

Water Conservation Response Plan

For

**Arapahoe County Water and
Wastewater Authority**

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Water Conservation Response Plan

1.0 Declaration of Policy, Purpose, and Intent

Arapahoe County Water and Wastewater Authority (ACWWA) provides water to customers. In cases of extreme drought, periods of abnormally high usage, system contamination, or extended reduction in ability to supply water due to equipment failure, ACWWA may require water customers to institute temporary restrictions to limit non-essential water usage. This Water Conservation Response Plan (Plan) is designed to protect the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation and fire protection during the periods or other water supply emergencies.

Water uses regulated or prohibited under this Plan are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water.

2.0 Authorization

The designated manager or official of ACWWA is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The designated manager or official of ACWWA shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan. This authorization was designated as part of the Plan's approval by the ACWWA's Board of Directors.

3.0 Public Education

The designated manager or official of ACWWA will periodically provide its employees, members, and the general public with information about this Plan, including the importance of the Plan, information about the conditions under which each stage of the Plan is to be initiated, processes used to reduce water use, and impending or current drought conditions. Dissemination of this information will occur via ACWWA's website and through direct mailings.

4.0 Initiation and Termination of Response Stages

The ACWWA general manager along with staff shall monitor water supply and demand conditions on a regular basis and shall determine when conditions warrant initiation and termination of each stage of this Plan. Water supply conditions will be determined by the source of supply, system capacity, and weather conditions.

ACWWA currently operates two distinct water systems, where the water supplies and systems are not comingled. The initiation of the following steps could cover both systems together or separately. These systems are: 1) ACWWA's main system, with services in Arapahoe and Douglas Counties; and 2) ACWWA's satellite system with services in Elbert County.

Public notification of the initiation or termination of drought response stages shall be by a variety of ways,

examples include: bill inserts, e-mail, website postings or a combination of these methods.

The following triggering criteria shall apply to ACWWA's water system and customer service area:

4.1 Triggering Criteria for Initiation and Termination of Stages, Targets and Measures of Water Conservation Response Plan

(1) STAGE 1 - Mild Water Shortage Conditions (Voluntary Measures)

- A. Requirements for Initiation:** Customers shall be requested to adhere to the Stage 1 of the Water Conservation Response Plan from May 1 through October 31 of each calendar year.
- B. Requirements for Termination:** Stage 1 of the Plan will remain in place.
- C. Targets for Water-Use Reductions:**
 - 1. Water Supply Reduction Target: No specific target; looking to provide consistent water usage (no one day or time of day seeing substantial increases in water usage).
- D. ACWWA Customer Measures:**
 - 1. Supply Management Measures: ACWWA will review system operations and identify ways to improve system efficiency and accountability.
 - 2. Demand Management Measures:
 - a. Ask customers to voluntarily comply with the current Watering Schedule, including watering landscapes no more than three times per week. *See Appendix A.1 – ACWWA Water System – Watering Schedule.;*
 - b. Ask ACWWA's high volume customers to voluntarily reduce water usage [targeting fifteen percent (15%)].
 - c. Actively promote drought related issues and the need to conserve.

(2) STAGE 2 - Moderate Water Shortage Conditions (Mandatory Measures)

- A. Requirements for Initiation:** Customers shall be required to adhere to the Stage 2 of the Water Conservation Response Plan from May 1 through October 31 of each calendar year.
- B. Requirements for Termination:** Stage 2 of the Plan may be rescinded when staff determines ACWWA's water supply has returned to normal and is adequate to meet the normal daily needs of its customers.

C. Targets for Water-Use Reductions:

1. Achieve a 10% reduction in water use.

D. ACWWA Customer Measures:

1. Supply Management Measures: ACWWA will review system operations and identify ways to improve system efficiency and accountability.
2. Demand Management Measures:
 - a. Customers are required to comply with the current Watering Schedule, including watering landscapes no more than three times per week. *See Appendix A.1 – Stage 2 ACWWA Water System – Watering Schedule.*;
 - b. Actively promote drought related issues and the need to conserve.

Upon termination of Stage 2, Stage 1 becomes operative.

(3) STAGE 3 - Critical Water Shortage Conditions (Mandatory Measures)

A. Requirements for Initiation - Customers shall be required to adhere to the Stage 3 of the Water Conservation Response Plan when one or a combination of such triggering criteria occurs, such as equipment failure, reduced yield from ACWWA's wells and/or shortages in ACWWA's approved augmentation plan.

B. Requirements for Termination - Stage 3 of the Plan may be rescinded when staff determines ACWWA's water supply has returned to normal and is adequate to meet the normal daily needs of its customers.

C. Targets for Water-Use Reductions:

1. Achieve a 30% reduction in water use.

D. ACWWA Customer Measures:

1. Supply Management Measures:
 - a. Apply all water-use restrictions prescribed for Stage 3 of the Plan for ACWWA utility owned facilities and properties;
 - b. Discontinue water main and line flushing unless necessary for public health reasons; and
 - c. Keep customers informed about issues regarding current and projected water supply and demand conditions.

2. Demand Management Measures: Under threat of additional charges, the following water-use restrictions shall apply to all retail water customers:

a. Any water usage reaching billing blocks 3 and 4 will be charged an additional fifteen percent (15%) over and above ACWWA's current rates.

b. Irrigation of Landscaped Areas:

i. Irrigation of landscaped areas with hose-end sprinklers or in-ground irrigation systems shall be limited to a no more than a TWICE weekly watering schedule determined by ACWWA and based on the nature of the current drought or water emergency. Irrigation of commercial landscapes and recreational areas may apply for a variance but must still develop a schedule where no part of the landscape is watered more than twice per week. See *Appendix A.2 – Stage 3 ACWWA Water System - Recommended Watering Schedule*.

ii. Outdoor watering is not permitted during the hottest time of the day, between 10 a.m. and 6 p.m. . This prohibition does not apply to irrigation of landscaped areas if it is by means of a hand-held hose;

iii. New landscapes may be installed and re-vegetation seeding only if performed under these specific criteria:

aa. A completed water schedule variance form has been submitted to ACWWA and has been approved prior to the installation of the landscape, or re-vegetation seed application

bb. Irrigation of the new landscape follows the schedule identified in the new landscape variance. The schedule will be developed to minimize water waste.

cc. Areas being re-vegetated for soil stabilization must also comply with the (aa) and (bb) specific criteria above. Options for re-vegetation may be available in times of low water supply.

dd. Variances for new landscapes may be issued for a period of no more than 30 days from the day of issuance. A variance is not an exemption from compliance with the permanent water use restrictions under Section 6.2 of this Plan. Variances will not be granted for seasonal "color bed" or temporary grass installation (overseeding).

c. Vehicle Washing: Use of water to wash any motor vehicle, such as an automobile, truck, motorbike, boat, trailer, or airplane is prohibited except on designated watering days between the hours of 6 p.m. and 10 a.m. Such activity, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle. A vehicle may be washed any time at a commercial car wash facility or commercial service station. Further, this activity is exempt from these regulations if the health, safety, and welfare of the public are served by washing the vehicle, such as a truck used to collect garbage or used to transport food and perishables.

d. Pools:

i. Filling of all new and existing swimming pools, hot tubs, wading pools, is prohibited. Replenishing to maintenance level is permitted. Draining is permitted only onto pervious surfaces or onto a surface where water will be transmitted directly to a pervious surface, and only if:

aa. Draining excess water from pool due to rain in order to lower water to maintenance level;

bb. Repairing, maintaining or replacing pool components that have become hazardous; or

cc. Repair of a pool leak.

ii. Refilling of public/community swimming pools is permitted only if pool has been drained for repairs, maintenance, or replacement as outlined in items above.

e. Outside Water Features: Operation of outside water features, such as, but not limited to, fountains, splash pad type fountains or outdoor misting systems, is prohibited, except where such features are used to sustain aquatic life or maintain water quality. (This provision includes fountains associated with aesthetic ponds and swimming pools).

f. Ponds: Ponds used for aesthetic, amenity, and/or storm water purposes may maintain water levels only necessary to preserve the integrity of the liner and operating system. ACWWA may request specific design documentation regarding a pond and the intended purpose.

g. Golf Courses: Golf courses receiving any amount of treated water from a ACWWA utility must develop a drought contingency plan that meets the minimum water reduction target set for Stage 3.

h. Events: Events involving the use of water such as: car washes, festivals, parties, water slides, and other activities involving the use of water are permitted, if the water being used drains to a recirculating device, or onto a pervious surface to prevent water waste.

- i. Restaurants: All restaurants are encouraged to serve water to their patrons only upon request.
- j. Fire Hydrants: Use of water from fire hydrants shall be limited to firefighting and activities necessary to maintain public health, safety, and welfare. Use of water from designated fire hydrants for construction purposes may be allowed under special conditions and requires a meter; a variance application must be submitted with an explanation of the special conditions.
- k. Recreational areas (includes parks and athletic fields): The areas can only be used for designated or scheduled events or activities. Unnecessary foot traffic must be discouraged. Watering must follow a no more than twice per week schedule. A variance can be obtained if watering cannot be completed on the designated two day schedule.
- l. Water Waste: The following non-essential uses of water are prohibited at all times during periods in which restrictions have gone into effect:
 - i. Washing sidewalks, walkways, driveways, parking lots, street, tennis courts, and other impervious surfaces is prohibited except for immediate health and safety;
 - ii. Washing buildings, houses or structures with a pressure washer or garden hose is prohibited for aesthetic purposes but allowable for surface preparation of maintenance work to be performed;
 - iii. Flushing gutters or flooding gutters is prohibited except for immediate health and safety; and
 - iv. Controlling dust is prohibited, unless there is a demonstrated need to do so for reasons of public health and safety, or as part of an ACWWA approved construction plan.

Upon termination of Stage 3, Stage 2 becomes operative.

(4) STAGE 4 - Severe Water Shortage Conditions (Mandatory Measures)

- A. Requirements for Initiation:** Customers shall be required to adhere to the Stage 4 of the Water Conservation Response Plan when one or a combination of such triggering criteria occurs, such as equipment failure, reduced yield from ACWWA's wells and/or shortages in ACWWA's approved augmentation plan.
- B. Requirements for Termination:** Stage 4 of the Plan may be rescinded when staff determines ACWWA's water supply has returned to normal and is adequate to meet the normal daily needs of its customers.

C. Targets for Water-Use Reductions: Achieve a minimum 50% reduction in water use.

D. ACWWA Customer Measures:

1. Supply Management Measures: In addition to measures implemented in the preceding stages of the Plan, affected ACWWA water utility systems will explore additional emergency water supply options.
2. Demand Management Measures: Under threat of additional charges, all retail customers are required to further reduce non-essential water uses as follows. All requirements of Stage 3 shall remain in effect during Stage 4, with the following modifications and additions.
 - a. Any water usage reaching billing blocks 3 and 4 will be charged an additional twenty-five percent (25%) over and above ACWWA's current rates.
 - b. Irrigation of Landscaped Areas:
 - i. Irrigation of landscaped areas shall be limited to a no more than ONCE per week watering schedule determined by ACWWA and based on the nature of the current drought or water emergency. Irrigation of commercial landscapes and recreational areas may apply for a variance but must still develop a schedule where no part of the landscape is watered more than once per week.
 - ii. No new landscapes may be installed.
 - c. Vehicle Washing: Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane, or other vehicle is prohibited. A vehicle can be washed at any time at a commercial car wash facility or commercial service station that recycles its water. Further, this activity is exempt from these regulations if the health, safety, and welfare of the public are served by washing the vehicle, such as a truck used to collect garbage or used to transport food and perishables.
 - d. Pools: Installation of swimming pools is prohibited. The filling or replenishing of water to swimming pools, hot tubs, wading pools, and other types of pools is prohibited. Public/community swimming pools may be exempt from this prohibition to maintain safe levels of water quality for human contact.
 - e. Golf Course: Golf courses receiving any amount of treated water from ACWWA must develop a drought contingency plan in accordance with ACWWA Water Conservation Response Plan and will implement its Stage 4 mandatory restrictions in conjunction with ACWWA.

f. Events: Events involving the use of water such as: car washes; festivals; parties; water slides; and other activities involving the use of water are prohibited.

g. Recreational areas (includes parks and athletic fields): The areas can only be used for designated or scheduled events or activities. Unnecessary foot traffic must be discouraged. Watering is prohibited except with a hand-held hose.

Upon termination of Stage 4, Stage 3 becomes operative.

(5) STAGE 5- Emergency Water Conditions

- A. Requirements for initiation:** Customers shall be required to adhere to the Stage 5 of the Water Conservation Response Plan when one or a combination of such triggering criteria occurs, such as equipment failure, reduced yield from ACWWA's wells and/or shortages in ACWWA's approved augmentation plan.
- B. Requirements for termination:** Stage 5 of the Plan may be rescinded when staff determines ACWWA's water supply has returned to normal and is adequate to meet the normal daily needs of its customers.
- C. Targets for Water-Use Reductions:** As determined by the ACWWA Board.
- D. ACWWA Customer Measures:** Under threat of additional charges for violation, all customers are required to reduce nonessential water uses during an emergency. All requirements of Stages 2 through 4 are also in effect during Stage5, with the following modifications and additions:
 - 1. Any water usage reaching billing blocks 3 and 4 will continue to be charged an additional twenty-five percent (25%) over and above ACWWA's current rates.
 - 2. Irrigation of landscaped areas is prohibited.
 - 3. Use of water from fire hydrants shall be limited to firefighting and activities necessary to maintain public health, safety, and welfare only.
 - 4. No applications for new, additional, expanded, or larger water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.

Upon termination of Stage 5, Stage 4 becomes operative.

5.0 Variances

- (1) The general manager, or his designee may grant variances:
 - A. From specific applications of the outdoor water schedule, providing that the variances do not increase the time allowed for watering but rather alter the schedule for watering;
 - B. Allowing the use of alternative water sources (i.e., ground water, reclaimed wastewater) that do not increase demand on potable water sources for outdoor use. Variance requests may be submitted to staff and need not meet the requirements of subsection below; and
 - C. If requirements of the Plan would cause a direct and substantive negative economic impact to a business being able to perform their core purpose.
- (2) The general manager, or his designee, may grant in writing temporary variances for existing water uses otherwise prohibited under this Plan if it is determined that failure to do so would cause an emergency adversely affecting the public health, sanitation, or fire protection, and if one or more of the following conditions are met:
 - A. Compliance with this Plan cannot be accomplished during the duration of the time the Plan is in effect; or
 - B. Alternative methods can be implemented that will achieve the same level of reduction in water use.
- (3) Persons requesting a variance from the provisions of this Plan shall file a petition for variance with ACWWA any time the Plan or a particular drought response stage is in effect. The general manager or his designee will review petitions for variances. The petitions shall include the following:
 - Name and address of the petitioner
 - Purpose of water use
 - Specific provision of the Plan from which the petitioner is requesting relief.
 - Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm the petitioner or others will sustain if petitioner complies with this Plan
 - Description of the relief requested
 - Period of time for which the variance is sought
 - Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date
 - Other pertinent information
- (4) Variances granted by ACWWA shall be subject to the following conditions, unless waived or modified by the general manager, or his designee:
 - A. Variances granted shall include a timetable for compliance.
 - B. Variances granted shall expire when the Plan, or its requirements, is no longer in effect, unless the petitioner has failed to meet specified requirements.

- (5) No variance shall be retroactive or otherwise excuse any violation occurring before the variance was issued.

6.0 Plan Updates

The Plan will be reviewed and updated as needed.

7.0 Appendices

Appendix A.1 – Stage 2 Watering Schedule, No More Than Three Times Per Week

ACWWA Water System

Irrigate outdoors using an in-ground irrigation system or hose-end sprinkler no more than **THREE times per week** and only during scheduled days and times as indicated below:

Residential and Commercial (including large landscapes such as HOA common areas):

Odd number addresses: Monday, Wednesday and Saturday

Even number addresses: Tuesday, Thursday and Sunday

Watering Hours:

Outdoor watering is not permitted during the hottest time of the day, between 10 a.m. and 6 p.m.

Appendix A.2 – Stage 3 Watering Schedule, No More Than Twice Per Week

ACWWA Water System

Irrigate outdoors using an in-ground irrigation system or hose-end sprinkler no more than **TWICE per week** and only during scheduled days and times as indicated below:

Residential and Commercial (including large landscapes such as HOA common areas):

Odd number addresses: Wednesdays and Saturdays

Even number addresses: Thursdays and Sundays

Watering Hours:

Outdoor watering is not permitted during the hottest time of the day, between 10 a.m. and 6 p.m.

Appendix B – Enforcement Provisions

Enforcement

The following enforcement provisions shall apply to all ACWWA water customers:

- (1) No person shall knowingly or intentionally use or allow the use of water from a ACWWA water utility system for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time.
- (2) Any person who violates this Plan shall be subject to the following additional charges and/or conditions of service:
 - A. Following the first documented violation, the violator shall be given a notice specifying the type of violation and the date and time it was observed. Additional charges and restrictions on service that may result from additional violations;
 - B. Following the second documented violation, the violator shall:
 1. be subject to an additional charge of \$100.00
 - C. Following the third documented violation, the violator shall:
 1. be subject to an additional charge of \$250.00
 - D. Following the third documented violation, the violator shall:
 1. be subject to an additional charge of \$500.00
 - E. Following the fourth documented violation, the violator shall:
 1. be subject to an additional charge of \$1,000.00
 2. ACWWA shall, modify the service with a flow meter, installed and maintained at the violator's expense.
- (3) Each day that one or more of the provisions in this Plan is violated shall constitute a separate violation. The owner of the property where the violation occurs and any other person, including one classified as a water customer of ACWWA, in apparent control of the property where a violation occurs or originates, shall be presumed to be the violator. Any such person, however, shall have the right to show that he did not commit the violation. See enforcement process diagram in *Appendix C - Drought Response Retail Enforcement Process for Municipalities*.
- (4) The manager or manager's designee of ACWWA shall have the power to enforce the provisions of this Plan.
- (5) Any court of competent jurisdiction shall have the power to issue to the manager or manager's designee of ACWWA warrants, or other process allowed by law, where necessary to aid in enforcing this Plan.
- (6) Judicial enforcement of additional charges issued pursuant to this Plan may be sought through a

municipal court, district court or small claims court having jurisdiction over the matter.

- (7) Compliance with this Plan also may be sought through injunctive relief in state district court.
- (8) ACWWA may use any method allowed by its Rules and Regulations to enforce the requirements of this Plan and collection of additional charges for violations, including but not limited to, shut-off of service, lien recording and foreclosure, and collection of late charges, interest, and all costs of collection and enforcement.

Appendix C – Drought Response Enforcement Process for All ACWWA Customers

