnel visiting individual meters to collect readings.
 - b) **AMR:** Automatic meter reading where radio signals transmit the current meter reading to a device outside of the building or meter pit in which the meter is located. Mobile AMR systems allow readings to be collected by readers with hand-held devices or via automobiles patrolling scheduled meter reading routes. Fixed network AMR include permanently installed data collector units located throughout the service area.
 - c) **AMI:** Advanced metering infrastructure, also referred to as smart meters, goes beyond AMR to include networking technology (telemetry) for remote leak detection, frequent meter data collection, and two-way communication between customer and utility.
- 8) **Rate Structures:** Provide information by customer category, for each applicable water distribution system.
 - a) **Declining block rates:** Lower unit charges are triggered at higher levels of water use; this rate structure does not encourage conservation.
 - b) **Flat rates:** Fixed fee regardless of how much water is used; this rate structure does not encourage conservation.
 - c) **Uniform rate:** Same unit charge for water regardless of how much water is used; this rate structure does not encourage conservation.
 - d) **Inclining block rates:** Higher unit charges are triggered at higher levels of water use to encourage conservation.
 - e) **Water budgets:** A variation of increasing block rates where the block size is defined by an empirical determination of efficient use for each customer using customer specific characteristics such as irrigable area, encouraging conservation.
 - f) **Seasonal:** Higher prices are charged during periods of scarcity (typically summer and fall) to more efficiently allocate water in times of shortage and to encourage reduced demand.
- 9) **Conservation Oriented Tap Fee:** Tap fee charges are based on the anticipated demands of new customers; this structure incentivizes customers to join the system at a better level of water efficiency for a lower connection charge with the commitment of installing water efficient fixtures and landscaping during the construction process.
- 10) **Integrated Resources Planning (IRP):** A comprehensive planning effort that incorporates both supply-side and demand-side management options.
- 11) **Point of Sale Controls:** Ordinance/regulation to provide opportunity to ensure the water efficiency features meet current regulations and/or to incentivize increased efficiency through retrofit of fixtures, appliances, landscape, and irrigation systems. Requirements can be triggered before a residence or building can be sold, transferred from one owner to another, or renovated beyond a predetermined level.

Contact & Submittal Information	
Utility Information	
Covered Entity Name	
Contact Name	
Contact Phone	
Contact Email	
Contact Address (Street or PO)	
Contact Address (City)	
Contact Address (State)	
Contact Address (Zip)	
Submittal Information	
Year of Data	
Report Date	

What customer categories do you have in your water distribution system(s)? (Check all that apply)

Residential	
OR	
Single Family	
Multi-Family	
Utility/Municipal Facility	
CII	
Irrigation Only	
Other	

Water Use Data (Potable treated water only)

Enter Reporting Unit (e.g., AF, MG, thousands of gallons, etc.)

Distributed Water (annual water production)

Frequency of Billing		Monthly	Bi-Monthly	Quarterly	Other (specify)
Customer Category	Residential				
	Single Family				
	Multi-Family				
	Utility/Municipal Facility				
	CII				
	Irrigation Only				
	Other				

Metered Water Use	Residential		Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
January								
February								
March								
April								
May								
June		OR						
July								
August								
September								
October								
November								
December								

Please select the most representative months to describe your Monthly Indoor Use (i.e. Dec., Jan., Feb.)

January	February	March	April	May	June	July	August	September	October	November	December

Normalizing Data

		Yes	No
Population Served for Year of Reporting			
Source		If yes, what is the estimate of this population?	
		Source	

Number of Active Service Connections	Residential		Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
January								
February								
March								
April								
May								
June		OR						
July								
August								
September								
October								
November								
December								

Average Number of Inactive Accounts Annually	Residential	OR	Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other

Annual Audit Report

System Water Audit (using 2009 AWWA M36 Manual of Practice-Water Audits and Loss Control Programs (3rd Edition))			
Billed Unmetered Water Use			
Unbilled Authorized Water Use			
Apparent Losses			
Real Losses			
	OR	Total Distributed/Produced Water	
		Total Metered Water Use	

Supplemental Information (Optional)

	Residential	OR	Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
Estimate of Irrigated Acres by Customer Category								

Average Annual Gross

Average Annual Total Precipitation for Service Area (inches)

Irrigation Application Rate for Service Area (gallons/square foot)

Number of Housing Units	Residential		Single Family	Multi-Family
January				
February				
March				
April				
May				
June		OR		
July				
August				
September				
October				
November				
December				

Return Flows	Yes	No
Do your water rights/water supplies allow direct or indirect use of return flows?		

	%
If so, what percent of the potable supply comes from recapturing retrun flows?	

Water Use Data (Non Potable raw water only)

MG, thousands of gallons, etc.)

Distributed Water (annual water production)

Frequency of Billing		Monthly	Bi-Monthly	Quarterly	Other (specify)
Customer Category	Residential				
	Single Family				
	Multi-Family				
	Utility/Municipal Facility				
	CII				
	Irrigation Only				
	Other				

Metered Water Use	Residential	OR	Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								

Please select the most representative months to describe your Monthly Indoor Use (i.e. Dec., Jan., Feb.)												
	January	February	March	April	May	June	July	August	September	October	November	December

Normalizing Data

Yes	No
-----	----

Population Served for Year of Reporting		population in your service area (i.e. tourism, second homes, students)?		
Source			If yes, what is the estimate of this population?	
			Source	

Number of Active Service Connections	Residential	OR	Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
	January							
	February							
	March							
	April							
	May							
	June							
	July							
	August							
	September							
	October							
	November							
	December							

Average Number of Inactive Accounts Annually	Residential	OR	Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other

Annual Audit Report

System Water Audit (using 2009 AWWA M36 Manual of Practice-Water Audits and Loss Control Programs (3rd Edition))	
Billed Unmetered Water Use	
Unbilled Authorized Water Use	
Total Distributed/Produced Water	

Apparent Losses		OR	Total Metered Water Use	
Real Losses				

Supplemental Information (Optional)

	Residential	OR	Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
Estimate of Irrigated Acres by Customer Category								

Average Annual Gross Evapotranspiration Rate for Service Area (inches)	
--	--

Precipitation for Service Area (inches)	
---	--

Service Area (gallons/square foot)	
------------------------------------	--

Number of Housing Units	Residential	OR	Single Family	Multi-Family
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				



Water Use Data (Non Potable reuse water only)

Enter Reporting Unit (e.g., AF, MG,)

Distributed Water (annual water)

Frequency of Billing		Monthly	Bi-Monthly	Quarterly	Other (specify)
Customer Category	Residential				
	Single Family				
	Multi-Family				
	Utility/Municipal Facility				
	CII				
	Irrigation Only				
	Other				

Metered Water Use	Residential		Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
January		OR						
February								
March								
April								
May								
June		OR						
July								
August								
September								
October								
November								
December								

Please select the most representative months to describe your	January	February	March	April	May	June	July	August	September	October	November	December

Normalizing Data

			Yes	No
Population Served for Year of Reporting				
Source			Do you have a large transient population in your service area (i.e. tourism, second homes, students)?	
			If yes, what is the estimate of this population?	
			Source	

Number of Active Service Connections	Residential		Single Family	Multi-Family	Utility/Municipal Facility	CII	Irrigation Only	Other
January		OR						
February								
March								
April								
May								
June		OR						
July								
August								
September								
October								
November								
December								

Average Number of Inactive Accounts Annually	Residential	OR	Single Family	Multi-Family	Utility/Municipal Fa	CII	Irrigation Onl	Other

Annual Audit Report

System Water Audit (using 2009 AWWA M36 Manual of Practice-Water Audits and Loss Control Programs (3rd Edition))	
Billed Unmetered Water Use	
Unbilled Authorized Water Use	
Apparent Losses	
Real Losses	

OR	Total Distributed/Produced Water	
	Total Metered Water Use	

Supplemental Information (Optional)

	Residential	OR	Single Family	Multi-Family	Utility/Municipal Fa	CII	Irrigation Onl	Other
Estimate of Irrigated Acres by Customer Category								

Average Annual Gross Evapotranspiration Rate for Service Area (inches)	
Average Annual Total Precipitation for Service Area (inches)	
Irrigation Application Rate for Service Area (gallons/square foot)	

Number of Housing Units	Residential		Single Family	Multi-Family
January		OR		
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

Metering and Billing (Meter Types, Frequency of Meter Reading, Type of Rate Structures and Tap Fees)

Meter Types		Number of Each Type											
		Treated Water				Non-Potable Raw Water				Non-Potable Reuse Water			
Customer Category	Residential	Manual Read	AMR	AMI	Unmetered	Manual Read	AMR	AMI	Unmetered	Manual Read	AMR	AMI	Unmetered
	Single Family												
	Multi-Family												
	Utility/Municipal Facility												
	CII												
	Irrigation Only												
	Other												

Frequency of Meter Reading		Treated Water			Non-Potable Raw Water			Non-Potable Reuse Water		
		Monthly	Bi-Monthly	Other (specify)	Monthly	Bi-Monthly	Other (specify)	Monthly	Bi-Monthly	Other (specify)
Customer Category	Residential									
	Single Family									
	Multi-Family									
	Utility/Municipal Facility									
	CII									
	Irrigation Only									
	Other									

Rate Structure		Treated Water								Non-Potable Raw Water								Non-Potable Reuse Water							
		Declining Block Rates	Flat Rates	Uniform rates	Inclining Block Rates	Water Budgets	Seasonal	No charge	Other	Declining Block Rates	Flat Rates	Uniform rates	Inclining Block Rates	Water Budgets	Seasonal	No charge	Other	Declining Block Rates	Flat Rates	Uniform rates	Inclining Block Rates	Water Budgets	Seasonal	No Charge	Other
Customer Category	Residential																								
	Single Family																								
	Multi-Family																								
	Utility/ Municipal Facility																								
	CII																								
	Irrigation Only																								
	Other																								

Details of Rate Structure(s)		Tier I	Tier II	Tier III	Tier IV	Tier V		
Tiers (number or name)							Explanation of rate structure if numbers alone do not capture all details	
Price/tier (\$)								
Spread of tiers (gallons)								
Service charge/Base Rate								

Conservation Oriented Tap Fees

Does the square footage and type of landscaping affect you tap fee pricing or is tap size the basis for irrigation tap fees?

Check all that apply

Size and type of	Tap Size	Both

What is your irrigation tap fee schedule? Choose one Category							
Categories							
Landscape Irrigation Requirement Based Irrigation Tap Fees						Tap Size Based Irrigation Tap Fees	
Landscape type	Define Type (if needed)	Irrigation Requirement Tap Fee Unit	Cost per unit	Tap Size Component (if any) of Irrigation Requirement Tap Fee		Tap Size Based Irrigation Tap Fee	
low water, high water, permanent irrigation, establishment irrigation(EXAMPLE)		Square Foot, Acre Foot, tap equivalent (define)				Tap Size	Cost
				Tap Size	Cost	Tap Size	Cost
				3/4"		3/4"	
				1"		1"	
				1.5"		1.5"	
				2"		2"	
				3"		3"	
				4"		4"	
				6"		6"	

Who calculated the tap size required? (check one)

Developer	Water Provider

Who calculates the irrigation requirement of the landscape? (check one)

Developer	Water Provider

Which are your non-residential indoor tap fees based on (check all that apply)

	Tap size calculated by water provider	Water Demands Calculated by Developer	Water Demands calculated by water provider
Tap size provided by developer			

If water demands are calculated what is the calculation method (check all that apply)

Size of Building	
Calculated GPM building requirement	
Type of business	

Water Loss Characterization

Meter Age (since new or since rebuild)		Number of Each Type											
		Treated Water				Non-Potable Raw Water				Non-Potable Reuse Water			
		< 2 years	2 - 5 years	5 -10 years	> 10 years	< 2 years	2 - 5 years	5 -10 years	> 10 years	< 2 years	2 - 5 years	5 -10 years	> 10 years
Customer Category	Residential												
	Single Family												
	Multi-Family												
	Utility/Municipal Facility												
	CII												
	Irrigation Only												
	Other												

Do you have a meter testing program?

Yes

No

Do you test your largest meters? (describe)

How often do you test your largest meters?

What % of total meters do you replace annually?

Status of Water Loss Characterization

(Check all that apply)	Yes	No	Date of Last Audit
Performed System Wide Audit (using AWWA M-36 Methodology)			

Nature of Leak Detection Program	Yes	No
Reactive approach to leak detection (when water is evident at surface corrective action is taken)		
Active Use of Accounting Methods to Find Leaks		
Active Use of Field Testing Methods to Find Leaks		

What type of technology is used in the field to find leaks (describe)?

How much of system is inspected annually for leaks (%)?

How much pipe is replaced annually in system (% of of total system)

Integrated Water Planning and Staffing

Do you integrate water conservation planning with other planning efforts?

Yes	No

If No, why not? (drop down menu)

no resources available	
not applicable	
not possible	
not enough data to be confident	

Is There a Staff Person Assigned to Water Conservation Program Management? (check all that apply)

Type of Staffing	Yes	If Yes, how many ?	No
Full Time			
Part Time (if yes, provide estimated number of hours per week budgeted for water conservation program management)			
Contracted Labor			
Non-Profit Organization			
Other			

Targeted Technical Assistance and Incentives (quantify efforts from reporting period)

Level 1-Management of Utility/Municipal Facility Water Efficiency(Check all that apply)

		Yes	No	# performed during reporting period	Have you done this program prior to THIS reporting period?	If YES, Start date- end date	Additional Information
Technical Assistance	Specialty Trainings and Workshops						
	Indoor Facility Efficiency Evaluations						
	Irrigation Efficiency Evaluations						
	Landscape Design Assistance						
	Process Water Efficiency Evaluations (i.e. COOLING TOWERS, fleet vehicle wash facilities etc.)						
	Other (describe)						

Incentives				# performed during reporting period	What level of technology is incentivized? (i.e. gallons per flush, gallons per minute, etc.)	Have you done this program prior to THIS reporting period?	If YES, Start date-end date	Additional Information
		Yes	No					
Indoor Fixtures/Appliances	Toilets							
	Urinals							
	Showerheads							
	Faucet Aerators							
	Clothes Washers							
	Dish Washers							
	Other (describe)							
Landscape Irrigation Equipment		Yes	No	Number of each rebated/distributed in last reporting period		Have you done this program prior to THIS reporting period?	If YES, Start date-end date	
	Rain Sensors (including rain and wind sensors)							
	Soil Moisture Sensors							
	ET Controllers							
	Other (describe)							
Landscape Installation		Yes	No	Amount of square feet removed/converted in last reporting period		Have you done this program prior to THIS reporting period?	If YES, Start date-end date	
	Turf Replacement with low water use plant materials							
	Soil Amendment							
	Other (describe)							
Other (describe)					What level of technology is incentivized? (i.e. gallons per flush, gallons per minute, etc.)			
		Yes	No	# performed during reporting period		Have you done this program prior to THIS reporting period?	If YES, Start date-end date	

Level 2-Management of Largest Water Customers Demands (Check all that apply)

		Residential	CII	Irrigation Only	Other	Number of each performed/distributed in last reporting period	Have you done this program prior to THIS reporting period?	If YES, Start date-end date	Additional Information
Technical Assistance	Specialty Trainings and Workshops								
	Indoor Facility Efficiency Evaluations								
	Irrigation Efficiency Evaluations								
	Landscape Design Assistance								
	Process Water Efficiency Evaluations (i.e. COOLING TOWERS, CHIP MANUFACTURERS, etc.)								
	Other (describe)								

[illegible]

Targeted Technical Assistance and Incentives (quantify efforts from reporting period)

Level 3- Management of Remaining Customer Demands (Check all that apply)

Technical Assistance

Specialty Trainings and Workshops

Indoor Facility Efficiency Evaluations

Irrigation Efficiency Evaluations

Landscape Design Assistance

Process Water Efficiency Evaluations (i.e. COOLING TOWERS, CHIP MANUFACTURERS, etc.)

Other (describe)

Incentives

Indoor Fixtures/Appliances

- Toilets
- Urinals
- Showerheads
- Faucet Aerators
- Clothes Washers
- Pre-rinse spray valves
- Dish Washers
- Customer Water Use Monitoring Device
- Indoor Water Audit Kits
- Other (describe)

Landscape Irrigation Equipment

Rain Sensors (including rain and wind sensors)
Soil Moisture Sensors
ET Controllers
Other (describe)

Landscape Installation

Turf Replacement with low water use plant materials
Soil Amendment
Other (describe)

Other (describe)

				Amount of square feet removed/converted in last reporting period		Have you done this program prior to THIS reporting period?	If YES, Start date-end date	Additional Information
Residential	CII	Irrigation Only	Other					
					What level of technology is incentivized? (i.e. gallons per flush, gallons per minute, etc.)	Have you done this program prior to THIS reporting period?	If YES, Start date-end date	Additional Information
Residential	CII	Irrigation Only	Other	Number of each rebated/distributed in last reporting period				

Ordinances

Do you, as a water provider, have authority over land use?

Yes	No	Other (describe)

Water Waste

Level 1-Water Waste Ordinance

check all that apply Yes Voluntary Mandatory Variable*	Water Waste Ordinance/Regulation in place	Time of Day Restrictions	Limits to Irrigation Runoff	Limits on Car Washing (e.g., automatic shutoff on hose)	Limits on Power-Washing and Hosing Down Pavement, etc.	Failing to Repair Leaks	Day of Week Watering Restrictions	Other (describe)

* dependant on determination of stage of water shortage or other utility/district action

Level1- Enforcement of Water Waste

check all that apply Warnings Fines Account Restrictions Account Shut-Offs Other (describe)	Water Waste Ordinance/Regulation in place	Time of Day Restrictions	Limits to Irrigation Runoff	Limits on Car Washing (e.g., automatic shutoff on hose)	Limits on Power-Washing and Hosing Down Pavement, etc.	Failing to Repair Leaks	Day of Week Watering Restrictions	Other (describe)	Number of each performed in last reporting	Who controls enforcement for ordinance?

New Construction

Level 2- New Construction Regulations

check all that apply EPA Water Sense Specification Soil Amendments Turf Restrictions Landscape Design Requirements Landscape Installation Requirements Irrigation Design Requirements Process Water Design Requirements Other (describe)	Residential	Municipal	CII	Irrigation Only

Level 2-Enforcement/Inspection of New Construction

check all that apply Plan Reviews Field Inspections Other (describe)	Yes	Number of each performed in last reporting period	Who controls enforcement for ordinance?

Existing Building Stock

Level 3-Existing/Retrofit Construction Regulations

check all that apply EPA Water Sense Specification Soil Amendments Turf Restrictions Landscape Design Requirements Landscape Installation Requirements Irrigation Design Requirements Car Wash Certification/Requirements Process Water Design Requirements Point of Sale Controls Other (describe)	Residential	Municipal	CII	Irrigation Only

Level 3-Enforcement/Inspection of Existing/Retrofit Construction Regulations

check all that apply Plan Reviews Field Inspections Other (describe)	Yes	Number of each performed in last reporting period	Who controls enforcement for ordinance?

Education

Level 1- One Way Educational Programs

check all that apply

Bill Stuffers
Newsletters
Door Hangers
Informational Website
Mass Mailings
Water Wise Demonstration Garden(s)
Other (describe)

Yes	Number of customers reached during reporting period

Level 2-One Way with Feedback Educational Programs

check all that apply

K-12 Classroom Programs
Water Fairs
Interactive Websites
Customer Informational Workshops
Organizational Messaging Programs
Customer Surveys
Other (describe)

Yes	Number of customers reached during reporting period

Level 3-Two Way Educational Programs

check all that apply

Community Working Groups
Focus Groups
Citizen Advisory Boards
Organizational Messaging Campaigns (multi-media)
Other (describe)

Yes	Number of customers reached during reporting period

Costs Incurred Over Last Reporting Period

Costs Incurred Only by the Utility/Municipality/District over Last Reporting Period

Total Annual Cost of Water Conservation Program (only dedicated staff and budget)

OR

Break down by individual program (optional, but desired if provider can break this down to program level)

Program A
Program B
Program C
Program D
Program E
Program F

Staff	Other Costs*	Total

* Costs of incentives such as rebates or audit kits, supplies to carry out programs and measures, costs of equipment to carry out programs and measures.

Customer Costs (optional)

Total Annual Customer Costs of Water Conservation Program

		Total